Metaphor Variation across Languages. A Corpus-driven Study

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Abstract

The study presented here arises from a research that contrasts heart metaphors in five European languages (Italian, French, German, Spanish and English) in the field of Conceptual Metaphor Theory (CMT). After a detailed examination of a wide range of dictionaries and thesauri, we establish a series of heart conceptualizations in the five languages subject of investigation. Once the conceptualizations are established, our purpose is to find out if we can find differences with respect to corpora, regarding the types of expressions contained. The aim of this paper is to show that we can actually find differences. We will see what they consist of, and we will also focus on which way we can benefit from the analysis of corpora in the study of metaphor from the point of view of CMT. In order to carry that out, we will analyse the Italian corpus "CORIS", reference corpus of contemporary written Italian, (http://corpus. cilta. unibo. it: 8080/corisita.html) of the University of Bologna. This corpus is developed and co-ordinated by Rossini Favretti since 1998 (cf. Rossini Favretti, 2000; Tamburini, 2000; De Santis, 2000; Rossini Favretti, Tamburini y De Santis, 2002).

1. Introduction

The first step of this investigation was to compare heart metaphors in five languages in order to establish concepts and metaphorical models. As Kövecses (1991: 30) comments regarding his methodology in the classification of conceptual metaphor of happiness:

> "…in order to be able to arrive at [the] metaphors, metonymies, and inherent concepts, and, eventually, [the] prototypical cognitive models, one needs to study the conventionalized linguistic expressions that are related to a given notion".

The image schematic structure of the heart is basically a container for emotions, among these love is the outstanding one, but the heart also conceptualizes other emotions such as sympathy, courage, kindness, etc.

We observed that the conceptualizations of the heart are very similar in the languages subject of study. The differences are slight in comparison with the big number of similarities found. Therefore, we discovered that most of the conceptual metaphors are the same. Besides, we also found a series of idiosyncratic metaphorical expressions in each language[1].

The really interesting and novel thing in this field consists of proving that some expressions, which are not completely the same in their structure or meaning, in two or more languages, are based on the same metaphor, since they are the reflection of a superior category. As Barcelona (2001: 137) points out, we are dealing with the same metaphor "even though the elaborations, the specifications and corresponding linguistic

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[1] The different conceptualizations are not reported in this paper due to space constraints, although they will be displayed in the poster session.

expressions of the metaphor are not exactly the same, or equally conventionalized, in both of them".

The concept of "Idealized Cognitive Model" is understood as a complex structure which can be composed of several metaphors and metonymies which can be related and can constitute folk theories of specific abstract fields. Our reflections determine the concept of "Idealized Cognitive Model" of the heart as the seat of emotions, mainly. This model is composed of several metaphors (and submetaphors derived from them) and metonymies, which are many times related, and constitute the cognitive folk model of the heart as the seat of emotions.

2. Corpus analysis

2.1. Introduction

In order to complete our study of heart metaphors, we decided to analyse, as a case study, the Italian corpus CORIS (http://corpora.dslo. unibo. it/ coris_eng.html) of the University of Bolonia, designed and co-ordinated by R. Rossini Favretti. It contains 100 million words and it consists of a collection of authentic and commonly occurring texts in electronic format by virtue of their representativeness of modern Italian (synchronic corpus of written language, whose texts belong, roughly speaking, to the 1980s and 1990s). The corpus is composed of the following subcorpora:

PRESS – 38 million words
FICTION – 25 million words
ACADEMIC PROSE – 12 million words
LEGAL AND ADMINISTRATIVE PROSE – 10 million words
MISCELLANEA – 10 million words
EPHEMERA – 5 million words

We selected 300 random cases out of the 15522 which contained the word "heart". The software collects the texts in a concordance format.

Even though the primary meaning of "heart" alludes to the body part, we have discovered that most of the entries collected from the corpus have a metaphorical meaning. Therefore, we agree with Deignan (1999: 179) who claims that the metaphorical senses of some words are used with the same, or even more frequency than their non-metaphorical senses:

> "One of the first observations that can be made through studying the concordances for many words is the frequency of occurrence of their metaphorical senses. While non-metaphorical senses may be psychologically primary and historically prior, contemporary corpus data show that metaphorical senses of some words are used as frequently as, or more frequently than, their non-metaphorical senses".

We establish a classification of the corpus distinguishing the literal senses from the figurative ones. Out of the 300 cases subject of study, 47 are literal and 253 are metaphorical or metonymic. So, the first surprising finding is that non-literal uses are much more frequent than the literal ones[2]. Many of those non-literal uses appear in fixed expressions, semantically opaque, and are prototypical of the category "idiom" for most of the linguists, such as "*stare a cuore*", "*nel profondo del cuore*", "*avere il cuore*

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[2] This corresponds to the experience of corpus lexicographers such as Lewis (1993).

in gola", etc. Besides, the corpus contains a big number of free metaphorical combinations. This reveals an important difference regarding dictionaries, basically that the corpus includes more unfixed expressions, i.e. dictionaries register more pure or opaque idioms, in the sense of Moon (1998), since, according to this linguist the purpose of this work is to describe language at a lexical level. That is why dictionaries tend to collect more expressions of this type because they cannot be broken down into their constituents. More "transparent" collocations are not of much interest, since they are the result of the sum of their components.

2.2. Metaphorical vs. non-metaphorical expressions.

Some collocations are quickly associated to specific senses. In this sense, *attacco* ("attack"), *trapianto* ("transplant"), *problemi* ("problems"), *malattia* ("illness"), are associated to the literal sense of heart as organ, while *spezzare* ("to break"), *toccare* ("to touch"), *spina* ("thorn"), etc. are immediately related to a metaphorical sense. Besides, there are cases in which a word can have both a literal and a metaphorical sense. Such is the case of *battere* ("to beat"). With words such as "*cessare*" or "*(ri)cominciare*", it has a literal sense, as in:

- ... e quando il suo cuore stanco cessa di battere,...
- Ora il suo cuore ha ricominciato a battere ma in stato di coma.

In the rest of the cases it usually has a figurative sense:

- ...a cena col mio primo amore, che mi ha fatto battere il cuore quando ero un' adolescente.

2.3. Non-metaphorical expressions.

In the non-metaphorical examples, we distinguish, on the one hand, the heart as organ, as we can see in the following expressions:

- ricoverato in ospedale per molti mesi per problemi al cuore...
- Dentro ci sono i polmoni, i cuore, il fegato, gli intestini...
- il primo intervento in Italia di trapianto di cuore e fegato ad un unico ricevente,...
- Il cuore di un uomo pesa 283 g (quello di lei 226 g).
- alcuni germi, provochi un' endocardite (infezione del cuore).

On the other hand, there are examples in which a pure physical similarity exists, i. e., a heart-shaped object:

- ... palloncini rosa a forma di cuore;
- pieno di tremolanti gelatine rosse a forma di cuore.
- può sognare su una collana di perle da sette milioni o un cuore di diamanti (12 milioni),...

2.4. Metaphorical expressions.
2.4.1. The heart as the seat of emotions.

Regarding the metaphorical examples, we distinguish, on the one hand, the heart as the seat of emotions. As such it opposes the head, seat of the intellect and the rational capacity, as we can illustrate with the following expressions:

- Insomma, usiamo sì il cervello, ma anche il cuore, per riempire la vita di sincera spiritualità.
- …il mio cuore non conosce ragione...
- ...perchè affrontiamo le cose più col cuore che con la testa...
- la mente riceve informazioni, le elabora ed insieme al cuore decide...

Emotions are the most basic thing of the human being and, therefore, they constitute something intrinsic to our lives. Above all, the heart stands out for being considered the

place where they are located. Therefore, we can establish the metaphor "THE HEART IS A CONTAINER OF THE EMOTIONS". Among them, love is the outstanding one. If we ask someone what image he associates with that emotion, there is no doubt that a heart would immediately come to his mind[3]. As a container of emotions, it can be filled, as in:

- Il mio cuore si riempie di tenerezza,...
- non pensavo a niente però sentivo il cuore pieno, grande, padrone dell'universo intero.

Love is an emotion which affects so deeply the human being that an endless number of metaphors has been elaborated. It would be enough to have a quick look at literature or just at the lyrics of songs. The metaphors collected in this study are the ones which show a great systematicity and conform to a complex metaphorical model.

The first indispensable metaphor in order to be able to refer to an abstract concept is called reification. This consists of attributing characteristic properties of objects to concepts, once turned into discrete entities. In this sense love, symbolized in the heart, is taken as a valuable object. As such, it is delicate and fragile and, as a consequence, it is breakable. As we know, someone has a "broken heart" due to an unhappy love affair. Therefore, we can coin the metaphor "THE HEART IS A BREAKABLE VALUABLE OBJECT":

- i suoi occhi le spezzarono il cuore.
- perché il mio cuore è spezzato ed il mio spirito contrito!

Being granted the condition of an object, the heart can own its typical features and be treated as such. In this last sense, it is possible to "possess" someone´s heart or "give it" in a love relationship.

2.4.1.1. THE HEART IS KINDNESS OR GENEROSITY.

It is a common place in our culture to associate the heart to several materials. For instance, related to gold it symbolizes the virtues that can be found inside us, as goodness or kindness, and those virtues are conceptualised as riches. This reification is present in the next example:

- corrette e amabili - oppure sono giovani ballerine dal cuore d' oro.

Negative connotations are, however, more numerous. We find expressions as:

- Allora dobbiamo essere come pietre, esseri umani senza cuore?

Metaphorically, we associate materials such as iron, steel, marble, stone, etc. to the heart when we refer to negative feelings. Someone with such a heart alludes to someone who is not easily moved and does not harbour feelings of sensitivity, compassion, sympathy or interest for others. The hardness of the material equals the hardness or coldness in attitude or behavior, as we can observe in the next expression:

- ...le tracce della durezza del cuore...

The opposite is "to be good or softhearted":

- il suo buon cuore trabocca e chiede al marito.
- Gentile da parte tua dirmelo, figliolo. Sei di buon cuore.
- poiché non è mai esistito un uomo dal cuore più tenero-

Someone who has such a heart possesses qualities like kindness or generosity.

Another basic reification consists of granting the heart a particular size. Ruiz de Mendoza (1999: 19) offers a description of the cognitive model of size, which consists of the following features:

(a) Objects vary in size, ranging from very small dimensions to very big ones.
(b) A small object seems to be more controllable than a big one.
(c) A small object seems to be potentially less harmful than a big one.

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[3] Obviously we are referring to the graphic representation with which it is traditionally associated.

(d) A small object seems to be potentially less important than a big one.

According to this author, this cognitive model has an experiential basis which arises from our interaction with big and small objects, and it makes us take different perspectives about them, what can produce diverse generalizations; among them, small objects are controllable and less important and big ones are less controllable and important.

From this cognitive model it follows that the largeness of the heart has positive connotations, like kindness or generosity, as it is illustrated in the following examples of our corpus:

- Lo fa perché ha il cuore grande, come ce l' aveva sua nonna...
- risulta che gli italiani hanno un gran cuore.

The heart is conceptualized as a container, the larger the size, the more feelings it harbors. On the other hand, the smallness or absence of heart has negative connotations:

- Il dominio non ha centro (come lo Stato non ha cuore),...

Related to the cognitive model of size, the heart can even swell in English and Italian. In English, the most frequent is that the heart "swells with pride". In Italian, it can have a positive connotation, as in:

"Avevo il cuore gonfio di gioia: My heart was full of joy".

Or a negative connotation:

"Avevo il cuore gonfio di dolore: My heart was heavy with grief".

In our corpus we found the expression:

- Col cuore gonfio, i nervi tesi e gli occhi fuori dalle orbite,...

On the contrary, the heart can also shrink. It means to experience pity or sympathy:

- ancora in vita le provocò una dolorosa stretta al cuore...

It also means "to fear":

- col cuore stretto mandai il doppiaggio a Londra.

Therefore, when the heart "expands", it has positive connotations, while when it "shrinks", it has negative ones. Small is conceptualized as negative, while big as positive.

Temperature is another factor to take into account, since it has consequences on the figurative uses of the heart. The cold-hot duality has negative and positive connotations respectively, which are motivated by the effect that these sensations have on the body, as can be proved by the following expressions:

- Aveva un cuore di ghiaccio. Anzi, era fredda e...
- Cosa vuole da me? Perchè mi guarda così? Io sente cuore di ghiaccio!
- sentii freddo al cuore per questo.

To this respect Deignan (1995: 161) points out:

"Whereas heat is usually used to talk about emotions which are strong and often negative, warm is used to describe emotions that are friendly, caring, and positive".

The expressions related to cold have negative connotations. These have an easy explanation, since we fight the cold due to the discomfort it causes[4].

2.4.1.2. THE HEART IS SINCERITY.
In relation with this feeling, we find the following expressions:

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[4] Cf. Searle (1995: 324) about the emotional metaphorization as heat, and not emotional as cold, where he shows the cultural origin of these metaphors.

The use of thermal metaphors to refer to people´s character is, in fact, one of the most widespread (Escandell Vidal, 1993: 228).

- si potrebbe anche dire che, nel profondo del cuore,…
- ... perché in fondo al cuore non è un tipo cattivo.
- Sperò con tutto il cuore che l' altro non se ne fosse accorto.
- ... fare il lavoro che ci piace con tutto il cuore e con tutta l' anima,...
- si voltò a guardare i soldati con la mano sul cuore e disse ad alta voce: Siete benvenuti tutti,...

The feelings associated to these expressions are sincere and intense. The heart is conceptualized as a container from which sincere feelings, which are usually hidden, emanate.

2.4.2. THE HEART IS A LIVING ORGANISM .

The heart, as long as it represents the emotion, is conceptualized as a living organism. Therefore, we can establish the metaphor "THE HEART IS A LIVING ORGANISM". This is a personification, the second type of basic cognitive operation. Concretely, it is an ontological metaphor, since an entity lacking that status, is personified. The clearest example of personification regarding the heart is its ability to talk, as in the expression "My heart tells me that…". In our corpus, we have found that as a living organism, the heart can even bleed:
- Il mio cuore sanguina nel vedere che...

According to this second type of ontological metaphor "THE HEART IS A LIVING ORGANISM", we find a series of submetaphors that we explain below.

2.4.2.1. THE HEART IS WORRY OR INTEREST.

Having the condition of a person, the heart can experience worries, concerns and even interest, as the following expressions show:
- ega il presidente Lombardi, che ha a cuore un grande progetto.
- la riforma della magistratura: un tema che gli sta molto a cuore...;
- la decadenza morale dell' America sta a cuore anche a Robert P. George.
- si è preso a cuore i problemi della città.

2.4.2.2. THE HEART IS PITY OR SYMPATHY.

The heart can also experience pity or sympathy, as can be observed in the next instance:
- Cosa poteva mai toccare il cuore di un uomo sentimentale…

2.4.3. THE HEART IS THE CORE OR CENTER OF SOMETHING.

As we know the heart is an organ situated in the chest and almost in the middle of the body. Besides, the function it carries out is vital for the human survival. That is why we refer to a central place as its heart, especially if that place is very important or has a lot of activity.
- le note di Beethoven si leveranno nel cuore di Torino fino allo sfolgorante Inno;
- la pista di ghiaccio sistemata nel cuore della città.
- Quando si svegliava, nel cuore della notte,...
- nel cuore dell ' inverno 330-329,...

2.4.4. THE HEART IS COURAGE.

The heart is also used in conventional expressions to symbolize courage and state of mind.
- La signora Packington aveva un cuore coraggioso. Si sedette e affrontò i fatti.

2.4.5. "THE HEART FOR THE PERSON" metonymy.

The metonymy "THE HEART FOR THE PERSON" belongs to the general metonymic model "THE BODY PART FOR THE PERSON". Examples of this metonymy are the following:

-   difficile e delicato tratto da "Cuore contro cuore"...
-   fosse corso a portargli il mio messaggio... "Oh cuore mio!".
-   la conoscenza diretta trasmessa da cuore di Faraone a cuore di Faraone.

3. Conclusions.

We can conclude that the study of this corpus has revealed differences as regards to dictionaries. We have seen that this corpus collects more literary expressions than dictionaries (mostly due to the big percentage of literary texts it is composed of). From this it follows that we have encountered expressions which we did not find in dictionaries. Obviously, everything depends on the type of corpus analysed, but in general sense we can affirm that if the corpus is not complete (including every type of register – even the oral one) it may not be so representative as lexicographic works, since they constitute a standard.

Corpora can facilitate information about the frequency and use of metaphorical expressions. Besides, it is of great use to show syntactic and semantic patterns. However, corpora can just provide us with the information; the task of the researcher, regarding his analysis and conclusions cannot be replaced. Corpora are just tools. As Lakoff pointed out in a discussion held in Cogling List in July 2004, about the importance of empirical methods in linguistic investigation:

> "Corpus linguistics can only provide you with utterances (or written letter sequences or character sequences or sign assemblages). To do cognitive linguistics with corpus data, you need to interpret the data, to give it meaning. The meaning doesn't occur in the corpus data".

Concordances show words in context, but it is the linguist´s task to process that information. Sometimes it is not easy to make a clear distinction between a literal and a metaphorical use, for example. The decision depends on the definition of metaphor employed. Besides, it is the researcher himself who has to decide if an expression is an instance of a specific conceptual metaphor.

Lakoff arrives at the conclusion that there is no empirical research without introspection:

> "The moral: there is no empirical research in cognitive linguistics without introspection. The idea that there is an empirical research/ introspection contrast makes no sense at all in our field".

In reality, we hold that everything depends on the purpose of the study. Ours wanted to prove the existence of concepts and metaphorical models in five languages. To carry that out, it was necessary to gather the biggest number of expressions as possible in the languages subject of investigation in order to find out the linguistic evidence to postulate the existence of conceptual metaphors. This corpus has provided us with new expressions, more literary ones, but it has not revealed different conceptual metaphors. Analysts are likely to have different linguistic knowledge backgrounds. Therefore it may be:

"[…] convenient to adopt a dictionary as a concrete form of reference, so that you have an independent reflection of what counts as the meaning of words for a particular group of users of English (Steen, 2007: 97)".

Nevertheless, the corpus analysis undertaken here opens the door to future investigations in this field.

All in all, the results of our research tell us that in order to develop a scientific approach to the study of metaphorical language, the convergent evidence from a broad empirical and methodological base is absolutely necessary.

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