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## CONCEPTUAL BLENDING IN THE INTERPRETATION OF PROVERBS<sup>1</sup>

The paper challenges the analysis of proverbs as particular cases of Generic is Specific metaphor suggested by Lakoff and Turner (1989). I argue that their metaphoric account of proverbs should be considerably revised and extended. Proverbs are usually not used in order to make “generic statements”, but, rather, in order to comment on specific construals of current situations. Therefore, I suggest that proverbs should be analyzed in terms of the theory of conceptual integration networks (Turner & Fauconnier 1995). Accordingly, the specific content of the proverbs and the construal of the current “target” situation should be considered as input spaces, the generic level schema as the generic space and the particular emergent meaning of the proverb in the current situation as the blend. Whether the mapping between the two spaces is more metonymic or metaphoric depends on the relation between the two input spaces.

### 1. Introductory remarks

Lakoff and Turner (1989:162ff, henceforth L&T) proposed that proverbs should be interpreted through GENERIC IS SPECIFIC metaphor, in which the content of the proverb represents a specific level schema functioning as the source, while the target is a generic level schema. Thus, e.g. the Chinese proverb *Blind blames the ditch* is “not just about blind people but about a broader class of people, people with some incapacity”. This would suggest that the metaphor allows us to express some eternal, universal (i.e. “generic”) wisdoms. However, on the same page (162) L&T argue that in fact this not the case. Instead, what happens is that GENERIC IS SPECIFIC metaphor “maps a single specific level schema onto an

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<sup>1</sup> An earlier, largely the same version of this paper was first presented under the same title at the 2nd UK Cognitive Linguistics Association Conference, Cardiff University, Wales UK, August 27-30, 2007. This is important in view of the fact that Sullivan and Sweetser (2009) arrived at very similar conclusions (terminological differences notwithstanding) and also suggested that proverbs are best analyzed in terms of conceptual integration.

infinitely large number of parallel specific level schemas that all have the same generic level structure as the source domain schema". In other words, instead of having GENERIC FOR SPECIFIC metaphor, the metaphor seems to be SPECIFIC2 IS SPECIFIC1, where Specific1 and Specific2 have the same generic structure. Thus, the appropriate mapping is not as in Fig. 1 below, but rather as in Fig. 2.

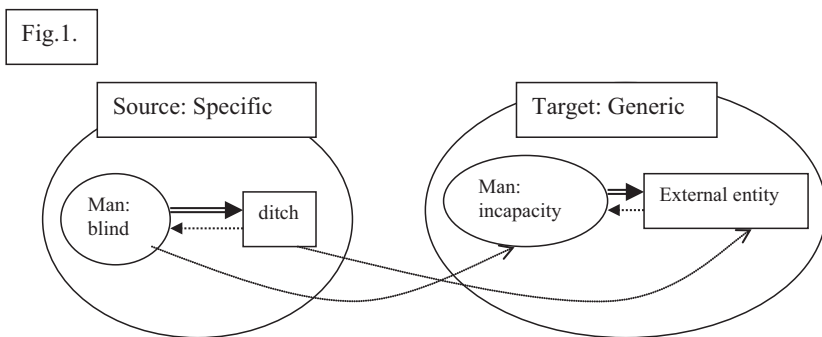


Fig. 1. GENERIC IS SPECIFIC Metaphor. The double arrow indicates blaming ditch/external entity for allegedly causing (dotted arrow) Man's failure. The other arrows indicate ordinary mappings.

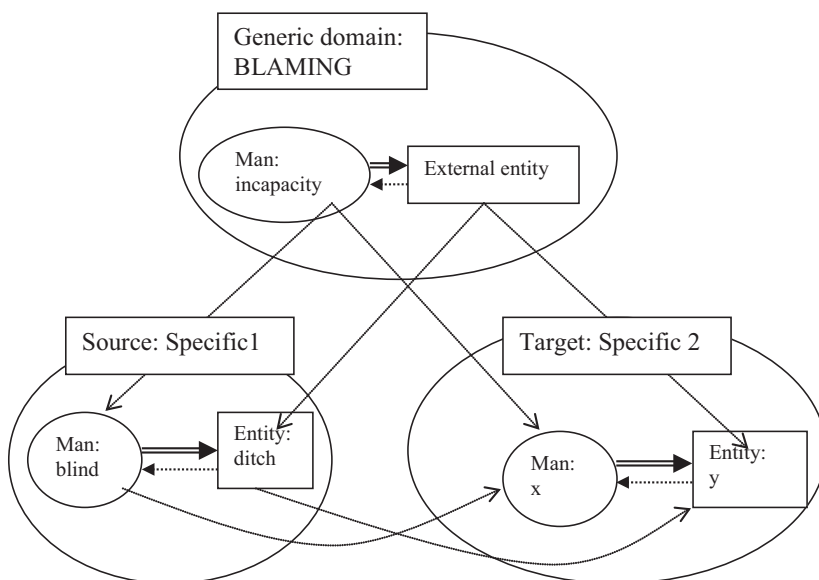


Fig. 2. SPECIFIC 2 IS SPECIFIC 1 Metaphor, where the Generic Domain of BLAMING represents the analogical structure of the two specific domains.

I shall try to show that L&T's metaphoric account of proverbs should be revised. There are three main reasons why L&T's position cannot be accepted.

### 1.1. Argument 1. GENERIC IS SPECIFIC is not a metaphor

The first reason why L&T analysis should be rejected is very basic, one could say – definitional. It goes like this: If we wish to retain the standard cognitive definition of metaphor as a mapping across two separate, distinct domains, then the argument is that the Generic and the Specific are not two separate, distinct domains, but, rather, that the Generic is immanent to the Specific. In other words, there is no mapping because the two are not different domains, but two different levels of specificity of essentially the same domain, i.e. the domain of Events, with the Specific representing the lower, more concrete and richer level, and the Generic representing the higher, more abstract level of specificity. The difference in the specificity of the levels results from the differences in the levels of specificity of the elements named in the two representations of the Specific and the Generic. For instance, a specific BLIND MAN corresponds to a general MAN, a specific DITCH corresponds to a general EXTERNAL ENTITY which may be dangerous to man, and so on.

The above considerations have led some linguists to the conclusion that the Generic-Specific relation should be viewed as a case of metonymy rather than metaphor. For instance, Rudzka-Ostyn (1995:241) claims that “any extension affected by abstraction, metaphoric or not, can be seen as involving metonymic dissociation”. This position is endorsed by Barcelona (2000), who, in his discussion of the metonymic motivation of metaphors, argues that the metaphor SADNESS IS DOWN is motivated by a metonymy based on the cultural model whereby sadness is associated with one of its behavioral effects, namely “downward oriented bodily posture”. Consequently, he argues that “The source domain in the metonymy is ‘downward oriented bodily posture’. The most salient subdomain within that source domain is ‘downward spatial orientation, which, thus, ‘stands for it’” (Barcelona 2000:44). Apparently, for Barcelona, the relation between more specific downward oriented bodily posture with the more abstract downward spatial orientation is metonymic. The same view is also expressed by Gibbs (1999).

Along with other researchers, e.g. Seto (1999), Nerlich and Clark (1999) and Panther and Thornburg (2003), I think that this view of metonymy is unwarranted because it implies that any act of categorizing is in fact metonymic, e.g. metonymy would be at work each time we refer to a cat saying *an animal*, and each time we refer to a Siamese cat saying *a cat*, and each time we refer to a black Siamese cat saying *a Siamese cat*, and so forth ad infinitum. In Seto's terms, this is a case of C(category)-related transfer, which in his view characterizes synecdoche but not metonymy. In terms of the definition of metonymy proposed by Panther and Thornburg (2003), generic-specific relations fail to satisfy the condition of contingency on metonymy, hence they are not metonymic.

Along with those researchers, I strongly believe that abstraction (schematization) and their opposites: specialization (elaboration), as inherent properties of linguistic designation, are one thing, and metonymy is another.<sup>2</sup> What crucially differentiates them is that, first, metonymy involves transfer of meaning and in abstraction there is no real transfer of meaning and, secondly, metonymy is a contingent relation between two conceptually autonomous concepts and in abstraction the concepts are maximally dependent on each other, with the more specific term necessarily evoking (or activating, or, as a logician would say, “entailing”) the other (cf. also Bierwiaczonek 2005).

This means that while the generic and specific domains in Fig 1 and 2 are linked by the relation of abstraction (or schematization, or, depending on the point of view, specialization, or elaboration), the relation between the two specific domains may be viewed as metonymic: they are two autonomous events (conceived as parts), which may be viewed as members of the set of events sharing the same schematic structure (conceived as the whole), the meaning of one of which is transferred to the other. But as we know from the work of e.g. Radden (2000), there is a cline from metonymy to metaphor, therefore there might be cases which are more metonymic and more metaphoric, depending on the conceptual distance between the two spaces. What is interesting is that this distance depends crucially on the level of the two categories in the taxonomy to which they belong. Thus, transfers on the basic level or above are usually considered metaphoric, e.g. calling a fish *a bird*, or a cat *a dog*, or a bike *a car*, as well as most personifications, are examples of such metaphors. One could probably say that the basic level and the levels above it specify not only distinct categories but also maximally distinct conceptual domains, which is why calling a cat *a dog* is felt to be metaphoric. Drawing particular exemplars from those domains and mapping them on one another is also felt to be metaphoric, e.g. calling a Siamese cat *a Pekinese*. The situation is different below the basic level when the meaning of one subcategory is transferred to another subcategory within a single basic level category. Consequently, calling a St. Bernard *a Pekinese*, or a sprat *a pike*, or a little Polish Fiat *a Mercedes*, could probably be considered metonymic, on account of their conceptual contiguity within a single conceptual domain.<sup>3</sup>

<sup>2</sup> A detailed discussion and defense of this view of the Generic vs. Specific relation can be found in Chapter 1 of Bierwiaczonek (2013).

<sup>3</sup> Sullivan and Sweetser (2009:320), albeit maintaining the term “metaphor” for both kinds of mappings, make a similar observation: “Inputs that belong to the same low-level category, and take part in blends with relatively specific generic spaces, seem less like separate domains, and result in less ‘figurative,’ less ‘metaphoric’ blends.” In Bierwiaczonek (2013:34) I tried to grasp this difference in terms of the **Principle of Minimal and Maximal Overlap**:

*When one basic or higher level category is used as a source for another basic or higher level category, the transfer is metaphoric. When one lower-than-basic level category is used as a source for another lower-than-basic level category, the transfer is metonymic.*

We may add in passing that the network represented in Fig. 2 is itself sufficient to refute the two-domain theory of metaphor, as it clearly requires at least three domains.

## 1.2. Argument 2. What about the BELIEF SPACE?

My second argument against L&T's analysis is that it ignores the Speaker's BELIEF SPACE, which motivates the use of the proverb in the first place. That is to say, the proverb *Blind blames the ditch* is used when the speaker believes that in fact it is the Agent of blaming that is responsible for his misfortunes. The belief is not expressed but it definitely forms necessary part of the emergent meaning of this proverb. Consequently, a more complete representation of the proverb in a particular context should probably look like the network in Fig. 3

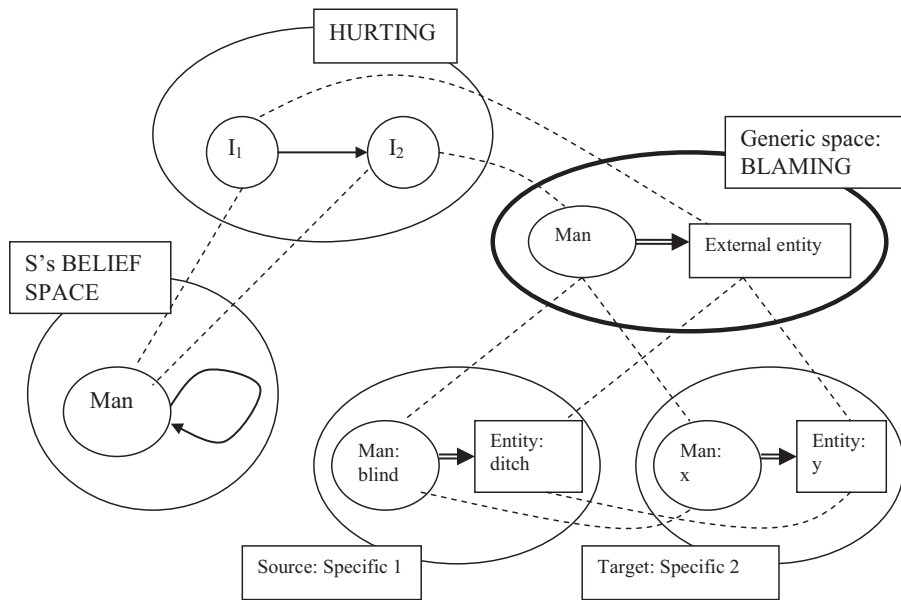


Fig. 3. The network showing relations between the blaming activity designated by the proverb and the Speaker's belief that in fact the Blamer has hurt himself. A more general interaction than just hurting is involved, probably some kind general responsibility of an individual  $I_1$  for another individual's ( $I_2$ 's) bad experience. Hurting has been chosen for expository reasons.

Since the transfer of meaning on the sub-basic level, e.g. *St. Bernard* for *Pekinese*, involves both the vertical and horizontal axes of categorization, i.e. it is on the borderline between synecdoche and metonymy proper, I suggested that it should be regarded as a case of special subcategory of figures of speech called "synecdochic metonymy".

If the network presented in Fig. 3 is approximately right, it constitutes another serious argument against any two-domain account of proverbs. Nevertheless, in the remainder of this paper, for expository reasons, the *SPEAKER'S BELIEF SPACE* will be ignored.

### **1.3. Argument 3. Proverbs often refer to other contextually given specific situations**

My third main objection to L & T's theory of interpretation of proverbs has to do with the way they are actually used in contexts. It can be easily observed that proverbs are rarely used in order to make "generic statements", which would make them similar to biblical parables. Rather, they usually function as comments on specific construals of current situations. Therefore, in most cases, the target of proverbs is not a generic-level situation but another specific situation, as I have already indicated in Figures 2 and 3 above. Thus, if the metaphoric account were to be retained, the metaphor should be *SPECIFIC 1 IS SPECIFIC 2*. As we have seen above, however, such cases should usually be analyzed as metonymies, whereby one particular case of a generic event is used to stand for another particular case of the same generic event. This proposal may well work for a lot of cases, but I will show below that even this improved metonymic account of proverbs is inadequate, since often the emergent meaning is not fully compatible with the "literal" meaning of the proverb and the current situation. Therefore, I suggest that proverbs should be analyzed in terms of the theory of conceptual integration networks (Turner & Fauconnier 1995, Fauconnier & Turner 2002, henceforth F&T). In my account I will combine the general framework of the blending theory with the neural theory of cognition developed by A. Damasio (1999), who distinguishes two crucial components of each act of cognition: the dispositional space, defined as "a space in which dispositional memories contain records of implicit knowledge on the basis of which images can be constructed in recall, movements can be generated, and the processing of images can be facilitated" (p. 219) and the image space, defined as "the space in which images of all sensory types explicitly occur and which includes the manifest mental contents" (ibid.). Given Damasio's model, the specific content of a proverb (or any other conceptual unit) is represented in the dispositional space, while the content of the target situation (as conceived by the conceptualizer) is represented in the image space, and the integration is executed by (or in?) the working memory (cf. LeDoux 2002). The model straightforwardly explains why there can't be any single account of the way proverbs work: it all depends on the relation between the dispositional space of the proverb and the image space of the current context. If the two spaces have the same organizing frame, the emergent meaning will be a mirror integration network, if the dispositional space is neatly projected onto the image space, the emergent meaning will be a single scope network; finally, when there are serious clashes between the two spaces, the emergent meaning will be a double scope integration network (see below for the

concepts of mirror, single scope and double scope networks). All these options are open.

This proposal should come as no surprise to anyone familiar with the theory of Conceptual Integration Networks (CIN), since the schematic representation of the mapping involved in the metonymic mapping shown in Fig. 2 looks quite like a CIN, except that one crucial component of the network is still missing, i.e. that of the blended space. Thus, my suggestion boils down to the extension of the network which follows from L&T's analysis by one more space, the one that shows how various bits and pieces of each of the inputs blend in order to produce the emergent meaning of a proverb in context.

## 2. Simplex, mirror, single scope and double scope integration networks

Fauconnier & Turner (2002) distinguish four kinds of integration networks: simplex networks, mirror networks, single scope networks and double scope networks.

### SIMPLEX NETWORK

Simplex networks integrate the spaces representing frames consisting of various roles (functions, e.g. FATHER and EGO in the family frame) and the spaces representing sets of values of those functions (e.g. *Paul, Sally*). Proverbs can be used in simplex networks only when they have literal senses and when they are used in those totally literal senses. For instance, when there is a real farmer who is supposed to make hay and the sun is shining, saying to him *Make hay while the sun shines* would be an example of a proverb used in a simplex network. It is arguable, however, to what extent such usage can be still regarded as proverbial. Notice that many proverbs don't allow for this kind of literal interpretations, e.g. the syntactically simple XYZ construction, as in *Necessity is the mother of invention*, involves much more than just providing values for the function of MOTHER.

As we shall see below (cf. Fig. 6), however, some proverbs which are themselves metaphorical, can provide spaces which may also appear in simplex networks.

### MIRROR NETWORK

"A mirror network is an integration network in which all spaces – inputs, generic and blend – share an organizing frame" (F&T:122), where the organizing frame is "a frame that specifies the nature of the relevant activity, events and participants" (p. 123).

In the case of *Blind blames the ditch*, it is not specified what kind of activity the blind person was involved in when she fell into the ditch, therefore there are a number of likely contexts that could license the mirror integration. One such

context would be a blind person falling into a pond and then blaming the pond, another would be a deaf and blind person blaming a car for knocking him down on a zebra crossing, having failed to perceive the red traffic light and the car horn. The two spaces differ in detail, but otherwise the organizing frames are the same: a perceptually disabled person moving in space, failing to perceive the signs of danger, being hurt by a dangerous object and blaming the object for it rather than herself.

If the organizing frame is construed as a single conceptual domain, the two spaces may be considered as two slightly different elements of this single domain, and hence the whole mapping could be viewed as an instance of synecdochic metonymy.

### SINGLE SCOPE NETWORK

“A single scope network has two input spaces with different organizing frames, one of which is projected to organize the blend. ... Single scope networks are the prototype of highly conventional source-target metaphors” (F&T:126f).

The most likely single scope integration network for *Blind blames the ditch* will involve projections from the category of disabled people to those who have other, non-perceptual incapacities, and from the “topographical” and physical category of the ditch to that of more abstract obstacles, and from the category of movement in space to that of other activities. Accordingly, the image spaces that might license the use of the proverb may be quite diverse.

Here are two examples: An athlete who aspires to break the world record in long jump, repeatedly fails to do so and each time finds fault with some external factor, the altitude of the stadium, the wind or the surface of the runway. The other example is a researcher who has just started to work at a new university and is unable to come up with any new research projects, but, instead of admitting his temporary lack of ideas, puts the blame for his failure on the administration of the university and/or the conditions in his lab. In both examples the mappings are rather straightforward. In the athlete case, the BLIND PERSON corresponds to the ATHLETE, the DITCH to the STADIUM or the ATMOSPHERIC CONDITIONS and the MOVEMENT to JUMPING. In the researcher case, the BLIND MAN corresponds to the RESEARCHER, the DITCH to the UNIVERSITY and its administration and/or facilities, the MOVEMENT in space to the EXPERIMENTAL RESEARCH. The source dispositional space provided by the content of the proverb and the target image space provided by the context are different, the correspondences straightforward. The obvious conclusion is that the proverb has been used metaphorically.

### DOUBLE SCOPE NETWORK

“A double scope network has inputs with different (and often clashing) organizing frames as well as an organizing frame for the blend that includes parts of each of those frames and has emergent structure of its own” (F&T:131)

I suggest that L&T’s account of the proverb *Blind blames the ditch* should be represented as a double scope network. Here are the reasons why.



L&T suggest that the proverb *Blind blames the ditch* could be used in a context whereby “a presidential candidate knowingly commits some personal impropriety (...), and his candidacy is destroyed by the press’s reporting of the impropriety” (L&T:163). They argue that given the above context, the proverb can be used felicitously because the situation described in the proverb and the situation in the context share the same generic level information, in particular:

- There is a person with an incapacity
- He encounters a situation in which his incapacity in that situation results in a negative consequence
- He blames the situation rather than his own incapacity
- He should have held himself responsible, not the situation.

L&T claim that the above description can be used as “a variable template that can be filled in in many ways” (L&T:164). What L&T fail to see is that what they call “filling in” is in fact a rather complex process, which may result in mental spaces whose mutual relations may range from rather simple cases to extremely complex ones which lead to equally complex blends. Paradoxically, the image space they describe and the “filling in” they propose is by no means simple. As an example they suggest the following “values” for the slots in the template (generic space):

- The person is the presidential candidate.
- His incapacity is his inability to understand the consequences of his own improper actions.
- The context he encounters is his knowingly committing an impropriety and the press’s reporting it.
- The consequence is having his candidacy dashed.
- He blames the press
- We judge him as being foolish for blaming the press the press instead of himself.

Then L&T argue that the above situation can be described in terms of the proverb *Blind blames the ditch* on account of and the following correspondences:

- The blind person corresponds to the presidential candidate.
- His blindness corresponds to his inability to understand the consequences of his own actions.
- Falling into the ditch corresponds to his committing the impropriety and having it reported.
- Being in the ditch corresponds to being out of the running as a candidate.
- Blaming the ditch corresponds to blaming the press coverage.
- Judging the blind man as foolish for blaming the ditch corresponds to judging the candidate as foolish for blaming the press coverage.

I wish to argue that L&T’s account is simplistic because in order to arrive at the satisfactory interpretation of the proverb used in that particular context, we must make considerable cognitive adjustments, typical of double scope blending of the two input spaces: the blind-man space and the president space.

Here is the list of the most obvious “clashes” between the two spaces represented graphically in Fig.4:

- a) The blind man space has only one Agent and a topographic entity (the ditch), while the politician space has a lot of other Agents, e.g. the investigative journalists, their bosses, the candidate’s family and his team of advisers, his party leaders, other parties and their candidates, the ordinary voters. There are also quite a few institutions: the press, the parties, the presidency, etc.
- b) Blindness is involuntary, affects almost all Agent’s externally oriented activities and usually cannot be cured, whereas inability to understand consequences of one’s actions does not mean that the decisions were taken unconsciously and unintentionally. In a sense, the Agent could see very well what he was doing and probably tried to conceal it.
- c) Falling into the ditch is considered to be a sorry accident which normally invites compassion and sympathy, while having one’s impropriety revealed by the press and the resulting scandal is considered an act of moral justice.
- d) The ditch is inert and passive, whereas in democratic countries journalists are active players on the political scene. In fact, it is hard to determine what exactly the ditch corresponds to. Is it the journalists, the press in general, or perhaps the society that demands high moral standards from its representatives.
- e) The ditch affects the blind man directly, through bodily contact, while the press affects the candidate indirectly, through the publication of their report, which affects the candidate because it affects his other party leaders and the voters.
- f) Finally, falling into a ditch does not change your social or political situation, whereas having one’s moral impropriety divulged may mean the end of your political career.

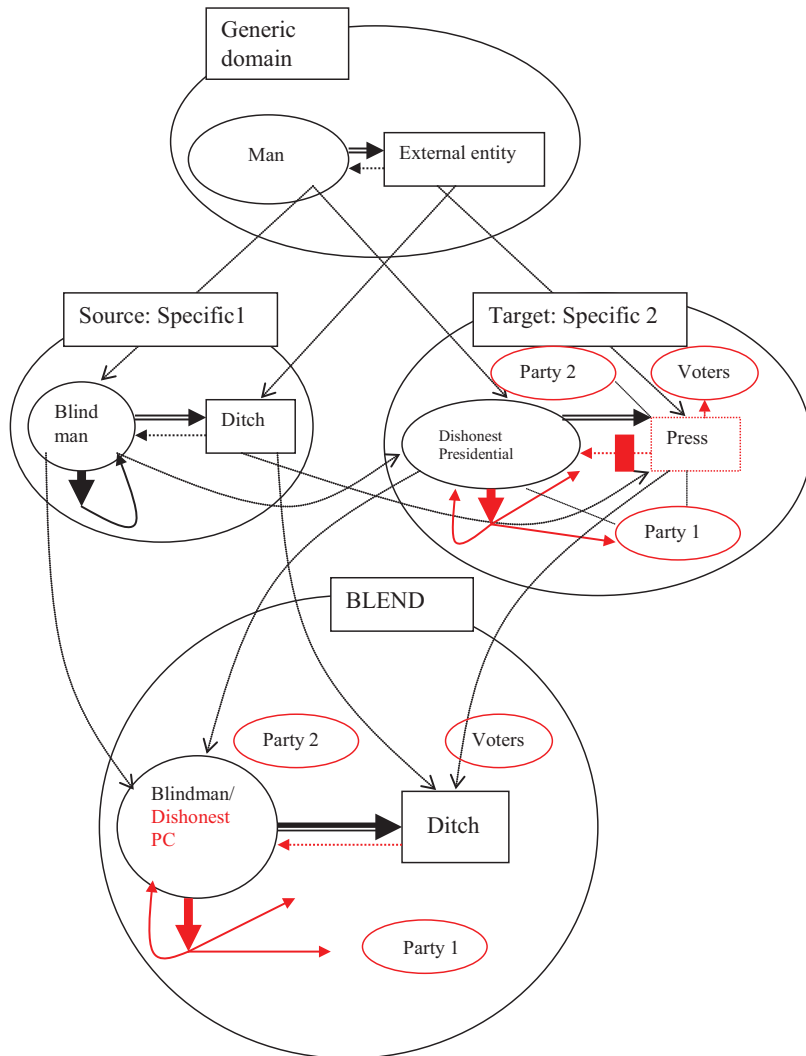


Fig. 4. Conceptual Integration Network of the proverb *Blind blames the ditch* with the Target Image Space of the Presidential Candidate.

### 3. Proverbs in translation

Most languages have proverbs which share their generic structure but differ in details. These details may be irrelevant to most prototypical mirror or single scope integrations, but may be quite important in the cases involving double scope integrations. Moreover, given specific image spaces, a proverb that requires one kind of integration in L1 may require another kind of integration in L2.

To begin with, I will consider a case whereby what appears to be a mirror integration in English requires a double scope integration in Polish.

The closest Polish equivalent of the English proverb *It never rains but it pours* is *Nieszczęścia chodzą parami*, literally ‘Misfortunes walk in pairs’.

Now consider the context whereby during one autumn there were three successive floods caused by heavy rains. In English, although the three periods of heavy raining are compressed into one downpour, thereby underscoring their intensity, the emergent meaning represents the case of mirror integration, since both spaces specify certain atmospheric conditions. The integration network blending these two spaces is shown in Fig. 5 below.

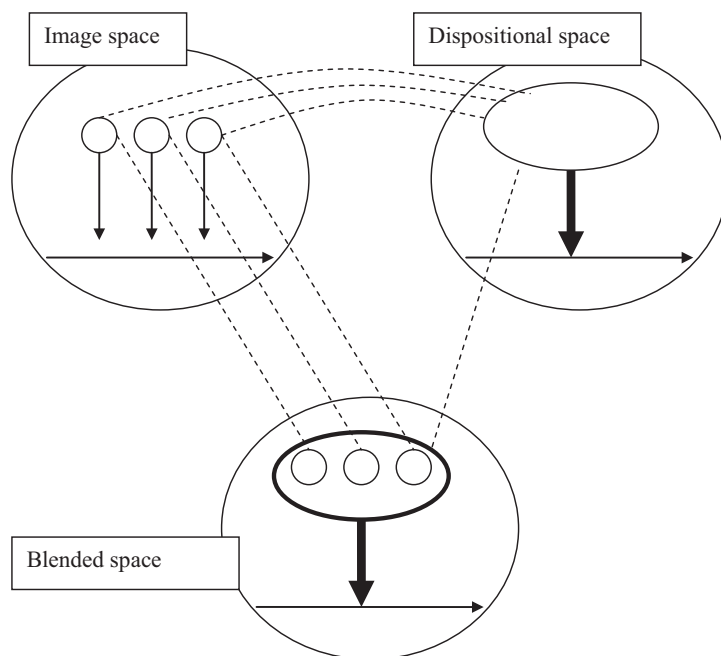


Fig. 5. Conceptual Integration Network of the proverb *It never rains but it pours* used in the context of three successive rains. The horizontal arrow at the bottom

of each space indicates time. The generic space and the negated hypothetical RAIN-SPACE have been ignored

In Polish, the basic organizing frame of the dispositional space is joint movement of two entities in space, which is integrated with the image space representing a succession of three events in time. The main clash between the two spaces involves precisely this simultaneous appearance of two moving entities in space in the proverb and the succession of three events in the target image space. The clash is probably reconciled by conceptualizing the previous calamities as a single misfortune and the latest calamity as the second component of the pair. Another major clash has to do with two different kinds of activities: raining in the image space and walking in the dispositional space. The integration network representing the blending process is represented in Fig. 6 below.

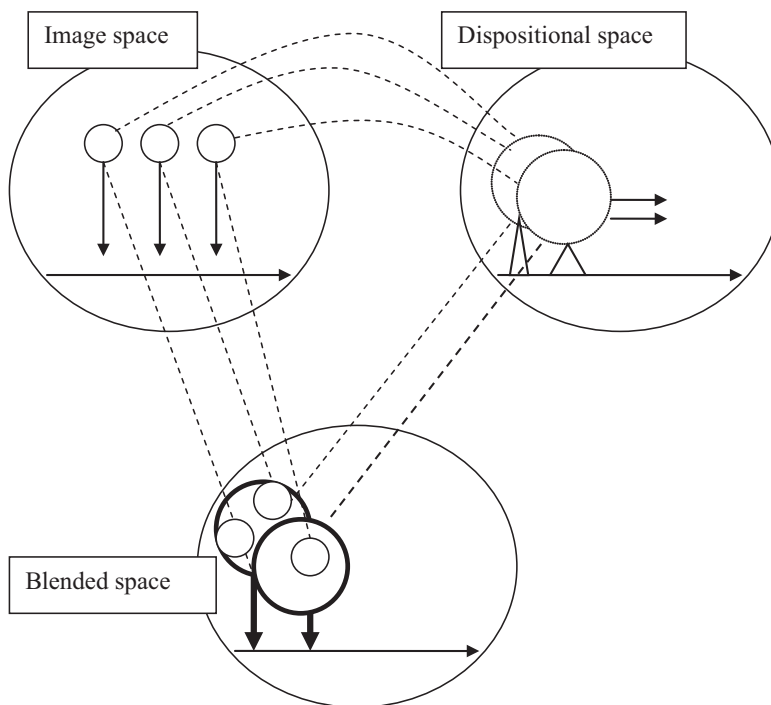


Fig. 6. Conceptual Integration Network of the Polish proverb *Nieszczęścia chodzą parami* ('Misfortunes walk in pairs') used in the context of three successive rains. The dotted circles in the dispositional space indicate misfortunes, which are, ontologically, events. The generic space has been ignored.

The differences in the specifics of the conceptual structure of the proverb in English and Polish make it possible to change the situation and use the Polish

proverb in a relatively simple single scope network where English requires a rather complex double scope network.

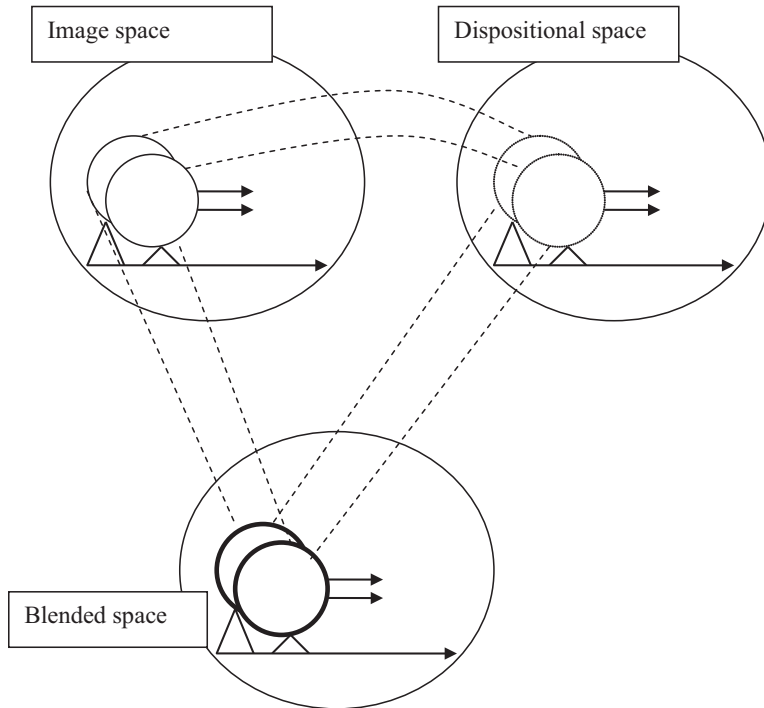


Fig. 7. Conceptual Integration Network of the Polish proverb *Nieszczęścia chodzą parami* ("Misfortunes walk in pairs") used in the context of the speaker seeing two people she despises walking together. The dotted circles in the dispositional space indicate misfortunes, which are, ontologically, events. The network looks almost like an ordinary simplex network except that it changes the ontological status of events in the dispositional space and links it with people in the image space (single scope mapping). It could be argued, though, that the ontological change is already implied by the conceptual content of the proverb, since the verb *chodzić* (walk) requires an animate subject. Notice that if the circled entities in the image space were events the emergent meaning would involve a single scope integration because the event can't walk, so the occurrence of events in time would be construed in terms of walking in space. The generic space has been ignored.

Consider the case of an image space in which there are two people the speaker does not like who are walking together, holding hands, apparently in love with each other. Integrating this image space with the dispositional space of the Polish proverb, the speaker may use the Polish proverb ("Misfortunes

walk in pairs’) quite felicitously as an expression of a single scope integration network in which misfortunes are metonymically mapped to people. In English, however, the same target would require a double-scope integration, in which the intensity of rain corresponds to just two individuals (as opposed to one). At the same time, the specifics of the dispositional source domain of the proverb, in particular the number two (denoted by *pairs*) makes the proverb practically unusable in the context in which the speaker would see three people she despises – the discrepancy in number seems to block integration, probably because there is no principled way of conceptually dividing the group into two entities. In English, however, the proverb *It never rains but it pours* could be used in that context without any extra cognitive effort.

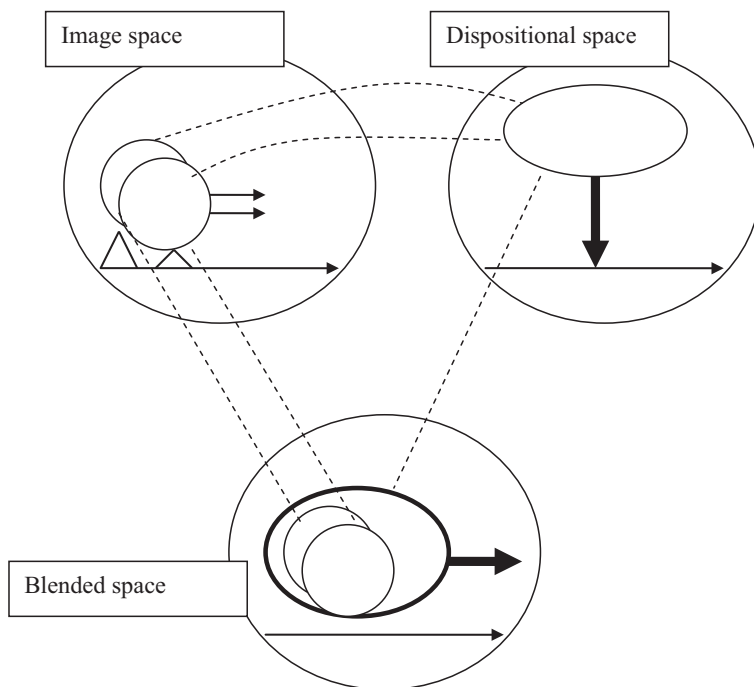


Fig. 8. The double scope Conceptual Integration Network of the English proverb *It never rains but it pours* used in the context of the speaker seeing two people she despises walking together.

#### 4. Conclusions

1. No analysis of proverbs can be reduced to two domains or spaces. In addition to the Generic Space and the Specific Space, i.e. the dispositional

space representing the conceptual structure of the proverb, it is necessary to take into account the image space, representing the conceptualization of the current situation, and the blended space, representing the emergent meaning of the proverb.

2. While the meaning of a proverb can be explained in terms of the generic space it instantiates, its emergent meaning is best represented in terms of conceptual integration networks along the lines suggested by Fauconnier and Turner
3. The suggested integration networks involving both dispositional and image spaces look very much like the model of cognition proposed by A. Damasio on the basis of his independent research into the neurology of cognition, which provides a strong piece of convergent evidence in favour of the proposed account of proverbs in terms of the theory of conceptual blending.
4. There is no single cognitive mechanism responsible for the emergent meaning of proverbs. They may be used both in mirror, single scope and in double scope integration networks, depending on the relation between the dispositional space of the proverb and the image space of the contextually given situation. Arguably, simplex networks may also occur, although in such cases proverbs can hardly be said to be used as proverbs.
5. There are reasons to argue that proverbs which occur in mirror networks are used metonymically (as cases of synecdochic metonymy), while those which occur in single and double scope networks are used metaphorically.
6. Proverbs may be more or less suitable for certain contexts: when they are used in mirror and single scope networks, their interpretation is straightforward; when they are used in double scope networks, they may call for considerable cognitive adjustments. (Which means they probably take longer to interpret and may give rise to different interpretations; a hypothesis to be tested psycholinguistically).
7. Cross-linguistically, it is important to remember that proverbs in L1 and L2, albeit generically identical, may differ in detail and, as a result, may differ significantly in their degree of suitability in certain contexts.

## References

- Barcelona, A. 2000. On the plausibility of claiming a metonymic motivation for conceptual metaphor. In A. Barcelona (ed.), *Metaphor and Metonymy at the Crossroads*, 31-58. Berlin, New York: Mouton de Gruyter.
- Bierwiaczonek, B. 2005. On the neural and conceptual basis of semantic relations and metonymy. In E. Górska and G. Radden (eds.), *Metonymy-Metaphor Collage*, 11-36. Warszawa: Wydawnictwo Uniwersytetu Warszawskiego.
- Bierwiaczonek, B. 2013. *Metonymy in Language, Thought and Brain*. Sheffield: Equinox.
- Blank, A. and P. Koch (eds.) 1999. *Historical Semantics and Cognition*. Berlin, New York: Mouton de Gruyter.



- Damasio, A. 1999. *The Feeling of What Happens. Body and Emotion in the Making of Consciousness*. San Diego, New York, London: Harcourt Inc.
- Fauconnier, G. and M. Turner 2002. *The Way We Think. Conceptual Blending and the Mind's Hidden Complexities*. Basic Books.
- Gibbs, R.W. Jr. 1999. Speaking and thinking with metonymy. In K-U. Panther and G. Radden (eds.), 61-76.
- Lakoff, G. and M. Turner 1989. *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- LeDoux, J. 2002. *Synaptic Self. How Our Brains Become Who We Are*. Penguin Books.
- Nerlich, B. and D.D. Clarke 1999. Synecdoche as a cognitive and communicative strategy. In A. Blank and P. Koch (eds.), 197-213.
- Panther, K-U. and G. Radden (eds.) 1999. *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Panther, K-U. and L. Thornburg 2003. Introduction: On the nature of conceptual metonymy. In K-U. Panther and L. Thornburg (eds.) *Metonymy and Pragmatic Inferencing*, 1-20. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Radden, G. 2000. How metonymic are metaphors? In A. Barcelona (ed.), 93-108.
- Rudzka-Ostyn, B. 1995. Metaphor, schema, invariance. The case of verbs of answering. In L. Goossens, P. Pauwels, B. Rudzka-Ostyn, A.-M. Simon-Venderbergen and J. Vanparys (eds.), *By Word of Mouth. Metaphor, Metonymy and Linguistic Action in a Cognitive Perspective*, 205-243. Amsterdam/Philadelphia: John Benjamins.
- Seto, K. 1999. Distinguishing metonymy from synecdoche. In K.-U. Panther and G. Radden (eds.), 91-120.
- Sullivan, K. and E. Sweetser 2009. Is „Generic is Specific“ a metaphor. In F. Parrill, V. Tobin and M. Turner (eds.), 309-328. *Meaning, Form and Body*. (Selected papers from the 2008 CSDL meeting). Stanford CA: CSLI Publications.
- Turner, M. and G. Fauconnier 1995. Conceptual integration and formal expression. *Journal of Metaphor and Symbolic Activity* 10(3):