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Bats Out of the Belfry：The Nature of Metaphor，with Special Attention to Pictorial Metaphors

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Abstract：The study of metaphor currently being made in the wake of Lakoff may contribute important knowledge of the traits most relevant to iconicity，but it fails to account for the nature of metaphors，which suppose a wilful misclassification of phenomena，which leads to a state of semantic tension. Taking our point of departure in an interpretation of the Peircean categories that we have proposed in a recent paper，we suggest that what Lakoff is studying are diagrams，rather than true metaphors. We then go on to show that the metaphor is a functional category，and that is can thus be realised also in pictures，though its manifestation in different in several ways from the verbal equivalent. Pictorial metaphors are doubly iconic，and thus suppose a double discovery procedure to pin down the similarity.

Keywords：metaphors，diagrams，pictorial signs，rhetoric，iconicity

钟楼上的蝙蝠：隐喻及图像隐喻的本质研究

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摘　要：拉考夫（G. Lakoff）对像似性的相关理论作出过重要贡献，随后学界对隐喻的研究逐渐兴起。然而拉考夫对隐喻的本质进行

了错误的解读，他认为其本质是对现象进行有意的错误分类从而产生语义张力。本论文基于对皮尔斯分类的解释，认为拉考夫所研究的是图表，而非真正的隐喻。隐喻作为一种功能范畴，尽管在图像与语言中呈现出多种差异，但仍可在图像中实现。图像隐喻具有双重像似性，因此存在一种发掘相似性的双重发现程序。

关键字：隐喻，图表，图像符号，修辞，像似性

There is at present such an abundant literature on what it pleased George Lakoff（1993；& Turner，1989）and his collaborators to call metaphor，that the received meaning of this term，in spite of being alive and well from Antiquity to the middle of the 20th century，is now completely obscured. There is no denying the usefulness of the kind of research inaugurated by Lakoff in discovering some of the rules of pertinence applying to iconicity as conceived universally by all human beings，as well as those being particular to certain cultures. Nor do I want to claim that before Lakoff there was only one conception of metaphor，which went on unperturbed from Aristotle to the mid 20th century. But one idea persisted all through the changing understandings of the term：the metaphor was a sign substituting for another sign，which，in the context，was the proper sign to use. The kind of iconic relations studied by Lakoff，however，are not signs for signs，since they designate relations for which there is no proper term. Indeed，in his most radical moments，Lakoff does not even treat his so-called metaphors as being signs at all，identifying these iconic relations with cognitive，and even directly neurological structures.

Ⅰ. The Metaphor as of a Sign for a Sign

In the following，I intend to recapture the traditional meaning of the term metaphor，not for sentimental reasons，but because I think it describes a fundamental kind of meaning-making，which，without it，cannot be named. I will adopt the Peircean terminology distinguishing three kinds of iconic signs，images，diagrams，and metaphors，and，taking my point of departure in the phenomenological elucidation of these notions which I have offered elsewhere

(Sonesson，2009；2013)，I will suggest that what Lakoff really is studying is, at the very most，diagrams (to the extent that it is involves any signs at all). All the while，I will be particularly interested in establishing if there is such a thing as pictorial metaphors (See Sonesson，2003). According to Lakoff，metaphoricity depends on cognitive，rather than linguistic，structures，and thus may well be identical for language and pictures as well as other visual signs. Indeed，this seems to be taken for granted by，for instance，Charles Forceville (2004－2009). Among students of pictorial semiotics，on the contrary，the conclusion has been，as we will see，that there can be no pictorial metaphors，although other rhetorical figures are possible. I will suggest，however，that given the functional definition of the metaphor，inspired as much in Max Black (1962) as in Peirce，pictorial metaphors exist，but are differently manifested from those of verbal language. On the other hand，the picture is an iconic sign，whether it contains metaphors or not，which is to say that all pictures share a property with metaphors，whether pictorial or not：that of being an iconic sign.

Metaphor is，together with metonymy，one of the most abused terms of semiotics，starting from Jakobson's (1942) equation of the former with the syntagm，and the latter with the paradigm. This amounts to a confusion of relationships within sign systems with relationships between particular sign tokens or secondary relationships between signs. Indeed，metaphors，like metonymies，are either created in a particular given text，or they are stock images，which relate signs，or at least sign contents，in stable relations，whereas syntagms and paradigms are constant primary relationships between signs. Moreover，the similarity present in a paradigm is often simply the position in the syntagm，whereas some more pregnant similarity relation is required in the metaphor. In the case of metaphors and paradigms，both types of similarity，at least，are relations *in absentia*. However，the contiguity of syntagms is a relation *in praesentia*，whereas that of metonymies，like all true figures，is a relation *in absentia*. True metaphors，like true metonymies，really are secondary signs：they relate two pre-existing signs by means of their respective contents，which means that a sign present in the syntagmatic chain serves to invoke another sign which is absent from it (cf. Sonesson，

1998a).

In the complex classifications of French 17th and 18th century treatises of rhetoric，the metaphor，like the metonymy，is a trope (applying to words，or single signs，rather than to sentences，or sign complexes) and a substitution (involving the exchange of one elements for another，rather than the suppression or addition of an element，or the permutation of the order of several elements). What differentiates the metonymy from the metaphor and the synecdoche is the nature of the relationship between the two elements entering into the substitutions. Whereas the tenor and its vehicle are joined by similarity in the metaphor，the metonymy connects them by means of a contiguity，and they are related as part to whole in the synecdoche. Thus，as classical semiotic terms，the metaphor is an iconic sign，and the metonymy and the synecdoche are varieties of indexical signs.

All those treatises of rhetoric feature a residue category，often called Catachresis，also known as dead metaphors. These books were meant as manuals for rhetors and poets，and thus take a very slight interest in what are already given in language itself. At least from Aristotle onwards，the metaphor have been thought of as a discovery procedure，the means for finding out，and even creating，similarities never observed before—which is the sense of the metaphor that Paul Ricœur (1975) has tried to restitute. The fundamental claim of Lakoff's "contemporary theory of metaphor" (which includes some rather marginal uses for the metonymy)，however，is that metaphors are not a luxury for poets，but part of the basic machinery of ordinary language，which means that those signs which others call dead metaphors are very much apt to come to life and proliferate. No doubt Lakoff has found a gold mine for unearthing the kind of similarities that are taken for granted in all human Lifeworlds，but in so doing，the sense of the metaphor as a discovery procedure has been lost.

According to one well-known theory of the metaphor，usually attributed to Max Black (1962; cf. Goodman，1968，p. 68; Ricœur，1975，p. 109)，the two terms brought together by the metaphor，called "vehicle" and "tenor" (in the terminology of I. A. Richards employed by Black)，must persist in a state of "tension" and "resistance"，which will naturally be the case if one sign is

substituted for another sign which is less befitting to the context；but，as I will argue below，this is even more clear if，at the root of the construction，there is an wilful miss-classification of something into a category to which it does not belong.

I will try to show，in the following，that this idea may be brought home by having recourse to the reconstruction of Peircean phenomenology on the basis of Husserlean phenomenology that I have undertaken elsewhere （Sonesson，2009；2013）. This interpretation is not meant to catch Peirce's own deeper purpose，but to use the phenomenological result of his work with the goal of gaining a better understanding of meaning-making. With this aim，the three Peircean categories are treated as one possible，but not exclusive，result of the Husserlean free variation in the imagination，also known as *ideation*. From this point of view，there is not reason to think that the Peircean categories are universally applicable，as Peirce himself was led to think；but they may possibly be adequate for the understanding of one particular ontological domain，which is singularly important，at least from the standpoint of human beings，or any other kind of living creatures. This domain，I submit，concerns the relation of the acting and perceiving subject to the world at large. In other words，the three categories describe *intentionality* in the sense of Brentano and Husserl，that is，the directedness of the mind to the things of which it takes cognizance. As is well-known，Peirce himself did not recognize the distinction between mind and matter，supposing the former to shade gradually into the other. Thus，he posited a "quasi-mind" at one end of the relations that he recognized. This may be a metaphysical truth，but here I am only interested in the experience given to phenomenology，in which mind and matter are very different things. Indeed，it is precisely because the mind and the body are experienced as in some sense different，that it makes sense to talk about the mind as embodied—and，correlatively，of the body as minded.

Ⅱ．On the Blackness of Blackbirds：Iconicity before the Sign

If we consider the numerous varied descriptions that Peirce gave to his categories，it might be suggested that everything said about Firstness boils

down to a meaning roughly paraphrased as "something there", that those phrases describing Secondness are equivalent to "reaction to the appearance of something", and that Thirdness can be reduced to "observing the appearance as well as the reaction to the appearance". (Sonesson，2009；2013) A few glosses on these conclusions remain to be spelled out. First of all，nothing can appear without appearing to somebody，so even if Firstness，exemplified by iconicity，only appears for "a fleeting moment"，as Peirce observes，it is still a relation，in spite of Peirce's insistence that it is not，or else it cannot even be an appearance. Still，we can recognise in Secondness a reaction in a fuller sense，something that may be an action，or also an awareness of the phenomenon. Thirdness may then either be the acknowledgment of the action or of the percept ascribed to Secondness. From this point of view，it is easier to understand why Peirce argues that Thirdness is different from Secondness，but that any higher relation is reducible to Thirdness：the observation of an reaction is different from a reaction，but the observation of an observation is just another observation. [①]
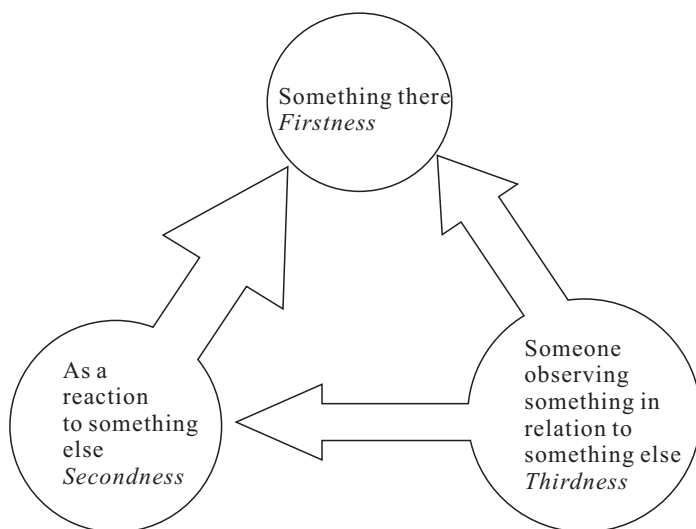
Figure 1　The Interpretation of the Three Peircean Categories，according to Sonesson （2013）

[①]　One may argue against this idea with reference to "*third-order mentality* (e. g. to see that you see that I see)" (See Zlatev，2008，p. 218)，but this supposes a different point of view.

In the following, I submit that that these descriptions apply to what Peirce in an early text called "the ground". The ground explains the relation that exists between the two items forming the sign, but it does not of itself guarantee that a sign is present. For this to happen, it is necessary to add Thirdness, and, in fact, a very peculiar version of Thirdness, correspond to what I have elsewhere defined as the sign, relying on criteria suggested by Edmund Husserl and Jean Piaget. At the level of grounds, it will be necessary to further generalize the description of the categories: if Firstness may still be seen as the phenomenon appearing, Secondness has to be viewed simply as one phenomenon appearing together with another, that is, as contiguity, but Thirdness, since it is supposed to shift the level, must be seen as the coming together of several phenomena into a new whole.

Conceived in strictly Peircean terms, iconicity is one of the three relationships in which a representamen (expression) may stand to its object (content or referent) and which may be taken as the "ground" for their forming a sign: more precisely, it is the first of these relationships. Thus, the ground seems to be a part of the sign having the function to pick out the relevant elements of expression and content, similar, in that respect, to the "form" (the principle of relevance) of the Saussure/Hjelmslev tradition. (cf. Sonesson, 1989, p. 202) Contrary to the indexical ground, which is a relation, the *iconic ground* consists of a set of two classes of properties ascribed to two different "things", which are taken to possess the properties in question independently, not only of the sign relation, but of each other. Indexicality as such involves two "things", and may therefore be conceived independently of the sign function, but iconicity should be possible to conceive independently even of the second "thing" involved.

The blackness of a blackbird, or the fact of Franklin being an American, to use some of Peirce's own examples, can be considered *iconicities*; when we compare two black things or Franklin and Rumford from the point of view of their being Americans, we establish an *iconic ground*; but it is only when one of the black things is taken to stand for the other, or when Rumford is made to represent Franklin, that they become *iconic signs*. Just as indexicality is conceivable, but is no sign, until it enters the sign relation, iconicity has

some kind of being，but does not exist，until a comparison takes place. In this sense，if indexicality is a potential sign，iconicity is only a potential ground （cf. Sonesson，1994a，1997b，1998b；also see Table 1）.

The most interesting arguments against iconicity were originally formulated by Arthur（1963）and were later repeated by Nelson Goodman （1968；cf. Sonesson，1989，p. 220）. According to the *argument of regression*，all things in the world can be classified into a set of very general categories，such as "thing"，"animal"，"human being"，etc.，and therefore everything in the universe can refer to，and be referred to by，everything else. Thus，if iconicity is at the origin of signs，all things in the universe will be signs. This may not be so far from what Peirce thought：at least Franklin and Rumford are potential signs of each other. It is certainly a conception of the world common in the Renaissance，and among Romantics and Symbolists. But this will not do in the case of pictures，where only certain categories of things are involved.（cf. Sonesson，1989，p. 220）

Table 1　The Different Kinds of Peircean Grounds as Related to the Three Sign Types

	Firstness Impression	*Secondness* Relation	*Thirdness* Habituation/Rule
Firstness Principle	iconicity	—	—
Secondness Ground	iconic ground	indexicality= indexical ground	symbolicity=symbolic ground
Thirdness Sign	iconic sign（icon）	indexical sign（index）	symbolic sign（symbol）

Thus，if Peirce meant to suggest that there are three properties，iconicity，indexicality，and symbolicity，which，by themselves and without any further requirement，trigger off the recognition of something as a sign，then the argument of regression will create trouble for his conception. On the other hand，if he merely wanted to suggest that something that was already recognized as being a sign，could be discovered to be an iconic sign，rather than an indexical or symbolic one，by means of tracing it back to the iconic ground，then the argument of regression will have no bearing on it.

According to the *symmetry argument*，iconicity cannot motivate a sign，

for while similarity is symmetrical and reflexive，the sign is not. This is true if similarity is identified with the equivalent relation as defined in logic; however，as should be intuitively obvious，similarity，as it is experienced in the Lifeworld，is most of the time asymmetric，and this has also been experimentally demonstrated by cognitive psychologists such as Rosch (1975b) and Tversky (1977; & Gati, 1978; cf. Sonesson, 1989, p. 220, 327). Rosch (1975b, p. 532) starts out from Wertheimer's idea that idealtypes，in the Weberian sense，may serve as "anchoring points for perception". Two tasks，one verbal and the other spatial，were devised. In the verbal task，subjects had to state their preference，in the case of different terms，for either "A is almost (virtually，essentially，etc.) a B"，or its inversion. In the spatial task，an object，which was known for other reasons either to be a prototype，or not to be one，was fixed in the middle of a table，and other objects had to be placed at different distances from the central object，according to whether they were more or less similar. Focal colours，determined in earlier experiments of Rosch's (1975c)，multiples of ten，as well as vertical，horizontal，and diagonal lines were used as prototypes. Both tests clearly showed similarity judgements to be asymmetrical：a non-focal colour is more similar to a focal one than the reverse; a line of 85 degrees is almost a diagonal，but the reverse is not true，and numbers somewhat above or somewhat below every multiple of ten are judged similar to the latter，much more than the latter is to them.

In a task involving comparisons between countries，Tversky (1977, p. 333) found that the statement "DPRK (Democratic People's Republic of Korea) is similar to China" was chosen in preference to its inversion in 66 out of 69 instances; it was also located higher on a scale. On the whole，that item which is most *prominent* becomes the references point, prominence being determined by prototypicality，frequency，intensity，celebrity，information，and so on. Perhaps we can take Tversky to suggest here that the reference point is not always an item already established as prototypical in a "natural category"，codified，for instance，in verbal language，but can also be negotiated in a more immediate and provisional fashion，in the on-going practice of the Lifeworld. If almost everybody agrees that DPRK is more

similar to China than the reverse，then this is probably in part because we *know so* many more facts about China than about DPRK，and so there is really very little that may disturb the feeling of similarity on the part of DPRK，which is the subject of comparison. China may also be more prominent，already because it plays a much more important part in Western history books，and also in contemporary politic，even though there are of course moments when the two Koreas seems to loom large in the international press.

From this point of view，the picture may be considered a petrified judgement of similarity：clearly，ordinary three-dimensional things are more prominent，on all counts，than two-dimensional surfaces. Contrary to the argument of regression，the symmetry argument may thus be warded off，without introducing a supplementary sign function，and without amending the definition of the iconic ground.

Ⅲ．Playing Billiard in the Clouds：First Approach to Metaphor

The alternative analysis of iconic signs in terms of convention suggested by Goodman，Eco，and others，is conceived to take care of the case of pictures，but paradoxically，it seems that is would really be needed for some other iconic signs. Since a child first confronted with pictures at 19 months of age can readily interpret them（as demonstrated by Hochberg），it is impossible for pictorial referents to be appointed individually（cf. Sonesson，1989，p. 251）. However，we do have to learn that，in certain situations，and according to particular conventions，objects which are normally used for what they are，become signs of themselves，of some of their properties，or of the class of which they form part：a car at a car exhibition，the stone axe in the museum show-case，the tin can in the shop window，the emperor's impersonator when the emperor is away，and a urinal（if it happens to be Duchamp's"Fountain"，or Sherrie Levine's paraphrase thereof）at an art exhibition. A convention is needed to tell us that they are signs—and what they are signs of（cf. Sonesson，1992a，1997b，1998b）.

We shall use the term *secondary iconicity* to designate an iconic relation between an expression and a content，which can only be perceived once the

sign function，and a particular variety of it，is known to obtain（cf. Sonesson，1989，p. 137）；that is，our knowledge about the existence of a convention is a condition upon the discovery of the iconic ground．The problem then becomes how to account for the possibility of there being a *primary iconicity*，that is，a case in which it is iconicity itself that is the condition upon the discovery of the sign function，that which must be perceived for the sign relation to be known to exist．（cf. Sonesson，1997b）

Among numerous apocryphal stories of tribes failing to recognise pictures as such，there is in fact one verified case in which the group（the "Me" studied by Deregowski）had never seen paper，and was therefore led to focus on the material *per se*．When pictures where instead printed on cloth，the "Me" immediately recognised the sign function and perceived the pictures．To these people，paper，being an unknown material，acquired such a prominence that it was impossible for them to see it as a vehicle for something else；on the other hand，it is precisely because paper is so trivial a material to us，that we have no trouble construing instances of it as pictorial signifiers．（cf. Sonesson，1989，p. 251）

It thus becomes necessary to posit a kind of taken-for-granted hierarchy of prominence between the things of the Lifeworld．For something to be a sign of something else，it must be relatively low-ranked on the scale of prototypicality applying to the "things" of the Lifeworld．Such a scale would be similar to the basic metaphor underlying ordinary language，which Lakoff & Turner call "The great chain of being"（1989，p. 160）．Indeed，these regularities of the Lifeworld，together with the similar laws of environmental physics，formulated by James Gibson（1982），stand at the origin of an even broader domain of study．

When Man Ray makes a picture of a billiard table，we need no convention to recognise what it depicts．However，for Sherrie Levine's billiard table to represent Man Ray's picture，there must be a label inverting the hierarchy of prominence of the Lifeworld．This shows that among the properties determining the probability of an object functioning as the expression of an iconic sign is to be found three-dimensionality rather than the opposite．（See Sonesson，1994a，b；1997b；1998b）.

Not all outlines on surfaces are primary iconicities，however，not，for instance，phenomena of the kind which Arnheim has called droodles，e. g. "olive dropping into martini glass or Close-up of girl in scanty bathing suit"，both of which may be seen into the lines，once the interpretation is suggested，but hardly before that（Fig. 2a）. The distinction between droodles and pictures becomes clearer when the same outlines can be interpreted both ways. Thus，the interpretation of Fig. 2c as a face is not at the same level as another interpretation，in which it represents，"a jar from above，with some pebbles and broken matches on the bottom，and a stick placed across the opening"（Hermerén，1983，p. 101），for although it is possible to apply the second interpretation，as in a droodle，once the suggestion is made，the first，pictorial，interpretation always returns with a vengeance（Sonesson，1989，p. 222）.
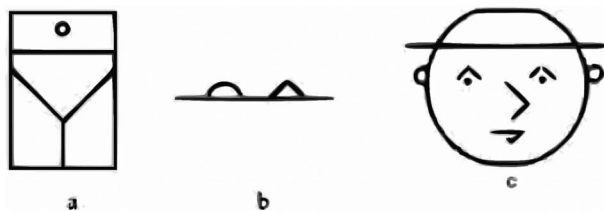
Figure 2　Two Droodles and a Picture

They can be read as a droodle：a. Olive dropping into Martini glass or Close-up of girl in scanty bathing suit (inspired from Arnheim as adapted in Sonesson 1992)；b. Carracci's key (Mason behind wall)；c. face or jar (inspired in Hermerén，1983，p. 101).

Metaphors，contrary to pictures，would seem to be a variety of secondary iconicity：while the similarity characterising a metaphor is rarely imposed on the terms（except in the surrealist variety，which fails as such），contrary to what is suggested by Goodman and，in some passages，by Lakoff，it is certainly the presence of the metaphoric link，i. e. of its expression plane，that permit this particular similarity to be singled out among many possibilities present in the two items involved，i. e. in their iconic ground. In this sense，metaphors are more like droodles than pictures：the semiotic link precedes the perception of the iconic relationship，rather than the reverse. This undoubtedly holds true of verbal metaphors，but since the opposite is true of pictures，and since the pictorial metaphor is a relation between two

（potential）pictures，it should come as no surprise that the case of the pictorial metaphors turns out to be more complicated.

Ⅳ. Of Bats and Other Birds：The Metaphor as False Attribution

According to Tversky（1977，328），metaphors，like other similarity judgements，are asymmetric. Thus we say "Turks fight like tigers"，not the reverse；and "My love is as deep as the ocean"，not the reverse；and to say that "A man is like a tree" is not at all the same as to say，that "A tree is like a man"，for in the first instance，we attribute roots to the man，and in the second instance we give a life history to the tree. In this last example，Tversky is，I believe，entirely right（though many more features may actually be transferred in each instance，as we shall suggest below），but is also seems to me that the two other metaphors，and indeed *all* metaphors，also possess their inversions，which have *a different meaning*. Of course，in examples such as those above，the inversions would probably only satisfy a surrealist. However，what Tversky fails to realise is that，while an ordinary judgement of similarity only possesses one really acceptable version，metaphors are possible in both directions，only with different meanings. Tversky（p. 349）observes that in the judgement of similarity，"a particular features space" is given beforehand，but in the metaphor，this space has to be sought out，but this is，as we shall see，not the only difference. Rather，it is an effect of something else：that metaphorical similarities have to be *created* anew，to a large extent，while judgements of similarity rely on similarities taken for granted.

To understand what kind of judgement is implied by metaphors，verbal and pictorial alike，we will again turn to Rosch，this time in order to criticise her conception. In her view（Rosch，1975a，p. 193），"natural categories"，are not "Aristotelian in nature"，but are "continuous rather than bounded entities". （in Rosch，Mervis，Gray，Johnson & Boyes-Braem，1976，p. 433；cf. Rosch，Simpson & Miller，1976，p. 491）Rosch's studies appear to have established that similarity serves as a *continuous* measure *inside* a given category. But it does not seem to follow from Rosch's experimental results that the several categories must necessarily blend continuously into each

other. This would imply that each further step away from one prototype must take us a step closer to another prototype, so that in becoming a central instance of one category, a thing continues to be a less central instance of another. In fact, there are objects which are neither typical chairs, nor typical armchairs, but have some properties characteristic of the one and the other category; and yet, it would seem that there is some point where an object becomes such a good example of an arm-chair, that is ceases altogether to be a bad example of a chair. Therefore, I would suggest, categories are not continuous; they are only somewhat permeable. Since this criticism was first formulated by Sonesson (1989, p. 330), similar observations have been made by Dirk Geeraerts (2010, p. 188).

In a discussion of contemporary biological classificatory schemes, Daube hits upon the idea that animal species have "transitional" members: the bat, for instance, is located somewhere between the birds and the quadrupeds (1805, p. 329). Thus, Daube is a Roschian *avant la lettre*. Interestingly, a number of tribes, such as the manwa (Ellen, 1977, p. 346), the kalam (Bulmer, 1979, p. 79), and the rangi (Kewsby, 1979, p. 43) do indeed classify the bat as a bird, and it seems that Europeans did that too, at an earlier period (cf. Kewsby, 1979, p. 43). The possession of feathers, the ability to lay eggs, and so on are less important in this view, than to be able to fly. No contemporary Westerner would agree: to characterise the bat as a bird can only be to make a metaphor, for the bat is not felt to be a untypical bird; it is peremptorily considered to be no bird at all. [1] Naturally, there are similarities between a bat and a bird, but, in our present-day classificatory schemes, these are not given much weight. To compare the bat to a bird is to put it in relation to the prototype of another category than its own; and thus a tension between the categories will result.

In linguistic semantics, both Kerbrat-Orecchioni (1977, pp. 1−293) and Nida (1975, p. 33) distinguish features derived from a comparison of a word with other terms in the same semantic field from features which can be

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[1] The case is not in the least like that of the whale, which is still categorised as a fish, even by those who know that zoology does not agree.

gleaned from the metaphorical extensions of the word，but since a great number of more or less far-fetched metaphors can be constructed，there is no limited number of such features．Ordinarily diagnostic components become secondary，and others come to the fore in the word "father"，as used in the sentence "He is like a father to the boy". In his study of "hedges"，Lakoff introduces terms such as "regular"，which have the function of picking up "metaphorical properties" of a word，while negating its literal properties．(1972，p. 183) Thus，to say that "Sarah is a regular spinster"，is to imply that Sarah is not really a member of the category of spinsters but yet has some properties that spinsters are expected to have："prissiness and lack of sexual activity"．(p. 198) Sarah，as it happens，is married; and neither "prissiness"，nor "lack of sexual activity"，nor the two of them together are sufficient to define membership in the category of spinsters，although we shall certainly expect the perfect spinster to manifest these properties．In our terms，Sarah does not possess any of the properties hierarchically dominant in the category "spinster"，and the properties she does possess are fairly low in that category．She is not even a bad example of a spinster．

Hence，in making a metaphor，we are comparing a member of one category，not，as in an ordinary judgement of similarity，to its own prototype，established in verbal language，or by some other traditional means，nor to any arbitrary member of another category，but to *the prototype of another category*，to the "best instances"，with the full set of maximally characterising properties．Some metaphors certainly do refer to comparatively important properties of the alien prototype，as when a man is compared to a tree; but they are never sufficiently important to dissolve the category distinction，making a man a "worst instance" of the tree category．The "flexibility" of the girl，and of the birch，is to the other extreme．

As was observed above（in Section Ⅰ），what has been said so far concords perfectly with the metaphor，theory usually of Black（1962），according to which the two terms brought together by the construction，called "vehicle" and "tenor" by Richards，must persist in a state of "tension" and "resistance"；for，indeed，what could occasion more resistance than the classification of a term under a heading to which it does not belong? There is

some psychological evidence for this theory of metaphor: small children, Gardner (1982, p. 91, 158) discovered, simply overgeneralize their terms, and only later come to use real metaphors, where "such tension is sensed, and then overridden" (p. 99; cf. Winner, Wapner, Cicone, & Gardner, 1979). In contrast, there is of course no resistance to be overridden in an ordinary judgement of similarity, as considered by Tversky and Rosch.

Another theory of metaphor is suggested (perhaps unintentionally, since it has never been returned to) by Groupe μ (1970, p. 107): the metaphor, we are told, "extrapole, elle se base sur une identite réelle manifestée après l'intersection de deux termes pour affirmer l'identité des termes entiers. Elle étend à la *réunion* des deux termes une proprieté qui n'appartient qu'a leur intersection". Thus, where the Black/Goodman/Gardner tradition supposes a non-coincidence of the two categories brought together, this theory appears to posit a partial identity, which is transmuted into a total coalescence.[①] However, if a union of the two sets of semantic features is to result, the metaphorical connection has to be symmetrical, which means that, contrary to Tversky's observation, "A tree is like a man", and "A man is like a tree" would be the same metaphor. But this is clearly unsatisfactory; so let us suppose instead, that in the metaphor, from a partial overlap, meaning is extended to include the complete set of features of the reference point, but not those of the subject of comparison. In the case of the metaphor "A man is like a tree", the man would not only acquire roots, as Tversky suggests, but he would be more generally tree-like, while there is no hint at all that the tree should be seen as man-like (of course, because of the context, or because of peculiar presuppositions prevailing in a given sociocultural Lifeworld, the "feature space" can be so constrained, as to focus on particular features of that space, as, in this instance, the "roots", on Tversky's interpretation).

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① Oddly enough, Groupe μ (1970, p. 108) then goes on to claim that this is the same thing as to say that a metaphor is made up of two synecdoches, one of which is generalising, e. g. from birch to flexibility, while the other is particularising, e. g. from flexibility to girl. But of course this is a quite different conception: it amounts to forming a single class made up of all things which possess in common the property of being flexible, neglecting all further attributes. The theory therefore only accounts for the intersection, not for the union

However, the union of the overlapping parts of the two feature sets, and the remaining features of the reference point is simply identical—to the reference point! The metaphor would be a simple identity; and since this is obviously untrue, we are led back to the first metaphor theory considered above.

We can now try a synthesis. The metaphor emphasizes certain properties of the subject of comparison, which are then also sought out, comparatively low on its feature hierarchy, in the reference point. The whole feature set of the reference point is then projected onto the subject of comparison. The result is no mere identity, however, for that part of the subject of comparison which does not intersect the reference point remains in awareness and resists integration in the new whole; thus, there is *tension* between the new category created and the received categories. As in the ordinary judgement of similarity, the non-intersecting features of the subject of comparison are heavily weighted, but in this case, this part of the feature set not only contains numerous features, but indeed features directly opposed to those of the new ecumenical category. Indeed, this is exactly what makes us perceive a comparison as a metaphor, rather than as an ordinary judgement of similarity.

Two conclusions impose themselves at this point. It follows from the very workings of the metaphor that categories must be "bounded entities", in spite of Rosch's claim to the contrary, and there does not seem to be any real contradiction between this fact and the prototypical organisation of many "natural categories". In the second place, it seems that the metaphor will normally involve an initial identity of some low-order features of the sets defining the two terms brought together; and that the effect of the metaphor is to absorb all the features of the reference point, only some of which may be in focus, into the revised feature set of the subject of comparison, but that tension continues to be felt between the newly created category and those features of the subject of comparison which do not enter the new category. Since the pictorial surface is completely different from what it depicts, the question arises whether the pictorial sign is a special case of the metaphor. However, it seems safe to say that the picture is never seen as being even remotely of the same kind as what it depicts: contrary to what is suggested by Borges' Chinese Dictionary, animals drawn with a fine camel hair brush are

never confused with those owned by the emperor. ① The case of pictorial metaphors would seem to be different—if there is indeed such a thing.

Ⅴ. Of Signs and Hypo-Icons

Given the interpretation of the Peircean categories suggested above（in Section Ⅱ）as an act of observing the act of experiencing a phenomenon，in other words，as（at least）a double intentionality，there can be no doubt that the sign function is a kind of Thirdness，but it is clearly not the only kind of Thirdness there is（See Figure 3）. Contemporary followers of Peirce would say that the sign is the prototypical Thirdness（not using that term），and that all other cases of Thirdness are more or less "degenerative"（in the mathematical sense），but that does not really bring us closer to any understanding the difference.（cf. Sonesson，2013）Instead，we need a positive definition of the sign，which is something that，so far，has been offered neither by Peircean nor by Saussurean.

	Firstness	Secondness	Thirdness
Firstness	Iconicity	—	—
Secondness	Iconic ground	Indexicality = indexical ground	—
Thirdness	Iconic sign (icon)	Indexical sign (index)	Symbolicity = symbolic ground = Symbolic sign (symbol)

Figure 3　**Reconstructions of Peircean Categories，Grounds，and Signs**

Elsewhere，taking my inspiration from both Husserl and Piaget，I have suggested that we can minimally define the sign by the following properties：

　　（1）it contains（a least）two parts（expression and content）and is as a

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① Except perhaps by very small children，apes or by somebody looking through a peep-hole with one eye—that is，by those who fail to see the picture *as* picture.

whole relatively independent of that for which it stands (the referent);

(2) these parts are differentiated, from the point of view of the subjects involved in the semiotic process, even though they may not be so objectively, i. e., in the common sense Lifeworld (except as signs forming part of that Lifeworld);

(3) there is a double asymmetry between the two parts, because one part, expression, is more directly experienced than the other;

(4) and because the other part, content, is more in focus than the other; and

(5) the sign itself is subjectively differentiated from the referent, and the referent is more indirectly known than any part of the sign. (Sonesson, 1989, 1992; 2011; 2013)

Perhaps this definition is not sufficient, but it will at least separate out a smaller class of phenomena within the big category of Thirdness. And it will allow for the fact that, as iconic and indexical signs are based on pre-existing iconic and indexical grounds, some symbolic signs may rely on some kind of Thirdness (rules or regularities) instituted prior to the sign.

Given thus explicit definition of the sign, we may now return to Peirce's subdivision of icons, now clearly understood as different kinds of iconic signs, and thus neither simple iconicities, nor more iconic grounds. This is the classical passage:

Hypoicons may be roughly divided according to the mode of Firstness of which they partake. Those which partake of simple qualities, or First Firstnesses, are images; those which represent the relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations in their own parts, are diagrams; those which represent the representative character of a representamen by representing a parallelism in something else, are metaphors. (CP 2. 277; EP 2, 274)

Peirce's description of the metaphor, in this passage, is notoriously difficult to comprehend. Here it is useful to remember that, if images are instances of First Firstness, diagrams are no doubt instances of Second Firstness, and metaphors of Third Firstness. If we add that hypo-icons are certainly signs in the strict sense of the term defined above, whatever pure

icons are，it seems that there must be some kind of Thirdness to all the three kinds of Firstness described above. It should not be forgotten，nevertheless，that all the hypo-icons，however much they share in Thirdness，and how，on another dimension，they vary as to Firstness，Secondness，and Thirdness，still remain instances of Firstness. The image，nevertheless，seems to come out，in our schema，exactly as the icon，so，at least for the moment，we have to take it to be the prototypical iconic sign（See Figure 4）.
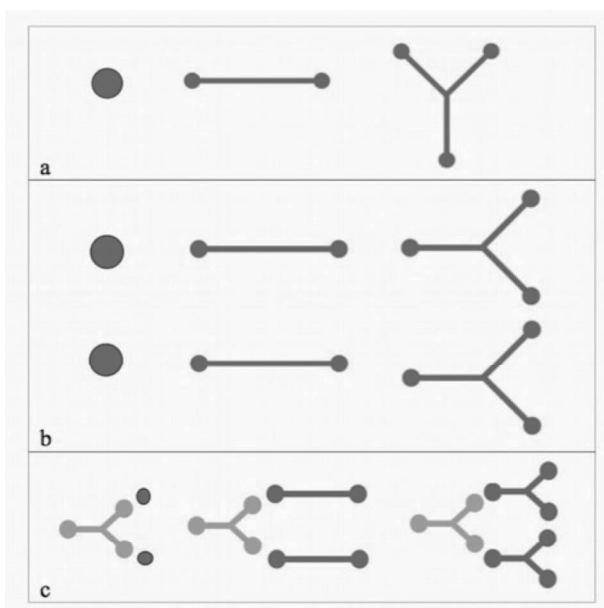
Figure 4 **The Hypo-icons**

a. the elementary figures of Firstness，Secondness，and Thirdness；b. with iconicity added；c. with the addition of Thirdness，specifically as the sign relation.

Let's start with a classical example of what the treatises of rhetoric would have considered a dead metaphor：the foot of a mountain. We are concerned with something that occupies the same position on a mountain as the feet do in relation to the human body，that is，the part that is closest to the ground. Lakoff and Johnson give a long list of linguistic "metaphors" involving the direction upwards：

Happy is up；sad is down.

Conscious is up；unconscious is down.

Health and life are up; sickness and death are down.

Having control or force is up; being subject to control or force is down.

More is up; less is down.

Foreseeable future events are up and ahead.

High status is up; low status is down.

Good is up; bad is down.

Virtue is up; depravity is down.

Rational is up; emotional is down. (1980)

All these examples, including the foot of the mountain, I suggest, are diagrams, not metaphors, in the sense of Peirce. Although the Peircean diagram is a much broader category, it includes diagrams in the everyday language sense; the lines of the population curve on the paper go up, just as the population does. This is, at least from one point of view, simply an equivalence between two two-place relations. The terms need to be reinterpreted, but the relation itself is one and the same. There is thus no tension.

In the case of a real metaphor, on the contrary, the relation itself, I suggest, has to be reinterpreted. This explains our feeling that metaphors transgress borders. Thus, for example, if I talk about a small line of forest close to the top of the mountain as the beard of the mountain, I may not be creating a great metaphor, but I am certainly producing an effect of transgression, in which not only the terms, but the relationship between them have to be re-evaluated.

Ⅵ. The Dialectics of the Cat and the Coffee Pot

In their seminal study of a coffee pot picture, which is also a cat picture, Groupe μ (1976, p. 45) observes that a pictorial metaphor differs from an ordinary linguistic one, in that its expression plane must contain the features of both contents involved, in this case, of the cat and the coffee pot. Some features have admittedly been suppressed: in this case, there is nothing to indicate neither the handle, nor the lid of the coffee pot, but it is more difficult to discover any part of the cat that is lacking. Both objects, in any case, may be easily recognized. Groupe μ therefore wants to abandon the

category of pictorial metaphor entirely，but this conclusion is hardly justified：there is metaphor as soon as the result of bringing two signs together is the postulation of a similarity between their contents，no matter how this equivalence is brought about，and whether the expression is involved or not.

Kerbrat-Orecchioni claims all pictorial metaphors must be，at the same time，*in absentia and in praesentia*，as for instance in the double exposure showing a Volkswagen and a beetle. In her view，a pictorial metaphor is discovered as such，because of the contradiction on the expression plane，not because of a semantic contradiction，as in linguistic metaphors.（1977a，pp. 1－375）It is certainly more difficult to separate expression and content in pictures than in verbal signs，since the latter is "seen in" the former（See Husserl，1980；Sonesson，1989；2011；2015），but，in the end，it must be obvious that the contradiction，in Magritte's "Le viol"，is not between one line or point and another，but between the breasts and the eyes，the nose and the navel，the mouth and the pubis，and so on. What is peculiar to the pictorial metaphor is that，to bring home a semantic similarity，you need to discover an（at least partial）visible similarity. That means，in terms of Ricœur's reading of Aristotle，that two different similarities have to be discovered. In other words，first you have to discover in what way cats and coffee pots are similar；then you have to find a visual equivalent of this similarity，projecting the cat and the coffee pot to the two-dimensional surface of the picture.

Even in verbal metaphors，the presence and absence of the two categories compared can vary，although，in some cases，the result is usually called a simile. Following Kerbrat-Orecchioni（1977b，p. 149），we can make the following distinctions：

Simile in praesentia：x is p as y（"La terre est bleue comme une orange"）；

Simile in absentia：x is as y（"la terre est comme une orange"）；

Metaphor in praesentia：x is y（"La terre est une orange"）；

Metaphor in absentia：y（"Nous vivons sur une orange"；a more adequate

formula for this may be "y ［x］"). ①

Differently put，metaphors are judgements of identity，and similes are judgements of similarity；when *in praesentia*，the judgements are made explicitly，when *in absentia*，they are made in an implicit way. As often has been pointed out（cf. Worth，1981，p.162；Gauthier，1982，p.179；Fresnault-Deruelle，1983，p.131；Gombrich，1982，137），there is nothing comparable in pictures to the syntactical terms of verbal language，i. e.，in the present case，there is nothing accounting for the difference between simile and metaphors properly speaking. This can be considered a defect of pictorial communication in relation to language，in the sense that no clear-cut distinctions can be made between the four different cases listed above. On the other hand，while language only allows for four（or perhaps a few more）different cases on the scale going from absolute distinction to total commixture，pictures can offer all conceivable possibilities in-between. Nevertheless，if we pursue Black's idea of the metaphor being，as a functional device，dependent on a tension between the two categories involved，verbal language，it would seem，can make a tidy distinction between the different degrees of such tension，while the case of pictures is much less clear.

In their later work，Groupe μ（1992）offers a cross-classification of the figures of visual rhetoric into those which are present or absent，and conjoint or disjoint. In the latter conception，a figure is *in absentia* conjoint，or a trope，if the two units involved occupy the same place in the statement，one being totally substituted for the other. It is *in praesentia* conjoint，an interpenetration，to the extent that the units appear in the same place，with only partial substitution of one for the other. There will be a figure which is *in praesentia* disjoint，a pairing，if the two entities occupy different places，without any substitution taking place. Finally，the figure will *be in absentia* disjoint，a projected trope，when only one unit is manifested，while the other is exterior to the statement，but is projected onto it.

In spite of its elegance，this model is，in the end，problematic in several ways.（cf. Sonesson，1996a，b，c）In the present context，nevertheless，I

① In fact，I contribute the distinction of the first two categories，on the analogy of the last two.

think it will be sufficient to point out that，given the numerous possibilities of commixture of the two categories involved in picture，it is impossible to account for all the differences in terms of what is conjoint and disjoint，and what is present and absent. To being with，Kerbrat-Orecchioni（1977a，pp. 1 －375）is right in suggesting that all pictorial figures require both some amount of presence and some amount of absence：a presence，normally，of that which is not expected，and an absence of that which is expected. On the other hand，she is clearly mistaken in her claim that pictorial metaphors depend on a contradiction on the expression plane，for although the expression is necessarily involved，it rather serves to mediate the contradiction.① The contradiction，in Magritte's "Le viol"，is not between one line or point and another，but between the breasts and the eyes，the nose and the navel，the mouth and the pubis，and so on. Indeed，it is as something "seen in" the pictorial surface，rather than as objects in the world，that the content participates in the pictorial metaphor：for the real coffee pot and the real cat have hardly any common features of appearance，and the Coliseum and the ice-pail also have very few.

The difference between the tropes and the interpenetrations，in Groupe's μ is scheme，has to do with the relations of wholes to parts，that is，factorality：in the first case，epitomised by the Haddock picture，one sub-ordinated elements of a interpretative scheme has been substituted for another in a whole which otherwise fulfils the expectations generated by the scheme；in another case，exemplified by the "chafetière"，two conflicting schemes of interpretation are actualised，and neither of the set of predictions generated for the whole by the two schemes is entirely born out. It is in this respect that these cases are opposed to the third one，which，in terms of the theory of indexicality，is a pure case of contiguity，the pairing.

Since both are some kind of indexical grounds，factorality and contiguity may be seen as extreme cases on a scale of relative integration，of the kind that is expected to obtain in the Lifeworld. Consider the case of a picture

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① This is rarely the case in the verbal equivalent，although alliteration，paranomas and portmanteau words may of course be combined with metaphors.

representing a bottle of liquor inside the Coliseum (cf. Sonesson，1989；1996c；1997a)：here two independent objects are represented，but they are not merged as in the interpenetrations；nor is (a part of) another object substituted for a part of the globally presented object，as in the tropes；nor are the objects simply put side by side in a surprising combination，as would seem to be the case with the pairings.① The joint appearance of Coliseum and the bottle (of this size and in this precise position) is unexpected，whereas there would be nothing strange in encountering a cat and a coffee pot，or a bottle and Haddock，side by side—the strangeness largely resides in the relations of part to whole. Yet，unlike the unexpected combinations of the pairings，the Coliseum picture does anticipate the presence of a well-defined element which is not there to be seen，that is，an ice-pail. Together with the ice cubes，the bottle requires the presence of an ice-pail，like the body scheme requires the pupils of Haddock's eyes：yet the ice cubes，the bottle，and the ice-pail do not make up any complete whole，but only a set of interconnected objects. The Coliseum picture does not break up the unity of an object as we know it in the world of our experience，but it associates things that are normally parts of different sets.

Rhetoricalness can be measured against a standard which consists of the Lifeworld itself or，at least in some cases，of an exemplary picture to which the picture in question refers. (cf. Sonesson，1996c；1997a) Between certain sets of things a more intimate link seems to exist，such as the items making up a complete dress，or a complete menu. The picture mentioned above，in which Coliseum appears instead of an ice-pail，transgresses the links posited by the syntax of objects in this sense. In other cases the integrity of an detached objects，in terms of the ecology of the Lifeworld，is broken down：normally，this will involve some curious deviations in the relationship between parts and wholes，of same variety or other；but there is also the more subtle case in which a more abstract property of the whole appears to be transmuted into another. Thus，for instance，in Inez von Lansweerde's

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① This is a more general notion of pairing then the one intended by Groupe μ，as will become apparent later. Indeed，it is closer to Husserl's usage：two separate items which are meaningfully associated with each other.

picture of a little girl with a "male mouth"，the mouth is present，and appears in the right place，but some of its features are deviant，i. e. its relative size is that corresponding to an adult male.

A pseudo-independent object not attested in any possible Lifeworld is created in the picture when parts of several wholes are merged together，as for instance the cat parts and the coffee pot parts building "la chafetière". Parts from one whole may form a new whole，as when，in a publicity picture，a jam pot is made out of orange slices，or several wholes may together form another whole，as in Arcimboldo's portraits，or in the "Absolut Venice" advertisement where doves on the Saint Marcus place have conglomerated in the shape of the Absolut bottle，or when a combination of laundry and a street lamp suggests the same characteristic bottle. No objects which could not occur in the Lifeworld are shown in these pictures；they are simply pictures of orange slices，vegetables，books，doves，etc. ，which could，but would not normally appear together in this way in the Lifeworld.

Indexicality accounts for the way in which pictorial metaphors are much more powerful than their verbal correspondents. In portmanteau word，just as in pictorial metaphors，the expression planes of two signs are merged，instead of being related by means of a third sign as in a verbal metaphor. However，portmanteau words are rare phenomena，which are difficult to produce，because the fusion of two verbal expressions tends to hamper recognition. In contrast，no problems of this kind would seem to exist for pictorial signs，first because the picture referents of common Lifeworld things can be adapted in numerous ways in order to go together，as we saw in the case of the cat and the coffee pot，and，second，because pictorial signs are easily embedded in other pictorial signs，with no consequences for recognisability.

Ⅷ. The Bird-Man and the Man-Bird：Thematic Hierarchies in Metaphors

Contrary to pictorial signs generally，pictorial metaphors，and thus perhaps all figures of visual rhetoric，are not necessarily *asymmetrical*. (Sonesson，1989，p. 333) Put in another way，it is often impossible to decide

which term is the "vehicle" and which is the "tenor". Thus it is not clear whether Magritte，in "Le viol"，is trying to tell us that female trunks resemble faces，or rather that faces are similar to trunks. The direction of the comparison is often made clear by the accompanying verbal text，or by the larger context. For instance，once we have identified the pictorial category "advertisement"，we understand that the super-market chain B&W wants to tell us that their fruits are as valuable as a crown，not to inform us about crowns that，in some curious way，resemble heaps of fruit. In these cases，genre conventions，common sociocultural understandings，or explicit theoretical discourses permit us to discover which the terms of the comparison is the most "prominent" one.

What we here discuss is often addressed in terms of subject and predicates，topic and comment，and so on. As Halliday (1967，p. 201；& Hasan，1976，p. 325) has observed，these terms tend to confuse at least two different distinctions，the *theme* and the *rheme*，and the *given* and the *new*：what is the subject of discussion，as against what we have to say about it；and what is taken to be known beforehand，i. e. "recoverable" from some other source，as against what is introduced as new information. Every unit of information must contain something new，whereas the given element is optional. These terms are not specifically linguistic：in language they are mapped into intonation groups，and the like，but in pictures they may well appear as something else.

It seems to me that facts that are recoverable from the structure of the common Lifeworld，or from the norms present in some particular socio-cultural world，must be treated as givens. Consider the case of Max Ernst's bird-headed man：the theme here must be taken to be "human being" (although the scheme for human being is only partially fulfilled)，whereas the rheme becomes something like "bird-likeness". What is given (known and recoverable from the picture) is the human trunk，in relation to which the new information must be "head of bird". It remains less clear whether there is also some mechanism *internal* to the pictorial sign，or at least independent of verbal texts and genre categories，which is able to decide the direction of the metaphorical relation.

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