View-Neutral Mapping Adjuncts in Real Text: A Preliminary Investigation

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0 Introduction

Over the past 20 or so years an impressive amount of evidence has been uncovered suggesting that metaphors cluster into families of metaphors, which share a small number of conventional correspondences between the source and the target domain, see Kovecses (2002). We accept this evidence. In this report we shall suggest that there are other correspondences between the pretend world in which a metaphor is interpreted literally and reality, i.e. the target. These correspondences are, in essence, identity correspondences, stating that certain attributes, propositions relations etc, that hold of entities when thought of in source domain terms will hold in essentially the same form of the corresponding entities in the target, even though the nature of the entity so qualified will almost certainly be radically different in the two domains. Furthermore, we shall claim that these correspondences cut across the classification of metaphors in families and can in principle apply to any metaphor.

1 View Neutral Mapping Adjuncts

Consider the following sentence, which is a much simplified version of a metaphor discussed in detail in Barnden & Lee (2001).

1) "The idea lay in the far reaches of Anne's mind."

Arguably, the metaphor depends on two conventional metaphors: IDEAS AS (POTENTIALLY MANIPULABLE) OBJECTS and MIND AS PHYSICAL SPACE (plus an implicit assumption that the possessor of the mind is located at the front or somewhere more central in the mind). Thus the "mind" is viewed as a physical space and the idea is viewed as a physical object in that space. However, the sentence conveys more information than that carried by the following metaphor, which would also seem to be analysable in terms of these conventional metaphors:

2) "She had an idea in mind."

It extends this metaphor by referring to 'the far reaches'. A plausible interpretation of the sentence is that Anne is not very consciously aware of the idea, i.e., the degree to which the idea can be manipulated mentally is very limited, and the reason for drawing this inference is that if an object is far away, then it can only be manipulated physically to a limited degree.

The following sentence again uses IDEAS AS OBJECTS, but this time in conjunction with COGNIZING AS SEEING. Thus although the target domain is broadly the same, the source domain is different. Again the notion of 'a limited degree' is present, but this time its vehicle is the word 'dimly'.

3) "he's only dimly aware of the reason for his placement in the symbolic order"
(www.altx.com/interzones/white/word2.html: accessed 4.12.03)

The notion of the 'degree' to which something holds is clearly not just a part of one source domain, but is it somehow related to the target domain? The answer is clearly not. Degrees do not just hold of aspects of mind and thought. The following makes use of the conventional metaphor PURPOSEFUL ACTION AS A JOURNEY, with the degree carried by almost:

4) "Now you've almost reached your destination: an informed and thoughtful opinion supported by research."
(www.stanford.edu/group/arts/nicaragua/student/contraquest/group.html: 4.12.03)

Let us now consider other attributes that a metaphorical expression might carry. Whereas the first two sentences involved the conventional metaphor IDEAS AS OBJECTS to help carry the notion of a qualitative degree, the following sentence uses it to carry a 'value judgement'. The object-idea is a 'gem', i.e. an object that the speaker would consider valuable, and this value judgement carries over to the 'idea' which has been cast as an object.

5) "That's a gem of an idea."

But with this attribute too, value judgement is not solely an attribute that holds of IDEAS AS OBJECTS. Consider the following which makes use the conventional metaphor ABSTRACT ENTITY AS PHYSICAL OBJECT:

6) "towards the end of the century, the men began to wear the very symbol of their bashed in authority: the trilby."

This is adapted from Goatly (1997 pp127). This extract conveys a number of different attributes of the 'authority', which are discussed in Barnden (2001). One prominent one however, is the value judgement conveyed by 'bashed in'.

The point we wish to stress is that there are a number of properties, attributes, relations, qualities etc, such as 'qualitative degree', 'value judgement', 'causation,' and others that cut across the conventional division of metaphors into families organized around a conceptual metaphor. In Barnden et al (2002) these are referred to as "View Neutral Mapping Adjuncts" (VNMAs) (see also, Wallington et al (in press)[1]). Since the qualitative degree inferable from far-ness, dimness, etc is not specific to any of the source (or target) domains, it would be more parsimonious to assume general mapping rules rather than a specific mapping rule within the MIND AS PHYSICAL SPACE conceptual metaphor that would map a source domain "far reaches" and similarly with 'dimness', etc. Furthermore, these general mappings are not metaphorical. A qualitative degree that has been inferred as holding of an entity in the source domain maps to a qualitative degree in the target. The entity it holds of will be different, but (simplifying somewhat) the degree will not.[2]

Very often these VNMAs are involved in the licensing of elements for which the underlying metaphorical view lists no established correspondence; what are called 'map-transcending' elements in the terminology of Barnden & Lee (2001), Barnden et al (2002). Instead, a meaning can be inferred in the context of the source domain that can be transferred via a VNMA. Often, it is the VNMA that conveys the rhetorical impact of the metaphorical stretch (see Wallington et al in press). However, VNMAs will be required for a full interpretation of a metaphorical stretch even if there are no map-transcending elements and where the main rhetorical thrust of the utterance can be accounted for solely in terms of the established correspondences of a conventional metaphorical view. For example, suppose that sentence (1) were changed to the following:

7) "The idea had been in the far reaches of Anne's mind, but Anne was now fully aware of it."

Whereas in sentence (1), the 'idea' is described as being in the far reaches at the time of utterance, at the time of utterance of sentence (7), the idea is no longer there. This temporal information holds of the metaphorical stretch if interpreted literally in source domain terms, but it also holds of the intended target interpretation of the sentence. However, to add temporal correspondences to the set of correspondences defining the MIND AS PHYSICAL SPACE conventional metaphorical view would be to miss a massive generalization; all metaphorical stretches convey temporal information and furthermore the temporal information maps across in an unchanging manner.

In the following section we provide a list of VNMAs. Then in section 3, we give a brief report of an attempt that was made during a corpus annotation study to identify one class of VNMA.

2 Types of VNMA

1 In Wallington et al, VNMAs are referred to as COMMAs or Conventional Metaphor Mapping Adjuncts.
2 It must not be forgotten that most adjectives and other qualifiers and degree words are relative and not absolute terms. Thus a large Chihuahua is probably smaller than a small Great Dane. Thus, it will not be any absolute sense that will correspond.

The following list appears to cover all the cases we have examined. See Barnden et al (2003) and Wallington et al (in press) for further discussion.

Causation/Ability VNMA: Causation, prevention, helping, ability and (dis) enablement relationships between events or other entities in the source map to causation, prevention, etc relationships between their mappees (if they have any).

Change VNMA: If there is a change event from one state of affairs to another in the source domain, where the states of affairs themselves have mappees in the target domain, then the change event has a mappee that is a change event between the latter states of affairs.

Time-order VNMA: The time-order of events in a source domain is the same as that of their mappee events, if any.

Duration VNMA: Qualitative length of time, in the context of the source domain, that is consumed by an event maps identically to qualitative length of time, in the context of the target domain, consumed by the mappee event, if any. For example, if something takes a long time in the context of the source domain then a mappee target event takes a long time in the context of the target. Also, qualitative duration comparisons map over.

Event-Shape VNMA: Aspectual features of events/ situations/ processes, such as whether they have a start or end, or are intermittent, map identically to mappee events/ situations/ processes.

Mental/ Emotional States VNMA: If some agents in the source domain map to some agents in the tar-get domain, then mental and emotional states of the agents map identically, except that their objects or propositional contents (if any) are modified suitably by any mapping relationships that apply, and provided that this modification can be done.

For example, if John and Mary arguing is metaphorically viewed as Harry and Sally (respectively) engaging in physical combat, then the source domain proposition that Harry believes he is losing in the combat maps to the target domain proposition that John believes he is losing the argument, assuming that combat-losing maps to argument-losing.

The VNMA allows for object/content-free states. Thus, John's being happy in the source domain maps to John's being happy in the target domain.

Modality VNMA: Relative degree of necessity, possibility, obligation, tendency, etc. in the source domain, for actors to undertake actions or for a state of affairs to obtain maps identically to relative degree of necessity, possibility, etc. for mappee actors, if any, to undertake mappee actions, if any, or for mappee states of affairs to obtain, if any.

Value-Judgment VNMA: Levels of goodness, importance or other types of value assigned by the under-stander to states of affairs in the source domain map identically to levels of goodness, etc. of their mappee states of affairs, if any.

Uncertainty VNMA: The level of certainty with which situations hold in the source maps at least roughly to level of certainty with which their mappee situations, if any, hold.

Function VNMA: Functions (i.e., purposes served) of entities in the source domain map to functions of their mappees, if any.

Qualitative Degree VNMA: If the holding of a graded property or relationship in the source maps to the holding of a graded property or relationship in the target, or vice versa, then the qualitative absolute and relative degrees map over identically. For example, if presence of above-normal temperature maps to presence of anger, then a high temperature maps to intense anger, and the higher the temperature the more intense the anger.

Negation VNMA: If a property or relationship in the source maps to a property or relationship in the tar-get, then non-possession of the source property/ relationship maps to non-possession of the target prop-erty/ relationship.

Set-hood VNMA: If entities of a certain type S in the source map to entities of type T in the target, then a set of entities of type S in the source maps to a set of entities of type T in the target.

Set-Size VNMA: Qualitative size (relative or absolute) of sets in the source maps identically to qualitative size of mappee sets in the target. E. g., if a set is large in the terms of the source domain then its mappee (if any) in the target domain is also large in the terms of that domain.

Physical-Size VNMA: Qualitative physical size (relative or absolute) of physical objects in the source

maps identically to qualitative physical sizes of mappee objects (if physical) in the target.

3 Corpus Analysis

In order to further investigate the use and role of VNMAs we turned to a corpus study that was being made of many different aspects of metaphor and asked the Data Collection Assistants (DCAs) to indicate whether they thought a particular metaphorical stretch was being used to convey a 'value judgement'. The value judgement VNMA was chosen because it was thought that it would be relatively easy to determine whether a stretch was conveying such information. Note that even determining whether a stretch is metaphorical or not is not a particular easy task and to further and to try to give some indication of the meaning makes the task much more difficult. In particular, for many of the VNMAs listed above, a process of often quite intensive inference is required to interpret a map-transcending element in the context of the literal interpretation of the source domain, so that something that can be interpreted by a VNMA will result. On the other hand, VNMAs such as 'time-order' will be required for all clausal stretches and so the interest in marking this information will be much more narrowly focussed. For this reason, it was decided to look for value judgements.

The study involved annotating almost 250,000 words of text taken from two sources: the British National Corpus (BNC) and a small corpus of doctor patient texts on the subject of arthritis. Furthermore, many of the texts were independently annotated by more than one DCA. The study is described in Wallington et al (2003).

The DCAs were instructed to mark metaphorical stretches in the text and then at the end of the text create a sequence of notes, one for each marked metaphorical stretch, in which they were required to fill in various attributes about the stretch. The one that is relevant to this study is that they were asked to give their degree of confidence as to whether the stretch conveys a judgement about the goodness, importance or desirability of what is being talked about. The judgement can be by the speaker/author, or by some agent mentioned in the text. The degree of confidence can range from –2 to 2, where –2 indicates that the DCA is fully confident that the stretch conveys no value judgement and 2 indicates that the DCA is fully confident that the stretch does conveys a value judgement about what is being talked about. For example, in sentence (5) in section 1, an idea is cast as an object using the metaphorical view IDEAS AS PHYSICAL OBJECTS. Describing it as a gem conveys the speaker's attitude towards the idea. Note that this is not the same as asking the DCAs to indicate the degree to which a value judgement plays a prominent role in the metaphorical stretch, nor the strength or extremity of any value judgement being conveyed, i.e. where hatred would receive a higher score than indifference.

Note that for cases where the target domain of the conventional metaphorical view concerns goodness, importance or desirability, such as IMPORTANCE IS WEIGHT, the DCAs will give a positive value judgement. Thus, it will not only be stretches where the value judgement is borne by the VNMAs that will be detected. However, it was felt that to complicate the instructions so that only such stretches will be marked with a positive value judgement would make the task too difficult. The results that we got suggest, however, that perhaps a more precise definition should have been given.

It is to be expected that metaphor analysts would disagree about what is and what is not a metaphorical stretch. We take the view that metaphor is to some extent a relative notion where what is metaphorical for one person might not be for another. For this reason we would not expect that in the cases where a text was tagged independently by more than one DCA the number of metaphorical stretches reported would be identical, although we would expect there to be broad agreement.

Because in many cases a file had been tagged by more than one DCA our intention was first to examine the results for these files in order to get some preliminary idea as to how easy it was to spot value judgements in metaphorical stretches. We already had some indication (via a means of measuring 'inter-annotator agreement' described in Wallington et al (2003)) that the DCAs were broadly consistent in deciding what is and what is not a metaphorical stretch, and we hoped that there would be a similar degree of agreement about value judgements.

Unfortunately, this proved not to be the case. We looked at a total of 14 files from the BNC that had been tagged by the same two DCAs. These two DCAs had been working on a relatively full time basis and had tagged far more files than the other DCAs. The two DCAs broadly agreed on the number of metaphorical stretches with one identifying 1371 stretches and the other 1312 stretches. This is a difference of approximately 5%. However, the first DCA classified 789 of the stretches as conveying a

value judgement whilst the second DCA so classified only 287 of the stretches. In other words, for the first DCA, 57.5% of the stretches conveyed a value judgement; for the second the figure was only 21.9%. Furthermore, there were no cases in which the DCA tagging the most value judgements tagged fewer than the other. If one looked just at the most certain cases, i.e where the value judgement was rated as '2', then we find a similar discrepancy. Now whether or not a value judgement is being conveyed and how closely it is tied to the specific phraseology of the metaphorical stretch rather than the entire context is a very difficult thing to determine, and clearly the instructions/training given to the DCAs with respect to the identification of value judgements need to be rephrased and sharpened. As for the current results, a detailed comparison of the stretches each DCA has marked as possessing a positive value judgement is required, before we can draw any firm conclusions about the value judgement VNMA. However, at this point, this exercise has only just started.

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