UNIVERSITÀ DI PISA

DOTTORATO DI RICERCA IN

LINGUISTICA GENERALE, STORICA, APPLICATA, COMPUTAZIONALE E DELLE LINGUE MODERNE

Cod. L-LIN/12

TESI DI DOTTORATO

Metaphor in Times of Crisis: Metaphorical Representations of the Global Crisis in *The Financial Times* and *Il Sole 24 Ore* 2008

TUTORI

Chiar.ma Prof.ssa Marcella Bertuccelli Papi

Chiar.ma Prof.ssa Donna Rose Miller

PRESIDENTE DEL CORSO DI DOTTORATO

Chiar.mo Prof. Alessandro Lenci

CANDIDATA

Antonella Luporini

CICLO 2010 – 2013

This page is intentionally left blank

Alla Zia Grazia.
Al suo amore per la vita… e per il mare.

This page is intentionally left blank

Table of Contents

PART II. CORPUS ANALYSIS

Chapter Three. Corpus Construction and Methodology of Analysis

Chapter Four. Metaphorical Representations of the Crisis in *The Financial Times* and *Il Sole 24 Ore* 2008

Acknowledgements

I would firstly like to express my deep gratitude to my supervisors, Professor Marcella Bertuccelli Papi and Professor Donna Rose Miller, for their dedication and their constructive feedback during all the stages of this research work. Without their precious (and patient!) guidance, this thesis would not have been possible.

I am also grateful to Prof. Alessandro Lenci for his valuable advice on corpus methodologies during the preliminary phase of the work.

I would like to thank Prof. Silvia Bruti, Dr. Veronica Bonsignori, Dr. Gloria Cappelli, Dr. Daniele Franceschi, Dr. Silvia Masi, Dr. Elisa Mattiello (University of Pisa), and Dr. Sabrina Fusari, Dr. Marina Manfredi, Dr. Enrico Monti (University of Bologna), for always finding the time to exchange ideas with me, and for providing me with many thought-provoking suggestions.

My thanks extend to all the staff at the Newspapers section of the British Library in Colindale (London), at the *Biblioteca di Economia "Sebastiano Brusco"* of the University of Modena and Reggio Emilia, and at the *Biblioteca Fondazione Einaudi* in Turin, for their warm welcome and their assistance during my bibliographical research.

I am truly and deeply indebted to my parents, Donatella and Franco, who have always supported me during the years of my PhD, and to Antonio (who has discovered a natural talent for linguistics!), for spending so much time talking about metaphor, for his tireless encouragement, and also for his concrete help with page layout, software and statistics. It is no exaggeration to say that his contribution was fundamental to the development of this work.

Finally, I wish to thank my special friends: Elena, Federica, Francesca, Giada, Giulia, Lorena, Roberta, Sara (… and Flipper!), for tolerating my mood swings and for dragging me away from my computer when it was clear that I needed a rest.

This page is intentionally left blank

Introduction

'If there's no meaning in it', said the King,
'that saves a world of trouble, you know,
as we needn't try to find any.
And yet I don't know', he went on,
spreading out the verses on his knee,
and looking at them with one eye;
'I seem to see some meaning in them, after all'.
(Lewis Carroll, *Alice's Adventures in Wonderland*)

1. Aim of the work and research questions

This work presents results from research into the metaphorical framing of the 2008 global financial and economic crisis, as it emerges from two specialised corpora, built by collecting first page and leading articles from all the issues of *The Financial Times* and *Il Sole 24 Ore* published in the same year. The analysis presented in the following chapters adopts a two-fold perspective on the data, applying the framework of Conceptual Metaphor Theory (Lakoff and Johnson 1980; Lakoff and Turner 1989; Lakoff and Johnson 1999), and that of grammatical metaphor within Systemic Functional Linguistics (Halliday 1985; Halliday and Matthiessen 1999; 2004).

One of the main tenets of Conceptual Metaphor Theory is that linguistic metaphors – which, far from being merely rhetorical or ornamental devices, are pervasive in ordinary uses of language – are surface realisations of a deeper system of conceptual metaphors that structure the way we think and act. This amounts to a claim that "[…] human *thought processes* are largely metaphorical" (Lakoff and Johnson 1980: 6; emphasis added). From this perspective, at the conceptual level, metaphor works by establishing sets of correspondences between different mental domains, showing a tendency to map more clearly delineated concepts, especially those that have to do with bodily experience, onto less readily accessible ones (such as those connected with psychological states or emotions). For instance, in many cultures the concept MONEY is mapped onto TIME via the conceptual metaphor TIME IS MONEY, which foregrounds the common element VALUABLE COMMODITY. At the linguistic level, conceptual metaphors are realised by lexical metaphors, i.e. by the use of a word or phrase in a context that is not the one it is essentially associated with, on the basis of some shared feature; the metaphorical interpretation arises from the tension between the core (literal) meaning of the word/phrase and its non-core use. In the case of TIME IS MONEY, the metaphor is instantiated by expressions like

You are wasting your time, in which the verb *waste* is metaphorically used in connection with a non-physical Object.

From the viewpoint of Systemic Functional Linguistics, metaphorical variation can go beyond the selection of single lexemes, affecting the entire grammatical structure: "[…] lexical selection is just one aspect of lexico-grammatical selection, or 'wording'; […] metaphorical variation is lexico-grammatical rather than simply lexical" (Halliday 1985: 320). In fact, in the same way as words have 'literal' or more basic senses, so grammatical structures have 'congruent' or primary functions in the linguistic system: they are more naturally associated with the expression of certain meanings, as a consequence of the evolutionary patterns of language. For instance, a Verbal Group is the 'default' option to represent linguistically what in Systemic Functional terminology is defined as a Process (something 'going on' in our inner or outer experience, such as an action, event, or mental state: Halliday and Matthiessen 2004: 170); this is because Verbal Groups have the potential for expressing features inherent in the Process itself, such as time, aspect, and phase (Halliday and Matthiessen 2004: 499-514). Furthermore, the Verbal Group is the experiential core of the clause, and the roles taken by the elements that participate in the Process are defined by their grammatical relationship to it. However, the meaning of a Process can also be realised by a nominal construction through *nominalization*, as in *the announcement was made of her acceptance* (as opposed to the more congruent wording *she announced that she was accepting*; Halliday and Matthiessen 1999: 235). In this case, the lexico-grammatical structure highlights a tension with the underlying semantics that is comparable to that produced, on a different plane[1], by lexical metaphors (Taverniers 2006: 327). On the one hand, since the basic function of a Nominal Group is that of representing entities, the Process is objectified, i.e., portrayed as if it were an object; on the other, the nominalization condenses the meaning of a clause into a single Nominal Group, thus inevitably causing a loss of information. Despite being a mechanism that receives primary focus in the course of this research, nominalization is but one of the possible manifestations of grammatical metaphor. Indeed, as will become clearer, in Systemic Functional Linguistics the clause is conceived of as a multifunctional unit, in which three different layers of meaning interact and find lexico-grammatical expression; metaphorical variation can occur in all of the three semantic dimensions, and take various forms within each of them.

[1] According to Halliday and Matthiessen, the main difference between grammatical and lexical metaphors is one of delicacy: "Grammatical metaphor involves the reconstrual of one domain in terms of another domain, where both are of a very general kind […] Lexical metaphor also involves the reconstrual of one domain in terms of another domain; but these domains are more delicate in the overall semantic system" (1999: 233).

Against this theoretical backdrop, and on the basis of evidence from the corpora, this work seeks to answer the following research questions:

1. What are the similarities and the differences between the English and the Italian corpus in terms of the types of conceptual metaphor used in relation to the crisis, and their linguistic realisations?
2. What are the similarities and the differences between the English and the Italian corpus in terms of the types of grammatical metaphor used in relation to the crisis, and their linguistic instantiations?
3. What role can conceptual and grammatical metaphors be hypothesised as playing in terms of register-idiosyncrasy, and in the general representation of the crisis at the socio-cultural level?
4. To what extent can the two theoretical frameworks be integrated in the analysis?

The last question stems from a basic theoretical assumption of the study, namely, that Conceptual Metaphor Theory and Systemic Functional Linguistics can provide complementary views on the data from the corpora, thus leading to a deeper understanding of the metaphorical mechanisms at work. In fact, both approaches relate metaphorical expressions in the language to a higher-order stratum (respectively dubbed conceptual or semantic). However, as has also emerged from the previous discussion, a bottom-up analysis within Conceptual Metaphor Theory will start with the metaphorical use of a word/phrase, and go back from there to the underlying conceptual mapping. A bottom-up analysis within Systemic Functional Linguistics, by contrast, will take the entire lexico-grammatical structure of the clause as the starting point (Halliday 1985: 320). Hence, the Systemic Functional perspective, being more wide-ranging, can be expected to unveil metaphorical patterns in discourse that would not emerge from a purely lexical analysis.

2. Background to the research

The key role played by grammatical and conceptual metaphor in specialised languages – especially, but not only, in the creation of technical vocabulary – is by now widely acknowledged, thanks to extensive research carried out on the subject in the last decades (cf. Halliday 1988; 1999/2004; Halliday and Martin 1993; Banks 2003 on the language of science;

McCloskey 1983; Mason 1990; Henderson 1994 on the field of economics). In recent years, numerous studies have focused on the metaphors used to frame economic and financial issues within the specific functional variety of the language of journalism, taking into account both the general and the specialised press, and almost invariably using corpus methodologies. Most of these studies analyse the data through the lens of Conceptual Metaphor Theory and take a contrastive stance, with a view to exploring metaphorical patterns in a cross-cultural perspective. Given the impossibility of providing a truly comprehensive account of the amount of work that has been done in the field in a limited space, the rest of this section deals with a selection of them only, namely, with those to which the present enquiry is especially indebted.

Charteris-Black and Ennis (2001) investigate linguistic and underlying conceptual metaphors in two corpora of financial reports in English and Spanish, created by collecting articles from the online edition of *The Times* of London and from two Chilean daily newspapers (*El Diario* and *Estrategia*), during the October 1997 stock market crash. Their findings highlight an overall similarity in the conceptual mappings involving ECONOMY and MARKET in the two languages (i.e. ECONOMY IS AN ORGANISM, MARKET MOVEMENTS ARE PHYSICAL MOVEMENTS, DOWNWARD MARKET MOVEMENTS ARE NATURAL DISASTERS). Nonetheless, the authors detect differences in the linguistic realisations of the conceptual metaphors in the two corpora, which they hypothesise as being connected with socio-cultural specificities. For instance, the higher frequency of lexical units pointing to a specific mapping between MARKET MOVEMENTS and NAUTICAL MOVEMENTS in the English corpus is explained by making reference to the influence of the nautical tradition on the history of the British Islands.

Semino (2002) compares corpora of articles from British and Italian newspapers to analyse the metaphors used to talk about the Euro in the period in which it was introduced in non-physical form in the participating countries, as an alternative to their national currencies (beginning of 1999). She finds differences in the source domains used in the Italian and the British press, reflecting divergent stances on the shared currency (approval in Italy *vs.* scepticism in Britain).

Charteris-Black and Musolff (2003) carry out a similar contrastive study using two specially designed corpora of articles from the British and the German editions of *The Financial Times*, published in a period in which the Euro was losing its strength in the foreign exchange markets (September – November 2000). They identify similarities in the two newspapers in the use of UP/DOWN MOVEMENT and HEALTH metaphors. However, while in the British edition the shared currency is commonly represented as an active participant within the metaphorical scenarios

(among which EURO TRADING IS COMBAT is particularly important), in the German edition it is generally described as a passive element.

Rojo López and Orts Llopis (2010) examine the metaphorical conceptualisation of the financial crisis in the British and the Spanish press, collecting articles from *The Economist* and *El Economista* in two different time spans (June – November 2007 and September – December 2008). Their results show a significantly higher number of metaphors framing the economic situation in positive terms in *El Economista* in 2007, when Spain was approaching national elections, while negative metaphors prevail in *The Economist* in the same period. The authors interpret such discrepancy as an attempt to conceal the signs of the upcoming crisis, highlighting the ideological and political power of metaphor.

Fusari (2011) carries out a corpus-assisted analysis of the ways in which the 2008 Alitalia crisis and privatisation was represented by the Italian, British, and American press, dedicating a chapter to conceptual metaphors and their linguistic realisations. For the purposes of her study, she builds three corpora containing articles on the topic that were published between August 2008 and January 2009 in some of the major Italian, British and American daily newspapers. The results point to a considerable overlap between English and Italian in terms of the source concepts involved in the metaphorical representation of the Alitalia crisis. However, the number of linguistic realisations for each of the source concepts is much higher in the Italian corpus than in the British and American ones. According to the author, such patterns may suggest a higher degree of lexical variety in Italian, together with a marked tendency to use metaphors for stylistic and rhetorical reasons in the Italian newspapers. This is in line with "[…] the idea of Italian good writing (*bello scrivere*) as characterized by elaborate rhetoric and literary style patterns that are not necessarily conducive to a better understanding of the matters being discussed in the news" (Fusari 2011: 127).

Finally, another valuable study, one that does not deal specifically with the language of business, but rather focuses on the use of metaphors in the press in general, is Krennmayr (2011). The book reports results of a detailed analysis conducted on a corpus of 190.000 words covering four registers comprised in the British National Corpus (news texts, academic texts, fiction, conversation). The corpus was built by the author in collaboration with other researchers, and annotated for metaphor retrieval using a procedure specifically elaborated to this end at Vrije Universiteit (MIPVU: Steen *et al.* 2010). Data from the news sub-sections are contrasted with those from the other sub-sections. In quantitative terms, Krennmayr finds differences in the metaphorical use of different word classes across the four registers (for instance, metaphorical verbs are more frequent in news than in conversation and fiction,

whereas metaphorical prepositions are less frequent in news discourse than in the academic register). From a qualitative viewpoint, she distinguishes between what are called deliberate and non-deliberate metaphors[2], and considers the effects of metaphor on the textual structure and the reader's response.

3. Corpus linguistics

Since this dissertation, as the studies glossed in the previous section, makes use of corpus methodologies, it is fitting to provide a necessarily brief description of the key notions and the main tools involved in a corpus linguistic analysis.

In modern linguistics, a corpus is defined as a collection of authentic written and/or spoken texts in electronic format, sampled in such a way as to be representative of a language or language variety, which can be interrogated using specific software programs (generally known as Corpus Query Systems, or CQS; cf. Baker, Hardie and McEnery 2006). Indeed, corpus linguistics began to flourish as a full-fledged discipline in the 1980s, and its developments have since then gone hand in hand with the increasing power and processing speed of modern computers. However, as observed by McEnery, Xiao and Tono (2006: 3), 'ancestors' of modern corpora were already being deployed by scholars in the field of linguistics in the first half of the past century: "Although linguists at that time would have used shoeboxes filled with paper slips rather than computers as a means of data storage, […] their methodology was essentially 'corpus-based' in the sense that it was empirical and based on observed data".

Corpora vary depending on their size, the types of text they include, and the research questions they are designed to address. The main distinction, and one which is also significant for the present work, is that between a *general*, or *reference*, corpus and a *specialised* corpus. General corpora are usually very large (they may consist of millions or even billions of words), and aim to represent a language or language variety as a whole: hence, their sampling procedure includes both written texts and transcriptions of oral texts, gathered from a wide variety of sources, including different registers and genres (for a discussion of these two notions, cf. Chapter Two, Section 1.1). Specialised corpora like the ones that were created for this study, by contrast, aim to be representative of a specific register or genre, and are usually smaller. General

[2] In the wake of Steen (2008), Krennmayr specifies that "[…] the communicative function of metaphor includes attending to whether or not the producer of a text deliberately invites the addressee to understand one thing in terms of something else or whether the recipient experiences an expression to be such a deliberate attempt to change his or her perspective on the topic" (2011: 152).

corpora are widely used in lexicography and in the design of pedagogic material. In addition, as the alternative epithet *reference* also suggests, they are frequently taken as a basis for comparison when research focuses on specialised corpora: for instance, to investigate linguistic structures or usages that may be hypothesised as being typical of a specific text-type (or *register-idiosyncratic*: cf. Miller 2007b; Miller and Johnson 2009 and to appear, 2013; the notion is introduced and applied to the analysis in Chapter Four, Section 3).

A further distinction can be drawn between 'static' corpora, whose contents remain fixed over time, and 'dynamic' corpora, which are constantly updated in order to reflect ongoing changes in a language: this latter type is commonly referred to as a *monitor* corpus after Sinclair's influential definition (1991: 26). Two of the most important general corpora of contemporary English instantiate these different maintenance criteria. The British National Corpus (BNC) is constant in size: it focuses on the variety of British English, and consists of approximately 100 million words (90% from written texts, 10% from spoken texts). The Bank of English (BoE), jointly owned by Collins Publishers and the University of Birmingham, is a monitor corpus (cf. Deignan 2005): it consists of 650 million words (as of 2012) and covers several national varieties of English, among them British, American and Australian English[3]. Both the BNC and the BoE, along with other English and Italian corpora, were used as reference corpora in the analysis of the data from *The Financial Times* and *Il Sole 24 Ore*, presented in Chapters Three and Four.

The corpora built for this work can also be defined as *comparable*, since they were designed and sampled according to the same criteria. Other types of corpora can be mentioned, albeit simply to give an idea of the range of possible applications of corpus methodologies, as they will only be touched upon. They include: *historical* corpora, gathering texts from a wider time span than monitor corpora, and used to study linguistic evolution; *parallel* corpora, containing the original (L1) version of one or more texts and its (their) translation(s) into one or more different languages; *learner* corpora, consisting of linguistic productions (written or spoken) of students of a foreign language, as opposed to *developmental* corpora, which collect productions by children acquiring their first language (cf. McEnery 1996; McEnery, Xiao and Tono 2006).

The huge quantity of data that can be made available, the speed and ease of processing guaranteed by modern technologies and the reliability – and retrievability – of the results are among the main advantages of employing corpora in the study of language. With reference to reliability, Fillmore, Wooters and Baker (2001: 5) observe that "Anyone working with large

[3] Source: www.mycobuild.com/about-collins-corpus.aspx.

masses of linguistic data learns quickly that native-speaker intuition is unreliable and there is no principled way of resolving differences between native speakers". However, comprehensive and carefully designed as they may be, corpora alone are not enough to carry out systematic linguistic research. As was already pointed out at the beginning of this section, Corpus Query Systems are generally required to analyse a collection of texts in quantitative and qualitative terms. Furthermore, in the case of *ad hoc* corpora especially created by the researcher to suit his/her research interests, specific software can be used to automatically annotate the data with additional layers of information: these include prosodic features, part-of-speech tagging, syntactic parsing and semantic features (Baker, Hardie and McEnery 2006). In addition, corpus evidence must be complemented by the analyst's observation and intuition: these are essential in order to make meaningful hypotheses about language patterns, which cannot be properly analysed in isolation from their original co-text and context (Miller 2000; Bayley, Ed., 2004; Deignan 2005).

The software used for annotating and interrogating the corpora in this thesis is the *Sketch Engine* (Kilgarriff, Rychlý, Smrz and Tugwell 2004; online access at www.sketchengine.co.uk). This web-based suite of programs enables the researcher to upload his/her own corpus, annotate it at various levels (either using a set of pre-loaded templates, or adding a new customised template) and analyse it using a number of tools. Some of these are widely known, having been part of the 'classic toolkit' of a corpus linguist for many years now (they are also supported by *Wordsmith Tools*, one of the most popular programs for lexical analysis: cf. Scott 2012).

- *Wordlist* generates a list of all the words, or lemmas, in the corpus (unless a *blacklist*, or *stoplist*, is uploaded which contains words that should be excluded from the final results), with related frequency. The results can be ordered alphabetically or by frequency, and a number of additional filters can be applied (e.g. it is possible to specify a minimum frequency value for words or lemmas to appear in the list).

- *Keywordlist* generates a list of salient words or lemmas (i.e. whose frequency is noticeably high, or low, in the case of *negative* keywords) by comparing the corpus under examination with a larger reference corpus. The Sketch Engine provides access to a set of pre-loaded corpora that can be used as reference, including the BNC.

- *Concordance* looks for all the occurrences of a specified search word or lemma in the corpus and presents them in their original textual environment; the size of the concordance window can be adjusted according to the research needs, going from a few words to an entire sentence. The results can be then taken as the basis to generate a list of *collocates* of the search word. *Collocation* is the technical term used by corpus linguists to refer to the fact that "On

some occasions, words appear to be chosen in pairs or groups and these are not necessarily adjacent" (Sinclair 1991: 116), or, more specifically, to "[…] the relationship a lexical item has with items that appear with greater than random probability in its (textual) context" (Hoey 1991: 6-7). Collocates in the Sketch Engine can be computed and sorted using a set of different statistical measures, both to the left and to the right of the node word, within a text span that can be defined by the user (the default option being from 5 words to the left to 5 words to the right). Following Firth's famous claim, "You shall *know* a *word* by the *company it keeps*" (1957: 11; original emphasis), collocates are generally held to be reliable indicators of a word's meaning and behaviour in a particular context.

In addition to these basic tools, the Sketch Engine has other language analysis options. Among them, *Word Sketch* generates a one-page summary of a word's collocational and grammatical behaviour on the basis of frequency counts and markers of grammatical relationship with surrounding words; it can thus be considered as a sort of 'enhanced' collocation, since traditional collocate lists are grammatically blind (cf. Kilgarriff and Kosem 2012).

4. How the thesis is structured

This dissertation is organised into two main parts. Following this introduction, Part I deals with the theoretical foundations of the study, aiming to provide a solid framework for the linguistic analysis of the corpora that is presented in Part II.

Within Part I, Chapter 1 focuses on the notion of metaphor in cognitive linguistics. After a brief survey of the history of metaphor studies, in which several important steps in the passage from the traditional ornamental view to the recent cognitive view of metaphor are revisited, the remainder of the chapter reviews the literature most relevant to this investigation: mainly Conceptual Metaphor Theory, but also – since these are occasionally referred to in the analysis of the corpus data – Conceptual Blending and the different but potentially complementary framework of Relevance Theory (cf. Tendhal and Gibbs 2008). Chapter 2 is dedicated to Systemic Functional Linguistics and grammatical metaphor. It begins with an overview of the Systemic Functional approach to the study of meaning-making and meaning-exchanging processes in text and context; this serves as the basis for the subsequent discussion of the concept of grammatical metaphor, and its realisations at different levels within the system of language.

Part II represents the core of the study, as it moves from the theoretical to the applied perspective. Chapter 3 provides a description of corpus design and construction, and outlines the methodology adopted in analysing the corpora for conceptual and grammatical metaphors, not unmindful of the limits inherent in all types of corpus-assisted research into metaphor. Chapter 4 is entirely dedicated to the discussion of the results of the analysis.

Finally, in the Conclusions, I review the overall findings, returning to the research questions that were posed in Section 1 above. I also highlight the main insights that emerged from the analysis, and make reference to some possible directions for future research.

Part I
Theoretical Foundations

This page is intentionally left blank

Chapter One
Metaphor in Cognitive Linguistics

1. Metaphor studies: historical overview

The history of metaphor studies is marked by a tension between two opposite stances: an ornamental (or decorative) view, initiated by Latin rhetoric and widely accepted for centuries, which conceives of metaphor as an element of the *ornatus orationis* whose only effects are to be sought on the plane of form, and a cognitive perspective, which assigns metaphor a primary function in thought and knowledge. In this chapter, a historical overview of the development of the two approaches is presented, and several cognitive theories of metaphor are reviewed as an introduction to the corpus-based analysis of metaphor in the business press that will be presented in Chapters Three and Four.

The main tenet of the ornamental view is that metaphorical expressions are deviations from a norm, i.e. literal language, whose use can be motivated either by stylistic reasons, or by the necessity to fill a gap in the language. Three main consequences follow from this assumption: first, metaphor is regarded as a feature of extra-ordinary uses of language, style generally playing a marginal role in common, everyday uses; second, there is a strong tendency to focus on novel metaphors as a mark of authorial creativity, thus neglecting conventional instances; finally, metaphorical expressions are seen as dispensable, or at least replaceable with a literal equivalent without any loss in terms of meaning. As observed by Deignan (2005: 3), until recently these were the guiding principles in the study of metaphor: "[…] for many years of the twentieth century the decorative approach had such a firm grip that it was rarely articulated explicitly, but rather was assumed, seen as common sense". However, during the last century several scholars began to feel the need to revisit the mainstream position, separating the level of language from that of thought and including both into a more comprehensive theory of metaphor. One of the central aspects of the ornamental view was challenged when it was noted that, along with philosophical and literary texts, everyday language too could count on a huge number of metaphorical expressions, only less visible due to their frequently conventional status. Towards the 1980s, the publication of Ortony's collection *Metaphor and Thought* (1979), immediately followed by Lakoff and Johnson's seminal work *Metaphors We Live By* (1980), concluded a process of re-evaluation of the

cognitive function of metaphor that dated back at least to the beginning of the century, and inaugurated a new epoch in the history of metaphor studies.

The origins of the dichotomy can actually be traced back to the oldest extant systematic contribution on the subject, that of Aristotle, and in its reception in the following centuries. In the *Poetics* (21, 3, 15-17) Aristotle describes metaphor in its etymological sense, as the process of transferring a word from its proper domain to an unfamiliar one by virtue of an existing bond. The two domains may be either directly connected along the lines of taxonomic categorisation – going from genus to species, from species to genus, or from species to species within the same genus – or linked by analogy on the basis of some shared attribute[1]. As can be noticed, Aristotle's notion of metaphor is more extensive than ours, which basically corresponds to his fourth type; in fact, it is generally held that the other three types describe what would be later theorised as separate phenomena, such as metonymy and synecdoche (e.g. Dorati in the edition of the *Rhetoric* we are referring to in this section)[2]. Even more meaningful to the present discussion are the remarks that follow Aristotle's initial definition as part of a broader reflection on the nature of poetical discourse. In Chapter 21 of the *Poetics*, he focuses on *lexis* and on words of different kind: firstly, he distinguishes between simple (monomorphemic) and compound words; secondly, and most importantly, he draws a line between proper and unusual words. Proper words are normally used in a language to make reference to some entity, while unusual, or extra-ordinary, words – such as loan words, altered words, neologisms, and metaphors – are 'deviations' from the norm. Proper words enhance clarity by virtue of their frequency and of the straightforward connection they set up with their referents, but at the same time they are banal; unusual words, by contrast, elevate the style above the level of ordinary language, though their use must not be excessive, in order to avoid obscurity and complexity. Style in poetry is virtuous when it is clear and noteworthy at the same time, i.e. when it combines proper and unusual words in a balanced way. Now, the poet should master all the unusual forms of expression, but among them metaphor has a

[1] In 21, 3 Aristotle also provides examples for each of the four metaphorical types. Metaphor from genus to species: "there *stands* my ship" (where *stands* = *lays at anchor*, i.e. a species of standing); metaphor from species to genus: "*ten thousand* noble deeds had Odysseus done" (where *ten thousand* = *many*, the genus to which the numeral belongs); metaphor from species to species: "*having drawn the life away* with bronze" and "*having cut water* with sharp bronze" (in the first case, *to draw away* actually means *to cut off* life, while in the second case *to cut* actually means *to draw away* water: the substitution is possible because these are two species of the same genus, namely, to take away); metaphor from analogy: "*the old age* of the day" (where *the old age* = *the evening*) and "*the evening* of life" (where *the evening* = *the old age*). Here, the substitution is based on a proportion (this is the meaning of the word ἀναλογία in ancient Greek; indeed, some authors translate μεταφορά κατὰ τὸ ἀνάλογον as "proportional metaphor"): evening is to day as old age is to life, i.e. the final part.

[2] However, as we shall see, Aristotle himself specifies that metaphors from analogy are more frequent and brilliant than the others (*Rhetoric* 1411a, 1-2) and explicitly acknowledges their cognitive function and evocative power (1411b, 20-21).

special status, and the capacity to produce good metaphors is much more important than any other skill. Aristotle makes this point explicit in *Poetics* 22, lines 58-61[3]:

> […] the capacity to be metaphorical is by far the most important thing. This is, in fact, the only skill that cannot be acquired from others, and it is the sign of a gifted mind, for to produce good metaphors means to be able to identify similarities.

Yet the central role assigned to metaphor, and the cognitive significance of the ability to relate different elements of the being by spotting resemblances ("[…] to connect, using words, things that would be impossible to connect otherwise", 22, 9-10), are not further explained in this text. The reasons underlying this crucial assumption have to be sought in other parts of the Aristotelian corpus, and especially in the *Rhetoric*: a later work, which in many respects is complementary to the *Poetics*. Book III presents a new discussion of the principles of moderation put forward in the *Poetics*, though this time the focus is on the language of prose, where it is even more difficult to strike a balance between banality and undue sophistication: in fact, the extra-ordinary resources employed to elevate the style in poetry must be used with great care in prose, where they may seem unnatural or excessive, and cause distrust in the audience. The only exception to this general rule is again represented by metaphor, the only alternative to proper words that can be chosen in prose without fear of sounding obscure: "[…] these and no other types of expression are universally used: everybody employs metaphors while talking, as well as common and proper terms" (*Rhet.* 1404b, 33-35). This is possible because metaphors, differently from other linguistic deviations from the norm, have the capacity to make the style clearer: "metaphor, more than any other element, has in itself clearness, pleasantness, and exoticism, and it is not possible to learn it from others" (1405a, 8-10). In this respect metaphors are close to proper words, even though they function on the basis of a different logical relation: as we have seen, metaphors are guided by the principle of similarity, while proper words are regulated by the much more rigid principle of identity, which establishes between them and their referents an unambiguous one-to-one correspondence. However, the fact that metaphors have less semantic and ontological constraints does not mean that they are arbitrary, as Aristotle later specifies. First, in order to be appropriate, a metaphor must be rooted in analogy (1405a, 11): that is, the elements it

[3] Unless otherwise indicated, translations from the Greek text are mine.

comprises must correctly function as the terms of a proportion, so that the metaphor can produce "[…] learning and knowledge through the genus" (i.e. through their inclusion in the same class by virtue of some common trait; 1410b, 15-16; cf. also Note 1 above). This is a necessary but not sufficient condition: the choice of words must be taken into account too, as it is always possible to find one term that is more appropriate, more *similar* than the others to what we want to express, and – most importantly – more capable of "[…] setting things right before our eyes" (1405b, 11-12). In its conciseness, this renowned expression (οἰκειότερον τῷ ποιεῖν τὸ πρᾶγμα πρὸ ὀμμάτων) perfectly illustrates the function assigned to metaphor by Aristotle, that of generating instantaneous knowledge by putting together things that have no apparent connection in a vivid and forceful manner:

> […] wittiness mainly arises from metaphor and from surprising the audience with something unexpected: learning becomes more evident in that it goes against expectations, and the mind seems to say: 'oh, it's true! I missed the point before'. (1412a, 18-21).

Thus, the criterion of balance followed by Aristotle in his discussion of lexis, both in poetry and in prose, applies to metaphor as well: in order to be appropriate, a metaphor should not be ridiculous nor too grand; not banal nor too difficult to interpret. In fact, inappropriate metaphors make the style cold, obscure, and ultimately fall short of enhancing understanding, which is the primary effect of a *good* metaphor.

The cognitive value that Aristotle assigns to metaphor in the *Poetics* and the *Rhetoric* becomes even clearer once we consider it within his broader philosophical thought. As Guastini (2005) remarks, making reference to other works in the Aristotelian corpus, and in particular to the *Metaphysics* and the *Nichomachean Ethics*, metaphor begins to play a key role in Aristotle's theory of knowledge as he gradually moves beyond Plato's logical categories of identity and difference to acknowledge the ontological and conceptual importance of the category of similarity; metaphors thus become powerful tools to express the multi-faceted nature of the Aristotelian being. According to Guastini, it is in this fundamentally cognitive sense that, in the *Poetics*, Aristotle speaks of metaphor as the capacity to theorise what is similar (choosing a verb that is generally used in connection with philosophical activity, i.e. θεωρεῖν) and that, in the *Rhetoric*, he relates it to the enthymeme as a means to produce knowledge using words in a clever and attractive way (the same points are

stressed by Laks 1994)[4]. Indeed, several scholars highlight the presence of a cognitive layer in the Aristotelian theory of metaphor: among them, Swiggers (who describes Aristotle's position as "astonishingly modern"; 1984: 40), Mahon (1999), Cameron (2003) and Eco, who maintains that the definitions provided by Aristotle in the *Poetics* and the *Rhetoric* "[…] show that metaphor is not a purely ornamental item, but rather a form of knowledge" (2004: 5)[5]. However, until only a few decades ago Aristotle's remarks were mainly interpreted in the opposite sense. To mention but a few names, Black (1955; 1962) traces back the origins of what he calls the comparison view (according to which a metaphorical statement can be equated with an elliptical simile) to the definition provided by Aristotle in *Poetics* 21 (cf. Section 1 above); Searle takes a similar position in his contribution to the first edition of *Metaphor and Thought* (1979/1993), while Ortony, in the introduction to the same volume, concludes that Aristotle's perspective on metaphor is "[…] entirely ornamental: metaphors, in other words, are not necessary, they are just nice" (1979: 3)[6]. On the other hand, as other scholars point out, several controversial passages in both the *Poetics* and the *Rhetoric* were open to misinterpretation, and may have influenced Cicero's definition of metaphor as a contracted simile, with a purely ornamental function ("*magnum ornamentum orationis*", *De Oratore* III, 42), or Quintilian's famous assertion: "[…] *in totum autem metaphora brevior est similitudo*" (*Institutio Oratoria* VIII, 6, 8). Johnson, in particular, identifies some crucial elements that paved the way for what he calls the "traditional" view of metaphor (1981: 4 and ff.). He suggests, in the wake of Ricoeur (1977), that by treating metaphor as a phenomenon involving single words rather than clauses Aristotle favoured its future classification as a mere stylistic device; he also points out that the aspect of deviation from standard language – i.e. the distinction between proper words and metaphors – introduced a "fatal separation" between literal and figurative language; finally, the importance of the notion of similarity and the frequent links between metaphor and simile in the texts led to the influential definition of metaphor as a shorter form of simile. However, with reference to this last point, Johnson specifies that "Aristotle's remarks do not necessarily imply that metaphors can always be reduced to literal statements of similarities between objects […] though similes are

[4] Guastini also observes that the Aristotelian notion of *lexis* comprises both the plane of form and that of content: from this perspective, the ornamental view, according to which metaphor is an exclusively formal device, represents a further distortion of Aristotle's theory.

[5] "*Aristotele è stato il primo a cercare di definire tecnicamente la metafora, sia nella* Poetica *sia nella* Retorica*, ma quelle sue definizioni inaugurali fanno qualche cosa di più: mostrano come essa non sia puro ornato bensì una forma di conoscenza*".

[6] Ortony slightly softens this assertion in the second edition of *Metaphor and Thought*, where he says: "[Aristotle] believed metaphors to be implicit comparisons, based on the principles of analogy […]. As to their use, he believed that it was *primarily* ornamental" (1993: 3; emphasis added).

metaphors, it does not follow that all metaphors are similes" (1981: 7). More recently, Manetti (2005) has rightly observed that the relationship between metaphor and simile is overturned in Latin rhetoric, since Aristotle clearly speaks of simile as a form of metaphor, and not vice versa (*Rhet.* 1406b, 20); furthermore, he explicitly says, in *Rhetoric*, that simile lacks those factors that make metaphor a powerful cognitive tool, i.e. attractiveness and capacity to generate instant knowledge: "[…] it is less pleasant, because it is longer, and it does not say 'this is that'; therefore, the mind does not have to make any effort to understand it" (1410b, 18-20). Similar objections can be made with reference to the inclusion of metaphor in the dimension of the *ornatus orationis*: Aristotle uses a different and specific term to designate ornamental words (κόσμοι), thus formally separating them from metaphors. The philological and theoretical debate is lively, and cannot be given the space it would deserve here: a collection of contributions on the history of metaphor from Aristotle to Cicero, Quintilian and beyond – including the aforementioned paper by Manetti – can be found in Lorusso (Ed., 2005).

Medieval scholars interpret the *Poetics* and the *Rhetoric* through the reading of the Latin rhetoricians and grammarians, who focus on the stylistic aspects of Aristotle's work, and generally consider metaphor as nothing more than a brief comparison: as a consequence, the original stress on the cognitive function becomes opaque with time. The process is favoured by the fact that in the early Middle Ages rhetoric starts to detach itself from philosophy, specialising in matters of style and artistic creation, and thus abandoning any cognitive concern [7]. The ornamental approach – in which metaphor is treated as an *optional* embellishment, equivalent in meaning to literal language – is thus firmly established, from medieval thought and theology to the Renaissance, even as the original Greek texts are re-discovered and studied. In the seventeenth century, the use of figurative language (including metaphor) is stigmatised by the Empiricist philosophers, who consider deviations from literal language not only as contrary to sensory experience, and as such misleading, but also as deliberately deceitful (cf. also Soskice 1985). In his *Essay Concerning Human Understanding*, John Locke recommends that all forms of non-literal language be excluded from the discourse of science and philosophy:

[7] Eco (2005) argues that, already in Quintilian, there is no trace of a cognitive function of metaphor in the Aristotelian sense, except for those cases in which it is used to fill a lexical gap (*catachresis*). On the separation between rhetoric and philosophy and its consequences, cf. also Johnson (1981: 9).

> […] all the artificial and figurative application of words eloquence has invented, are for nothing else but to insinuate wrong *ideas*, move the passions, and thereby mislead the judgment […] they are certainly, in all discourses that pretend to inform or instruct, wholly to be avoided. (1690/1735: 106; original emphasis).

As a consequence, metaphor is confined to literary language, marking the mainstream tendency for the centuries to come.

Influential attempts to recover the epistemic dimension of metaphor emerge from the work of Rousseau (cf. Kittay 1987) and Nietzsche, who deals with this topic in one essay (*On Truth and Falsity in their Ultra-Moral Sense*, completed in 1873 and published posthumously), a series of lectures on rhetoric given at the University of Basel in 1872-1873, and a set of notes from a private notebook, again dated 1872-1873. Nietzsche rejects the commonly accepted view of literal language as the standard option, highlighting the fundamentally metaphorical nature of language and, even more importantly, of thought. If every linguistic expression leading to a *transfer* of meaning of some sort can be reasonably described as metaphorical (as the etymological sense of the word *metaphor* suggests), then the only possible instances of truly literal meaning are those in which a word and its referent coincide perfectly, and these are extremely rare: as Hinman says, quoting Nietzsche, "whenever a word is used to refer to anything except the "singularly occurring and thoroughly individualized primal experience to which it owes its origin", it becomes metaphorical" (1982: 183). Metaphor is ubiquitous because of its basic cognitive function: it permeates the whole process of acquisition and classification of knowledge, across three different stages. The first stage involves a transfer from a sensory stimulus to a mental image that acts as a representation for it (*Anschauungsmetapher*, or perceptual metaphor); the second involves a transfer from the so-formed mental image to a sound, i.e. a word; the third and final stage has to do with conceptualisation, i.e. with the transfer from the level of words to that of concepts: we attach a single word to a whole set of experiences that have something in common, focusing on their aspects of similarity while ignoring their differences (*Erkenntnissmetaphern*, or knowledge metaphor). All these transfers are *inherently* metaphorical, not only because they take place between different domains of reality, but also because they imply treating different elements (perceptual experience – image – sound – concept) as if they were equal, so that one can actually stand for the other. Therefore, the mental schemata according to which we classify our experience of the world are rooted in metaphor, even though we are generally not aware of it anymore. As Hinman concludes:

> […] the categories and concepts in terms of which we order experience have no more epistemic justification than other metaphors, except for the fact that we have forgotten their metaphorical origins and let them harden into normative measures of reality itself. (1982: 191).

In his survey of the history of metaphor, Johnson stresses the importance of Nietzsche's contribution in view of the cognitive re-evaluation that would take place in the twentieth century:

> We experience reality metaphorically. What we know, we know metaphorically. And the 'fixed truths' of our culture are nothing but metaphorical understandings that have become conventionalized to the point where their metaphoricity is forgotten. (1981: 15-16).

Three aspects of Nietzsche's reflection are crucial to future research on metaphor. First, he establishes a strong connection between perception and metaphor, the latter being the privileged channel through which information coming from our bodily experience is processed; second, he distinguishes between *linguistic* and *conceptual* metaphors, while preserving their interaction; third, he explains our conceptual system in terms of a set of metaphor-based schemata, whose metaphorical origin has become opaque. These claims will be defended by several scholars in the following years, and will eventually lay the basis for Lakoff and Johnson's Conceptual Metaphor Theory; but before coming to that point, let us briefly consider the development of metaphor studies in the twentieth century.

2. Twentieth-century approaches to metaphor

Radically different attitudes towards language and meaning coexist during the first half of the twentieth century. On the one hand, logical positivism defends an approach to knowledge that is based on empirical evidence, and analyses language according to the *verifiability principle* inspired by Wittgenstein's theories and formalised within the Vienna Circle by Moritz Schlick: a statement only depends on its empirical validity, i.e. it can be said to have meaning only if it is possible to identify the actual conditions under which its truth value can be assessed. From this perspective, non-literal language becomes totally meaningless, since it

has no direct empirical referent, and thus unable to convey any form of knowledge. The empiricist belief in the supremacy of literal language is strongly reasserted. As noted by Ortony:

> A basic notion of positivism was that reality could be precisely described through the medium of language in a manner that was clear, unambiguous, and, in principle, testable – reality could, and should, be literally describable. (1993: 1).

The opposite approach focuses on the compositional nature of meaning. Scholars adhering to this general belief, though from different backgrounds and within different fields, contend that meaning arises from integrating language with extra-linguistic information, both contextual and encyclopaedic. In 1921, Sapir publishes his seminal book *Language: An Introduction to the Study of Speech*, supporting the view of a mutual influence between linguistic structures and external reality and lying the foundations for the linguistic relativity hypothesis: language is inevitably tied to the speech community and the culture it belongs to (Sapir 1921; Whorf 1956). In the same years, Malinowski acknowledges the importance of the *context of situation* in his survey of the linguistic habits of a set of primitive cultures, arguing that "[…] the *situation* in which words are uttered can never be passed over as irrelevant to the linguistic expression" (1923/2003: 6; original emphasis); his findings influence Firth and, through him, Halliday, who expands the notion of context of situation within Systemic Functional Linguistics (Halliday and Matthiessen 2004; cf. Chapter Two, Section 1.1). A few years later, Morris outlines a branch of semiotics that deals specifically with the study of the sign-interpreter relation, which he labels *Pragmatics*[8]. The acknowledgment of the inherent complexity of meaning that clearly emerges from all these works brings about a new wave of interest towards non-literal language; this is also favoured by the gradual decline of logical positivism around the middle of the century, and by the crisis of the time-honoured discipline of rhetoric (Ricoeur 1977).

The first systematic and non-strictly philosophical defence of the cognitive function of metaphor appears in 1936 with the publication of Richard's *The Philosophy of Rhetoric*. In the wake of Aristotle (with whom he disagrees on several other points[9]), Richards maintains

[8] According to Levinson (1983: 1), "The modern usage of the term **pragmatics** is attributable to the philosopher Charles Morris (1938), who was concerned to outline (after Locke and Peirce) the general shape of a science of signs, or **semiotics**" (original emphasis).

[9] Richards is among those who stress the compatibility between Aristotle's theories and the subsequent downgrading of metaphor to the level of stylistic embellishments. His criticism concerns, in particular,

that mastering metaphor is essential in order to reach communicative efficiency and inspire emotional participation in the reader. However, to acknowledge the artistic value of metaphor for him does not mean to overlook the central role it plays in language in general, nor to adhere to the traditional ornamental view: on the contrary, Richards sees metaphor at work everywhere in linguistic communication, and defines it as the "omnipresent principle of language" (1936: 92). On the same page, he makes reference to the language of science and to that of philosophy, where, in his words, "[…] our pretence to do without metaphor is never more than a bluff waiting to be called". On the basis of this assumption, Richards goes as far as to suggest that the ubiquity of metaphor in language can be taken as evidence for its ubiquity in thought. In fact, metaphorical processes also underlie the basic operations that allow us to *abstract* a set of defining features from an individual phenomenon, *think of* it as a member of a class, and refer to both the phenomenon and the class by means of a single word or phrase. In this sense, linguistic metaphors are much more than the substitution of one word for another: they are the output of a deeper process, involving "[…] a borrowing between and intercourse of *thoughts*, a transaction between contexts" (1936: 94; original emphasis). Richards also recognises the need to introduce specific terminology in the study of metaphor, and proposes the labels *tenor* and *vehicle* to refer to the two *ideas* that are simultaneously evoked by a metaphorical statement: the tenor is the principal subject, the vehicle is the concept this is compared with. He maintains that metaphor sets up an interactive relationship between these two components, which mutually strengthen each other, and produce new meaning by virtue of their co-occurrence (a special case of what he elsewhere calls the principle of the *interinanimation of words*; 1936: 45-66**)**. Finally, he discredits the traditional view by pointing out that, in most cases, the connection between tenor and vehicle is *not* a plain one, and – even more importantly – it may be based on disparities rather than similarities. The stress on the interactive and complex relationship linking a metaphor's

---

Aristotle's claim that "[the command of metaphor] alone cannot be imparted to another: it is the mark of the genius, for to make good metaphors implies an eye for resemblances" (*Poetics*, translation by S.H. Butcher, quoted in Richards 1936: 89). This goes against Richards' view of metaphor as a feature of human language and thought, and he sees three main fallacies in it: 1. metaphorical skills can actually be acquired, for "[…] we gain our command of metaphor just as we learn whatever else makes us distinctively human" (1936: 90); 2. the capacity to be metaphorical cannot be a sort of special talent, precisely because it is a distinctively human trait; 3. for the same reason, it is misleading to present metaphor as a deviation from linguistic norm. Mahon carefully confutes each of Richards' objections, observing that "Aristotle must believe that our ability to use metaphors can be learned and improved from reading works such as the *Rhetoric*, otherwise he would not write in such a manual-like way" (1999: 77). It should also be noted that Richards does not take into account the passage of the *Rhetoric* where Aristotle clearly states that metaphors are used by *everybody* in *normal* conversation (1404b; cf. Section 1).

components is what makes Richards' contribution so innovative and influential for the future of metaphor studies.

Despite the revolutionary ideas it contains (or, perhaps, precisely for this reason) Richards' analysis goes more or less unnoticed when it appears; it is Max Black who, several years later, casts new light on it by taking it as a point of departure for his interaction theory of metaphor. In the earliest formulation of the theory (Black 1955), metaphor is seen as resulting from the presence of different thoughts that act upon each other simultaneously (as already proposed by Richard), but the perspective extends beyond words and phrases to include the sentence level, and a pragmatic interpretation of metaphorical statements is put forward for those cases in which a semantic interpretation does not suffice. Black maintains that some instances of metaphor can be readily identified "[…] without needing to know who uses the expression, or on what occasions, or with what intention" (1955: 277), because they blatantly violate semantic rules. The contrast between the elements that are used metaphorically (which he calls the *focus*) and those that are used literally (the *frame*) is enough to elicit a metaphorical interpretation of the whole sentence; this is usually the case with very simple metaphors. More complex (and interesting) cases, he goes on, require less of a semantic and more of a pragmatic consideration, because their meaning "[…] has to be reconstructed from the speaker's intentions, that is, from their original context of utterance". In both cases, however, new meanings result from the combination of the focal word(s) and the frame, as different thoughts, or different conceptual systems, interact. A statement like *man is a wolf* brings two subjects together, each with its system of associated features: a *principal subject* (*man*) and a *subsidiary subject* (*wolf*)[10]. The metaphor then selects a sub-system of relevant features from the subsidiary subject and transfers them to the principal subject, constructing a special pattern of implications about it. This process is a "distinctive *intellectual* operation" (1955: 293; original emphasis) through which the elements are seen in a new light: on the one hand, by foregrounding some features and suppressing others, metaphors organise and influence our view of the principal subject[11]; on the other, by virtue of the interaction between the two

[10] Black's *principal* and *subsidiary subject* correspond to the labels *tenor* and *vehicle*, as defined by Richards. Indeed, Black himself declares his dissatisfaction with Richards' terminology: "Richards' "vehicle" vacillates in reference between the metaphorical expression (*E*), the subsidiary subject (*S*) and the connected implication system (*I*). It is less clear what his "tenor" means" (1955: 294). The two terms are replaced by *primary* and *secondary subject* in Black (1979).

[11] To illustrate this point, Black discusses the metaphorical representation of a battle as a chess game, highlighting the fact that the emotional component of a battle is cancelled as a result of its interaction with the subsidiary subject (characterised by artificiality, rationality, absence of moral implications). The ideological power of metaphor has been thoroughly studied within Conceptual Metaphor Theory by George Lakoff (cf. Section 3.1 below).

conceptual systems, they act upon the subsidiary subject as well. In the example above, those traits of wolves that permit their identification with humans are emphasised[12]. From this perspective, the inadequacy of what Black calls the substitution and the comparison views becomes evident: once a metaphor has been literally paraphrased, or converted into a simile, much of its strength and its "*cognitive* content" (1955: 293; original emphasis) is inevitably lost, for the receiver is not forced to work out his/her patterns of implications; further, the comparison view does not account for the fact that the most interesting metaphors actually *create* similarity where it does not exist. Although later works (cf. in particular Black 1979) provide a more detailed classification of the different types of metaphor (e.g. extinct, dormant, active, and – within the latter group – emphatic vs. non-emphatic, resonant vs. non-resonant) and further develop the theory, its core, which has been briefly illustrated here, is essentially left untouched.

Black's contribution fosters new interest on the mechanisms underlying metaphor production and understanding. In the years following the publication of his seminal essay, one stream of research focuses on metaphor identification and processing in the light of its deviant character[13]. The question is: when we say that metaphor is fundamentally a deviation from a norm, as Black himself puts it, what type of norm are we referring to?

One possible answer is that metaphor is a deviation from semantic rules. Levin (1977) analyses ordinary metaphorical statements in terms of their violation of selection restrictions in sentence construction. In his example *The stone died*, the semantic feature ((Cease to be) (Living)) of the verb *die* leads to the selection restrictions (+ human) or (+ animal) or (+ plant), which clash with the semantic features of *stone*, namely, (+ mineral) and, consequently, (- human). According to Levin, the metaphorical interpretation arises from transferring a feature or a selection restriction from one lexical unit to the other, thus solving the conflict. The process is bidirectional, as it may involve either (1) the transfer of the semantic feature (+ mineral) from *stone* into the set of selection restrictions of the verb *die*, or

[12] "If to call a man a wolf is to put him in a special light, we must not forget that the metaphor makes the wolf seem more human than he otherwise would" (1955: 291).

[13] I am here focusing on only a small part of the issues that have been addressed by metaphor studies in the last decades. I shall omit mention of psycholinguistic and neurolinguistic research on metaphor understanding, in particular the numerous studies that a) explore comprehension times in order to assess whether the process involves the default activation and subsequent rejection of literal meanings and b) seek to identify the cerebral area(s) involved in metaphor processing through fMRI and other functional tests. I shall also omit mention of contributions to the debate on the truth-conditional validity of metaphors vs. their literal counterparts (Davidson 1978, for example, is at odds with Black's interaction theory, as he denies the semantic and truth-conditional validity of metaphor). My purpose in what follows is in fact to draw attention to the contributions that are most relevant to the present work. For a compendium of recent developments in metaphor studies, cf. Gibbs (Ed., 2008).

(2) the transfer of the selection restriction (+ human) from the verb *die* into the set of semantic features of *stone*. At this stage, different meanings may arise depending on whether we choose (a) a *disjunctive* reading, in which the conflicting elements cancel each other out; (b) a *conjunctive* reading, in which the conflicting elements are conjoined and result in a generalised meaning; (c) a *displacive* reading, in which the transferred feature or selection restriction takes the place of the contrasting element. The reading, as Levin specifies, is guided by the context. Option (c) gives rise to a purely metaphorical interpretation: in a displacive Noun → Verb reading of *The stone died*, the semantic feature (+ mineral) replaces the selection restrictions (+ human), (+ animal) and (+ plant), leading to a semantic interpretation of the type *The stone disintegrated* (with a generalisation in the meaning of *die*); in a displacive Verb → Noun reading of the same sentence, the selection restriction (+ human) replaces (+ mineral) and results in a semantic interpretation of the type *The stupid person died*, with the remaining semantic features of *stone* being attributed to the human being in question.

In the same years, Fillmore – who, like Levin, comes from a generative-transformational background – begins to develop his Frame Semantic theory, based on earlier work on a *case grammar*, in which he tried to identify the principles regulating the mapping of deep semantic roles onto the surface syntactic structure (cf. Fillmore 1968/2003). Fillmore's theory differs from formal semantics, in that it considers knowledge as essentially experiential: from this viewpoint, it is closely related to the cognitive linguistic approach to metaphor. The main tenet of frame semantics is that lexical units are understood by making reference to prototypical knowledge structures, which include some central (core) and some peripheral (non-core) elements. For example, a verb like *die* activates a frame whose only core element is a sentient being (the Protagonist) who ceases to exist, while other non-core, and thus optional, elements include the cause of death, or the time and place of the event. Within this framework, a metaphorical interpretation arises from using a lexical unit in connection with a non-standard frame, rather than from a conflict between formal rules. Thus, taking again Levin's example *The stone died*, the *stone* is assigned a semantic role that differs from the one(s) it prototypically plays: since it is not a sentient being, the non-standard use has effects on the whole structure of the frame evoked by *die*. In Fillmore's words:

> […] metaphor consists in using, in connection with one scene, a word […] that is known by both speaker and hearer to be more fundamentally associated with a

> different frame. The requirement for a true metaphor is that the interpreter is simultaneously aware of both the new scene and the original scene. (1977: 70).

Though subsequent research on frame semantics does not focus specifically on metaphor (cf. Fillmore 1982; Fillmore, Wooters and Baker 2001), Fillmore's early work on experiential and prototypical knowledge clearly influences Lakoff and Johnson's Conceptual Metaphor Theory (cf. Section 3.1 below).

A further stream of research considers metaphor as a deviation from pragmatic constraints, being based on the assumption that word and sentence meaning on their own cannot be metaphorical, while speaker meaning can. Grice (1975) explains metaphor (together with irony, meiosis, and hyperbole) in terms of a violation of the Cooperative Principle, which consists in flouting the first maxim of Quality (*Do not say what you believe to be false*). This results in a conversational implicature of the following type: 'my interlocutor has *made as if to say* that *x*, but *x* – if interpreted literally – would be blatantly false; this contrasts with the fact that I believe my interlocutor to be cooperative, and I assume that s/he is for a number of reasons. Therefore, I must go beyond the literal interpretation'. Discussing the example *You are the cream in my coffee*, Grice says:

> […] the contradictory of what the speaker has made as if to say will, strictly speaking, be a truism […]. The most likely supposition is that the speaker is attributing to his audience some feature or features in respect of which the audience resembles (more or less fancifully) the mentioned substance. (1975: 53).

In other words, the maxim of Quality is flouted at the level of what is said, but preserved at the level of what is implicated. As a consequence, metaphor processing calls for a surplus of cognitive effort due to the double stage of interpretation required: the literal meaning must be discarded in the light of the context of utterance before the non-literal meaning is taken into account.

Searle (1979/1993) deals with metaphor, together with irony and indirect speech acts, as part of a reflection on how it is possible to say one thing while meaning another. In his view, the metaphorical interpretation of an utterance involves at least three steps[14]: the first, as

[14] While focusing on the hearer, Searle argues that the findings may help understanding the procedure followed by the speaker as well: in fact, communication, to be successful, requires that both participants share a common set of principles (Searle 1979/1993: 102).

observed by Grice, consists in making a decision between the literal and the metaphorical interpretation, the former being the default option. Usually, metaphorical utterances are defective if taken literally, in terms of truth conditions, violation of speech act rules, and violation of conversational principles. This is the most common clue to the metaphorical nature of an utterance, but, apparently, it is not the only one. Searle maintains that there are cases in which literal and metaphorical meaning are not at variance (that is, what changes is the set of validating truth conditions of the utterance, and not the truth value itself), although he does not mention them explicitly. Once the hearer knows that the speaker is saying 'S is P' while meaning 'S is R', the second step involves computing the possible values of R on the basis of a number of principles[15]. The third step consists in restricting the range of the possible values of R with the help of contextual information and encyclopaedic knowledge concerning S, in order to keep only those values of R that can be possible properties of S within the context of utterance. Metaphor differs from irony and indirect speech acts inasmuch as these are regulated by different mechanisms. Ironical utterances, if taken literally, are inappropriate to the situation, since speaker meaning is the opposite of sentence meaning. In the case of indirect speech acts, there is something more to speaker meaning that cannot be captured by a strictly literal interpretation of sentence meaning: if A asks B '*Can you pass the salt?*' A means what s/he says (literally, s/he is asking a question about B's *capacity* to do something) but, *in addition*, s/he aims to formulate a polite request. B retrieves A's meaning on the basis of the context (e.g. A and B having dinner together), his/her knowledge of the rules of speech acts (the question on the ability to pass the salt overlaps with the actual request to do so) and his/her knowledge of a system of conventions (e.g. the fact that a particular situation requires an indirect speech act, which may be expressed by an interrogative form). At the same time, metaphor and irony differ from indirect speech acts in that their interpretation is not based on linguistic or extra-linguistic conventions (Searle 1979/1993: 109).

[15] The list provided by Searle comprises six principles, namely, things that are P are also: 1. *By definition R*. 2. *Contingently R*. 3. *Often said or believed to be R*. 4. *Culturally or naturally associated with R, even though R is not the same as P, nor is it in any way similar to P, nor is it believed to be P or similar to P*. 5. *Not like R, but the condition of being P is like the condition of being R*. 6. *Similar in meaning to R, but P has restricted its application, so that it does not fit S anymore*. Other three principles are described separately: 7. *Principles 1 - 6 may be applied to metaphors not having a syntactic form of the type 'S is P'*. 8. *There is no clear theoretical boundary among metaphor, synecdoche and simile*: "[…] it becomes a matter of terminology whether we want to construe metonymy and synecdoche as special cases of metaphors or as independent tropes" (1979/1993: 107). 9. *The association between P and R may be created anew by the metaphor itself* (though Searle admits that he has never seen any convincing instantiation of this principle; cf. also Black 1955).

However, while focusing on the question of *how* we process metaphors, none of the theories so far reviewed attempts to provide a systematic explanation of the reasons *why* we choose it so often, even in ordinary conversation, and despite the fact that it seems to require extra work on the part of the receiver. An exception to this tendency can be found in Reddy's (1979/1993) seminal study on what he calls the *conduit metaphor*, that is, a recurring metaphorical frame in our metalinguistic vocabulary (1979/1993), which also contributed to the inception of Conceptual Metaphor Theory (cf. Note 17 below). In his essay, Reddy discusses a set of apparently dead metaphors that constitute as many default options to talk about language. He gives, among others, the following examples (1979/1993: 166; original emphasis):

1) You still haven't *given me* any *idea* of what you mean.
2) Whenever you have a good *idea* practice *capturing it in words*.
3) Don't *force* your *meanings into* the wrong *words*.

These expressions have a clear metaphorical origin: ideas and meanings are not concrete objects that we can actually exchange with our interlocutors, nor are words physical containers that we can stuff with goods (if this were the case, we would hardly need a conventional communicative system like language). As the author observes, most of the linguistic structures used in English to refer to verbal communication instantiate this general pattern. They involve metaphorical expressions based on the physical transfer of meanings, opinions and thoughts, from one brain to the other, through different types of container, as if they were objects (this is also shown by several terms used in the field of linguistics: the *channel* of communication; the *content* of the message; the *sender* and the *receiver*). The overall coherence of the system makes it possible to group its different realisations under the single heading of *conduit metaphor*. This includes a major framework – in which elements belonging to the cognitive and emotional dimension are inserted into something and sent outside – and a minor framework – in which the same elements are seen as flying undisturbed out of our mind into the external space, and possibly back (as in '*Somehow, these hostile feelings found their way to the ghettos of Rome*'; Reddy 1979/1993: 171). Coherence is both formal and conceptual: for instance, the speaker *packs* the message, the listener *unpacks* it; if the *container* is not enough *receptive*, then the speaker risks *filling* it with *too much content* and putting the *transfer* at risk. The author also observes that English makes available a wide range of expressions that can be used to blame the speaker, rather than the hearer, in the event

of an unsuccessful transfer. In fact, preparing the package is generally perceived as the most difficult task: "After all, receiving and unwrapping a package is so passive and so simple – what can go wrong?" (Reddy 1979/1993: 168). After analysing the conduit metaphor from a linguistic perspective, Reddy moves on to investigate the underlying connection between language and thought: in his words, "[…] to what extent language can influence thought processes" (1979/1993: 175). In his view, the conduit metaphor provides a biased representation of human communication, portraying it as a neat and almost infallible process, a sort of assembly line. A more objective representation would embrace the presence of misunderstandings, divergent opinions, and different interpretations of the same utterance: in other words, it would account for the fact that meanings have to be continuously adjusted and re-negotiated to resist the entropy characterising all physical systems, including verbal interactions (cf. Bertuccelli Papi and Lenci 2007). Yet, the paradigm of the packing and unpacking of messages is so pervasive precisely because it is reassuring, and its ubiquity in language has consequences on the cognitive plane: it affects not only the way people talk about communication, but also, and most importantly, the way they conceive of it. At least two aspects of Reddy's work make it important for the development of metaphor studies in the following years. First, it provides linguistic evidence to support the claim that metaphor can be found in everyday language, as in (perhaps, even *more than* in) literary and artistic uses[16]. Second, it highlights the cognitive function of the conduit paradigm: in so doing, it takes into account not only the *how*, but also the *why* of metaphor[17].

3. Current approaches to the study of metaphor

3.1 Conceptual Metaphor Theory and Contemporary Theory of Metaphor

In his review of Lakoff and Johnson's *Metaphors We Live By* (1980), Lawler speaks of a "[…] powerfully human book about a powerful human topic" (1983: 207), also making reference to an article written by Carlin Romano for the *Voice Literary Supplement* two years

[16] Reddy concludes his article with an Appendix containing more than 140 linguistic instantiations of the conduit metaphor, resulting from his personal survey, which he contrasts with a set of alternative expressions, either non-metaphorical or based on different metaphors. His attempt to provide evidence from real linguistic occurrences may well be defined as a corpus-linguistic approach *ante litteram*.

[17] Lakoff begins his essay "The contemporary theory of metaphor" with an acknowledgement of the influence of Reddy's work on his and Johnson's research.

before, whose words today seem prophetic: it forecasts a "boom" in research on metaphor after Lakoff and Johnson's work (Lawler 1983: 201). Indeed, the publication of *Metaphors We Live By* marks the beginning of an important stream of research on conceptual metaphors (Conceptual Metaphor Theory, or CMT), which will be further developed by a wide international community of scholars in the following years.

The main tenet of Conceptual Metaphor Theory is that linguistic metaphors are surface realisations of a deeper system of conceptual metaphors, in terms of which we both think and act. A conceptual metaphor can be defined as a mapping between two domains, one of which projects a set of fixed correspondences onto the other. Scholars working within this framework have developed terminological and graphic conventions to account for the important theoretical distinction between linguistic and conceptual metaphors. Thus, the term *metaphorical expression* (or *linguistic metaphor*) conventionally denotes the linguistic realisation of a mapping, written in lower-case letters or italics, while the term *metaphor* refers to the underlying conceptual mapping, usually written in small capitals. In addition, the labels *target* and *source* are used to identify the two conceptual domains joined by a metaphor: the former (corresponding to the classic labels *tenor* or *primary subject*) refers to the concept that is explained or represented in metaphorical terms, while the latter (corresponding to the classic labels *vehicle* or *secondary subject*) refers to the concept that forms the basis of the metaphor. For instance, the mapping between ARGUMENT (target domain) and WAR (source domain) is realised by metaphorical expressions like the following (taken from Lakoff and Johnson 1980: 4; original emphasis):

4) He *attacked every weak point* in my argument.
5) I've never *won* an argument with him.
6) You disagree? Okay, *shoot!*

ARGUMENT IS WAR is an example of what Lakoff and Johnson (1980) call *structural metaphors*, that is, metaphors that establish mappings between elements belonging to structured conceptual domains. In Western culture people talk about arguments in terms of war because their mental representation of arguments shares a set of traits with that of wars, e.g. elaborating strategies, winning and losing conflicts, behaving aggressively and generally seeing the interlocutor as an opponent. The overlap activates the transfer of information from one domain to the other, to the point that the metaphorical nature of the association becomes opaque: "We talk about arguments that way because we conceive of them that way – and we

act according to the way we conceive of things" (Lakoff and Johnson 1980: 5). The metaphorical connection between ARGUMENT and WAR is culture-specific, but it is systematic in the cultures in which it appears: in other words, it has become the standard way of conceptualising and talking about arguments, and it manifests itself in a set of coherent linguistic expressions.

According to Lakoff and Johnson, conceptual mappings are *selective* processes, which function by highlighting some areas of the source and the target domains, putting the rest on the background. In the case of ARGUMENT IS WAR, ARGUMENT is seen through the lens of WAR, which foregrounds features like RIVALRY and AGGRESSIVENESS, thus influencing our behaviour. Indeed, while arguing, we tend to forget that our aim should be to find a solution to the conflict, while we often strive to defend our opinions and attack the other's, not to mention the numerous times that we come to the conclusion of an argument without even remembering exactly the reason why it arose.

A second category of metaphors includes concepts (occasionally groups of concepts, forming coherent sets) that are organised in terms of spatial orientation: these are labelled *orientational metaphors* by Lakoff and Johnson (1980). Examples can be found in ordinary linguistic expressions used to describe emotions and states of consciousness, such as *to feel down*, *to be depressed*, *to be in seventh heaven* (respectively sanctioned by SAD IS DOWN vs. HAPPY IS UP), or *to fall asleep*, *to sink into sleep/into a coma/into oblivion*, *to wake up*, *to get up* (respectively sanctioned by CONSCIOUS IS UP vs. UNCONSCIOUS IS DOWN). Orientational metaphors are perhaps the clearest source of evidence for one of the main assumptions of CMT, namely, that the metaphors structuring our conceptual system are grounded in physical experience. The association between consciousness/unconsciousness, on the one hand, and vertical/horizontal dimension, on the other, is experientially motivated, since most animals rest or sleep lying down, fall to the floor in case they pass out, and get up again as soon as they wake up or recover. Physical posture provides the experiential basis for the metaphorical representation of positive and negative emotions as well (cf. Gibbs and Wilson 2002).

Basic orientational metaphors (such as the ones discussed above) seem to cut across different cultures, and to give rise to coherent metaphorical expressions in different languages. However, there are also cases in which the association of a spatial notion with a given concept is culturally mediated. With reference to this point, Lakoff and Johnson observe that "[…] which concepts are oriented which way and which orientations are most important vary from culture to culture" (1980: 24). Within the same culture, the systematic internal structure of the orientational category guarantees coherence among interrelated concepts: for instance,

CONSCIOUS IS UP /UNCONSCIOUS IS DOWN are consistent with RATIONAL IS UP/IRRATIONAL IS DOWN and with HAVING CONTROL IS UP/BEING SUBJECT TO CONTROL IS DOWN. Therefore, the process of creation of orientational metaphors is doubly limited: by their experiential basis, and by the internal coherence of the system. Potential conflicts are solved by referring to the overall value system of the culture or sub-culture in which they appear[18].

A third category includes what Lakoff and Johnson (1980) call *ontological metaphors*, that is, metaphors that result from assigning surfaces or boundaries to things that have no definite shape, or from re-elaborating abstract entities in concrete terms. Such processes reduce the cognitive cost of elaborating elements that do not share our condition of concrete and bounded beings, making them more readily understandable. As a consequence, states, activities and events are systematically mapped onto physical entities, substances and containers (as is the case with Reddy's conduit metaphor: cf. Section 2 above). A wide range of linguistic expressions used to refer to our mental states and processes reflects this tendency (examples taken from Lakoff and Johnson 1980: 27-28; original emphasis):

THE MIND IS AN ENTITY

7) The *wheels are turning* now!
8) I'm *a little rusty* today.
9) He *broke* under cross-examination[19].

THE MIND (and CONTENT OF MIND) IS A SUBSTANCE

10) It *seems* to be deeply *rooted in* the mind of the ordinary British citizen.
11) The sentences piled one upon another, without restraint, like *a flow of* thought.

THE MIND IS A CONTAINER

12) We have agreed the recommendation. We will *bear that in* mind.
13) We have to *keep this timescale in* mind when planning for the future[20].

The classification discussed so far is partially modified in subsequent refinements of CMT. In 1989, Lakoff and Turner propose a new paradigm called the *Great Chain of Being*: this

[18] For instance, a sentence like *the inflation rate is rapidly growing* shows that MORE IS UP is 'more basic' than GOOD IS UP: therefore, it is given priority, at least in modern Western culture.
[19] Examples (1) - (3) are taken from Lakoff and Johnson (1980: 27-28). More specifically, examples (7) and (8) are linguistic realisations of the THE MIND IS A MACHINE, while example (9) instantiates THE MIND IS A BRITTLE OBJECT. Both are elaborations on the basic ontological metaphor THE MIND IS AN ENTITY.
[20] Examples (10) - (13) are taken from the British National Corpus.

organises living beings and inanimate objects into a hierarchical system including different classes, and explains the metaphorical representation of the members of one class in terms of the attributes and behaviour that characterise the members of another (higher or lower) class. In their words, the Great Chain is "[…] a cultural model that concerns kinds of beings and their properties and places them on a vertical scale with "higher" beings and properties over "lower" beings and properties" (Lakoff and Turner 1989: 166). In its most basic form, the Great Chain paradigm is structured as follows:

> HUMANS: Higher order attributes and behavior (e.g. thought, character)
> ANIMALS: Instinctual attributes and behavior
> PLANTS: Biological attributes and behavior
> COMPLEX OBJECTS: Structural attributes and functional behavior
> NATURAL PHYSICAL THINGS: Natural physical attributes and natural behavior
> (Lakoff and Turner 1989: 170-171)

In the more complex version of the paradigm that pervades Western culture, the basic Great Chain is extended upwards to embrace two higher-order structures: human society and the cosmos, comprising religious and supernatural entities. The elements that belong to these levels are generally linked via metaphor to lower-order entities, as when we speak of societies in terms of human attributes (e.g. a *just* society). However, there are also cases in which metaphor proceeds the other way round, as when we speak of human self-knowledge in terms of a world (e.g. our *inner* world). The Extended Great Chain can be conveniently used as a template to classify large amounts of data, which often lead to a wide range of apparently unrelated metaphorical occurrences (cf. Rojo López and Orts Llopis 2010; cf. also Chapter Four). Even more importantly, as Lakoff and Turner point out in their concluding remarks, the cultural model of the Extended Great Chain constantly influences our social and political behaviour: "The Great Chain itself is a political issue. As a chain of dominance, it can become a chain of subjugation" (1989: 213). The ideological and political power of metaphor has been further investigated by Lakoff and by other scholars working within the framework of CMT, as we shall see below.

An improved version of Conceptual Metaphor Theory, generally referred to as the Contemporary Theory of Metaphor (or CTM), is presented in Lakoff (1993). An important novelty is the formalisation of the *Invariance Principle*, already outlined in Lakoff and Turner (1989) and Lakoff (1990):

> Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain. (Lakoff 1993: 215).

An image schema is a schematic representation of perceptual experience, gathering generic information about different activities and events: an example is the PATH schema, which includes a starting point, a destination, and motion through a series of intermediate steps. According to the Invariance Principle, metaphors based on this schema (e.g. LOVE IS A JOURNEY) will map the starting point of the source concept onto the (metaphorical) starting point of the target concept, the destination onto the destination, and so on (e.g. *things were easier at the beginning*; *we are going nowhere on this relationship*). Since image schemas are deeply rooted in experience, the Contemporary Theory of Metaphor maintains that they form the basis of many of our metaphorical thought processes, and that even the more complex metaphors tend to preserve an image-schematic core (Lakoff 1993: 231). Ontological metaphors, for instance, may be seen as ultimately image-schematic, for they map the part-to-whole structure of physical objects onto the less delineated structure of abstract elements, preserving the original experiential logic.

In the same work, Lakoff also introduces a new category of metaphors (*image metaphors*), based on the association between images rather than concepts: "Image metaphors […] are "one-shot" metaphors: they map only one image onto one other image" (1993: 229). An example of an image metaphor can be found in the metaphorical statement '*His toes were like the keyboard of a spinet*' (Rabelais, quoted in Lakoff 1993: 230), which sets up a mapping between two conventional mental images, one for the foot and its sub-parts (the toes), and one for the keyboard and its sub-parts (the keys), again obeying the Invariance Principle. Being "one-shot", image metaphors are much less elaborate than conceptual metaphors such as ARGUMENT IS WAR, or THEORIES ARE BUILDINGS, in which simultaneous mappings take place between elements belonging to complex conceptual structures (also called *experiential gestalts* in Lakoff and Johnson 1980).

The remainder of this section reviews some of the main tenets of Conceptual Metaphor Theory in the light of the changes proposed in the Contemporary Theory of Metaphor. Subsequent developments are dealt with in Section 3.2.

- *The ubiquity of metaphor in ordinary language provides evidence supporting the claim that our conceptual system is organised according to metaphorical criteria*. Language is a product of our conceptual structure, and if linguistic metaphors are so frequent and numerous,

then metaphor must play a key role in the underlying cognitive processes as well. The conventional status of the metaphorical expressions that pervade ordinary language also partially explains why these have been neglected for centuries under the decorative view. Let us consider a word like *inflation*, which has entered everyday language with time, losing part of its original specialised meaning. Although it can be traced back to a mapping between MONEY and INFLATABLE OBJECT, the metaphorical origin of the word has become opaque, and can only be retrieved by lingering on the word's meaning (something that most speakers will not do in normal, everyday communication). Novel linguistic expressions may bring a conventional metaphor like this "back to life", following two strategies: (a) revitalisation of the metaphorical intersection, e.g. "If China wants to fight inflation *by letting air out of the balloon*, letting the currency rise would be a good start" [21]; (b) extension into areas of the concepts that are not conventionally involved in the metaphorical mapping, like (in this case) being made of a plastic material that explodes when it comes into contact with a spiky object, e.g. "Oil *takes the sting out of* inflation"[22]. However, Conceptual Metaphor theorists refuse to call even highly conventional metaphors 'dead', preferring to apply this label to metaphors that occupy a peripheral position in our conceptual system: "They do not interact with other metaphors, play no particularly interesting role in our conceptual system, and hence are not metaphors that we live by" (Lakoff and Johnson 1980: 55).

- *Metaphors are central to thinking and knowledge, and are based on physical experience*. Although our understanding of the world is always filtered by the cultural background, primary concepts (like that of SPACE) and image-schemas are non-metaphorical, since they emerge directly from bodily experience: they are formed at an early evolutionary stage, and subsequently used to grasp less clearly delineated concepts, such as emotional states or mental processes. This amounts to a claim that, as we move away from the realm of physical experience to enter that of abstract concepts, metaphor becomes the 'standard' cognitive process: we understand most, if not all, abstract concepts by mapping conceptual domains that are closer to physical experience onto them.

Research has been carried out on this topic in recent years, and within a number of languages, confirming the general tendency to talk about abstract concepts in concrete terms. To mention only a few studies, Lakoff and Turner (1989) and Sweetser (1990, from a cross-linguistic perspective) examine the linguistic realisations of the metaphor UNDERSTANDING IS SEIZING; Gibbs (1994) links many of the expressions used in ordinary English to refer to anger

[21] Source: http://blogs.reuters.com.
[22] Source: *The Financial Times*, leader, September 13th/14th 2008.

to the underlying conceptual metaphor ANGER IS HEATED FLUID IN A CONTAINER; Boers (2000) provides empirical evidence showing that awareness of the metaphorical basis of English idiomatic expressions helps students of English as a foreign language understand them and enrich their vocabulary; finally, Deignan and Potter (2004) conduct a corpus-aided survey of non-literal uses of the lexis of human body in English and Italian, tracing most of them back to metaphor and metonymy (often a combination of the two).

Metaphorical mappings are involved in the formation of new knowledge as well. Deignan (2005) explores the field of information technology, where new discoveries are frequently re-elaborated in metaphorical terms: the conceptual metaphor CONNECTED COMPUTERS ARE NODES IN A WEB (realised at the language level by expressions like *internet*, or *world wide web*) links a highly specialised and abstract notion to the familiar mental image of a spider's web, thus enhancing understanding. But words like *web* or *mouse* also show that metaphor plays an active role in the creation of lexis.

- *Physical experience can be culturally-mediated*. The tendency to conceptualise abstract notions as concrete elements and activities cuts across different cultures, but the forms it takes are frequently culture-specific. Cultural specificity can be found even in the basic category of orientational metaphors, but it becomes more visible when the source concepts are themselves culturally determined, as is the case with many structural metaphors.

- *Our conceptual system is a network whose nodes are connected via different types of relationship, among which metaphor plays a pivotal role*. The correct functioning of the network is guaranteed by three properties. First, its systematicity: the ability to identify systematic correspondences between different domains of experience makes it possible to understand one concept in terms of another, or to map one mental image onto another. Second, its selectivity: conceptual and image metaphors are not random, they focus on selected areas of a concept, or on selected mental images, discarding other possibilities or leaving them on the background. Third, its coherence: complexity and flexibility in the network are counterbalanced by the existence of coherent mappings within the same metaphorical domain and across different domains. When a concept functions as source in several metaphorical processes, the results generally form a coherent set; if not, the conflict is solved by making reference to the broader value system of the culture. When several mappings apply to the same concept, pointing out as many perspectives on it, these are generally coherent with one another.

A further point of interest, also in view of the corpus-aided analysis presented in Chapter Four, is the ideological power of metaphor. Metaphors "organize our view" of the world, as

Black puts it (1955: 288; cf. also Section 2). Therefore, it could be argued that metaphorical representations of reality are by definition biased, and that by choosing a particular metaphor speakers may (consciously or not) influence the hearers' attitude towards a topic. Many scholars, especially in the field of Critical Discourse Analysis, have tackled this issue from various perspectives, with a view to unveiling the ways in which the metaphors used in different text-types (literature, sociology, economics, politics, media discourse) may influence public opinion.

Lakoff and Johnson reflect on the ideological implications of metaphor in their seminal work, arguing that "[…] metaphors can be self-fulfilling prophecies" (1980: 156 and ff.). They analyse the WAR metaphor chosen by President Jimmy Carter to talk about the energy crisis faced by the United States in the 1970s. They report examples showing that the crisis was referred to as a '*threat to national security*' posed by an '*enemy'*, which called upon citizens to establish '*a new chain of command*'. They observe that among the major entailments of the metaphor was the need for people to prepare to support their nation and make sacrifices; a further implication was that the enemy was foreign, and cartoonists used to portray him in Arab clothing. The authors underline that THE ENERGY CRISIS IS WAR was not the only possible metaphor. Its choice affected the way in which people (including politicians, who were responsible for handling the situation) conceptualised the event, and – consequently – their actions.

Lakoff (1991) studies the metaphorical system used in relation to the Gulf War. Among other elements, he identifies a dangerous combination between the metonym THE RULER FOR THE STATE HE RULES and the metaphorical scenario THE WAR IS A FAIRY-TALE. Within the metaphorical scenario, Saddam Hussein is the VILLAIN, Kuwait is the VICTIM, while the United States play the role of the HERO: the metaphor entails that the war is just, at the same time concealing its brutal and violent aspects. The metonym, in turn, diverts people's attention away from the thousands of civilians who are part of the same state, and die every day under the bombings. According to Lakoff (who analyses again the use of metaphors in war discourse in 2003, towards the beginning of Gulf War II), these and other conceptual mappings played a key role in fostering public acceptance of the war.

Within the field of domestic policy, Semino and Masci (1996) investigate the FOOTBALL, WAR and RELIGION metaphors used by Silvio Berlusconi to sway the electorate during the 1994 election campaign, while Rojo López and Orts Llopis (2010) compare the metaphorical representation of the financial crisis in the Spanish and the British specialised press between

2007 – when Spain was on the verge of national elections – and 2008 (cf. Introduction, Section 2).

Before concluding this section, it is worth noting that Lakoff himself has recently re-visited both Conceptual Metaphor Theory and the Contemporary Theory of Metaphor in the light of the discoveries made in the brain sciences, with a view to explaining the neural processes that make metaphorical reasoning possible: this new stage is commonly referred to as the Neural Theory of Metaphor (or NTM: Lakoff 2008). The Neural Theory of Metaphor may be described as a specialised branch of a wider approach, called the Neural Theory of Language (NTL), developed by Lakoff and Feldman at the University of Berkeley. Within the framework of NTL, thought is considered as a physically-based phenomenon, in a two-fold sense: not only is it directly connected with our bodily experience, as already claimed by Conceptual Metaphor Theory; it also proceeds by activation of physical structures within the brain, that is, neural networks made up of different neuronal groups. Activation takes place through electric impulses that flow across the empty spaces between neurons (synapses). Since each neuron is connected with a large number of other neurons, and may function within different neuronal groups at the same time, the firing of one node spreads to other nodes, even in different regions of the brain, making thought a highly complex activity: the same type of complexity is involved in metaphor processing (cf. also Grady 1997; Narayanan 1997; Johnson 1999).

3.2 Beyond CMT and CTM: Conceptual Blending

Conceptual Metaphor Theory and the Contemporary Theory of Metaphor have attracted various forms of criticism. Ruiz de Mendoza Ibáñez and Pérez Hernández (2011: 165 and ff.) comment on some of them, among which their circularity (i.e. the fact that linguistic metaphors are taken as both evidence for and the result of the metaphorical nature of our conceptual system) and the inaccuracy of the taxonomy they propose. Another serious criticism that has been levelled at CMT and CTM is that they are too static to capture the complex cognitive mechanisms at work in metaphorical meaning construction. In addition, they do not explain why speakers come up with additional meaning when interpreting metaphorical statements, that is, meaning that is not part of either the source or the target concept and falls outside the set of correspondences established by the metaphor between

them. As a consequence, new theories have been proposed in recent years that attempt to improve CMT and CTM by addressing these questions.

Conceptual Blending (or Conceptual Integration; cf. in particular Fauconnier and Turner 1998; 2002) is itself a 'blend' of standard Conceptual Metaphor Theory and a different but interrelated framework, Mental Space Theory (Fauconnier 1985/1994; 1997), which conceives of meaning construction as a dynamic and context-bound process, involving the formation of mental spaces and the creation of mappings between them. Fauconnier maintains that mental spaces are temporary 'packages' of information, which are created out of long-term and short-term schematic and/or specific knowledge, and modified and enriched on-line as we think and talk. From this perspective, linguistic expressions do not have intrinsic meaning, but act as guidelines for speaker and receiver to form mental spaces and establish mappings between them: the process is context-driven, and explains the multiple interpretations that can be assigned to an utterance. More specifically, linguistic units prompt the selection of relevant pre-existing knowledge structures (frames or schemas), forming the ground of a mental space; this, in turn, is enriched in the light of the context, of other available information, and of its relations with other mental spaces, in order to transform the linguistic input into a complete mental representation.

Some linguistic units, in particular, act as *space builders*, i.e. they guide the hearer towards the creation of mental spaces that are not anchored in the default 'here and now', although they are a function of it (cf. Fauconnier 1997). Among them we find Prepositional Phrases, adverbs, connectives, and clauses that activate different spatial or temporal representations, or outline hypothetical, theoretical, fictional, counterfactual realities that satisfy the truth conditions of the utterance. For example:

14) *In* New *York*, people eat a lot of sushi (said by A to B when both are in London).
15) *The* Italian football team won the World Cup *in 1982*.
16) The existence of God can be proved *philosophically*.
17) Professor X will come to the Conference opening *if* her plane lands on time.
18) *If I* were *you*, I wouldn't care so much about that.

Nominal groups (and pronouns) play equally important roles on the cognitive plane, as they are pointers to the entities that populate mental spaces (*space elements*), which may be either prototypical (i.e. belonging to encyclopaedic and schematic knowledge about the event) or occasion-specific (i.e. retrievable from the context of utterance). During the process of

meaning construction, on the basis of the linguistic units, properties are attributed to the mental space elements, and the relations holding among them are identified; this may result in the creation of mappings with other, related frames. In the following example:

19) *In Pride and Prejudice*, Elizabeth marries Mr. Darcy.

the Prepositional Phrase acts as a space builder that leads to the construction of a fictional mental space, including information on the novel *Pride and Prejudice*. The Nominal Groups foreground two elements in the mental space NOVEL[23], i.e. two characters, who may or may not be associated with pre-existing knowledge in the reader's mind. The Verbal Group introduces their relationship, simultaneously evoking a frame MARRIAGE whose core participants are two partners (prototypically a man and a woman) who modify their legal relationship by taking on the social roles of HUSBAND and WIFE. At this point, on the basis of inferential processes guided by pre-existing knowledge of the MARRIAGE frame and other background knowledge (e.g. the fact that the names *Elizabeth* and *Mr. Darcy* denote a female and a male human being, respectively), the participant role WIFE is mapped onto the element evoked by the lexical unit *Elizabeth*, while the participant role HUSBAND is mapped onto the element evoked by the lexical unit *Mr. Darcy*. This is visually represented in the following figure:

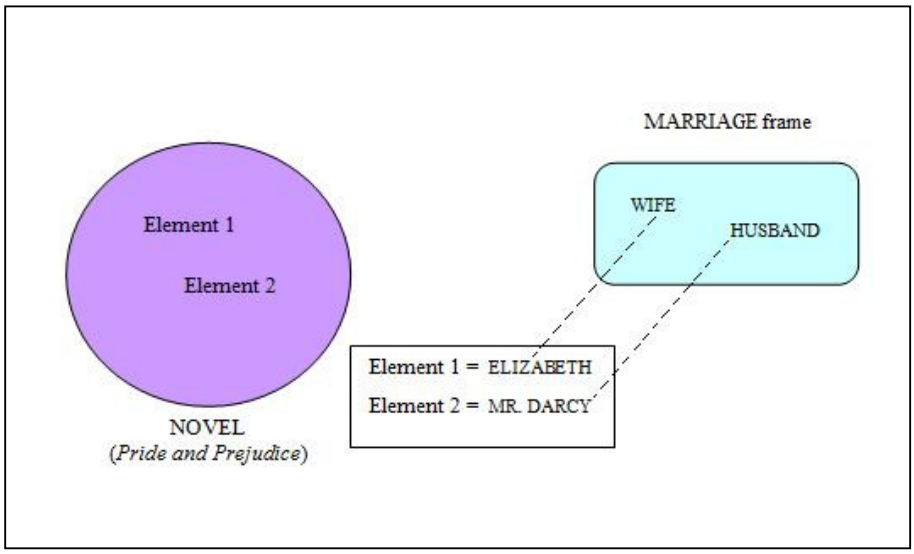

Figure 1.1 Representation of the process of meaning construction in (19)

[23] Here and henceforth, the labels indicating mental spaces, frames, and their elements are written in small capitals, following the criterion introduced in the previous section with reference to conceptual metaphors and conceptual domains.

Let us suppose we add a sentence to the one analysed above:

20) He is a handsome young gentleman.

The pronoun *he* relates anaphorically to *Mr. Darcy* in (19), as the hearer understands through an inferential process that is based on background knowledge (*he* is the pronominal form used for members of the category human: male) and short-term knowledge (in (20), it can only refer to Element 2 in the mental space NOVEL, which corresponds to the participant role of HUSBAND in the MARRIAGE frame). Once the co-reference has been established, a new property is assigned to Element 2 by the expression *handsome young gentleman* (the relationship being marked by the presence of the Verbal Group *is*). Previously acquired knowledge is merged with knowledge deriving from (20) in order to reach a complete mental representation: now the hearer knows that, in *Pride and Prejudice*, Elizabeth becomes the wife of a handsome young gentleman, whose name is Mr. Darcy. The absence of space builders in (20) implies that the property expressed therein must be added to the mental space activated by (19). However, as discourse unfolds, new mental spaces (including new frames) may be created along with already existing ones, leading to further knowledge transfers and to an increasingly complex and multidimensional representation (a network, or *lattice* of mental spaces; for a detailed overview of the principles regulating meaning construction in Fauconnier's theory, and the solutions it offers to a number of semantic and pragmatic problems, cf. Croft and Cruse 2004: 32-39; Evans and Green 2006: 363-397).

Three aspects emerge from the previous discussion that are central to the subsequent evolution of Mental Spaces Theory into Conceptual Blending. First, meaning construction requires the formation and the interaction of mental spaces: these are constructed on the fly, more complex and dynamic than semantic frames (which nonetheless contribute to populate their internal 'world'; cf. also Section 2), and more versatile than classic conceptual domains. Second, linguistic expressions are inputs to cognitive processes of elaboration, which produce enriched mental representations as output by integrating information from various sources. Third, knowledge acquired in this way can spread across mental spaces.

Conceptual Blending aims to account for those linguistic phenomena (including but not limited to metaphor) that cannot be adequately explained in cognitive terms by either Mental Spaces Theory or Conceptual Metaphor Theory (previously applied by Turner to his research on literary metaphors, cf. Turner 1987). Although here we are focusing on language, it should be noted that Conceptual Blending is a theory of human cognition in general, as it aims to

explain various aspects of human behaviour (e.g. Parrill and Sweetser 2004 on gesture, or Câmara Pereira 2007 on creativity in artificial intelligence).

The main tenet of the theory is that "[…] meaning construction typically involves integration of structure that gives rise to *more than the sum of its parts*" (Evans and Green 2006: 400; emphasis added). A stimulus (not necessarily verbal) can call forth multiple mental spaces at once: these combine to create a *blended* space, in which new meaning (i.e. meaning that cannot be retrieved from any of the input spaces alone) is formed. Such process is constitutive of human thought. When applied to metaphor, this framework provides an explanation for those cases in which the metaphorical meaning cannot be reduced to a set of mappings between two static conceptual domains, as in standard CMT. Let us consider the following example (which is also one of the most frequently discussed in the literature; cf. Kövecses 2011):

21) That surgeon is a butcher.

Within Conceptual Metaphor Theory, (21) would be analysed as a realisation of the conceptual metaphor SURGERY IS BUTCHERY, in which selected elements from the source domain BUTCHERY (including the BUTCHER, his TOOLS– prototypically a CLEAVER – and the CARCASS he is cutting up) are mapped onto the corresponding elements in the target domain SURGERY (the SURGEON, his/her TOOLS – prototypically a SCALPEL – and the HUMAN BODY on whom s/he is operating). However, CMT would not account for the cognitive processes that lead to the production of a further layer of meaning, related to the surgeon's INCOMPETENCE, which is part of the speaker's meaning in (21), but at the same time is *not* an intrinsic property of the source domain BUTCHERY (cf. Grady, Oakley and Coulson 1999). From the perspective of Conceptual Blending, the metaphor brings into play mental spaces rather than conceptual domains: more specifically, the *emergent* property INCOMPETENCE (cf. Fauconnier and Turner 2002: 297) appears within a blended space that integrates information coming from a *network* of mental spaces (an elaboration of the notion of lattice set forth by Mental Space Theory). The process is visually represented in the figure below:

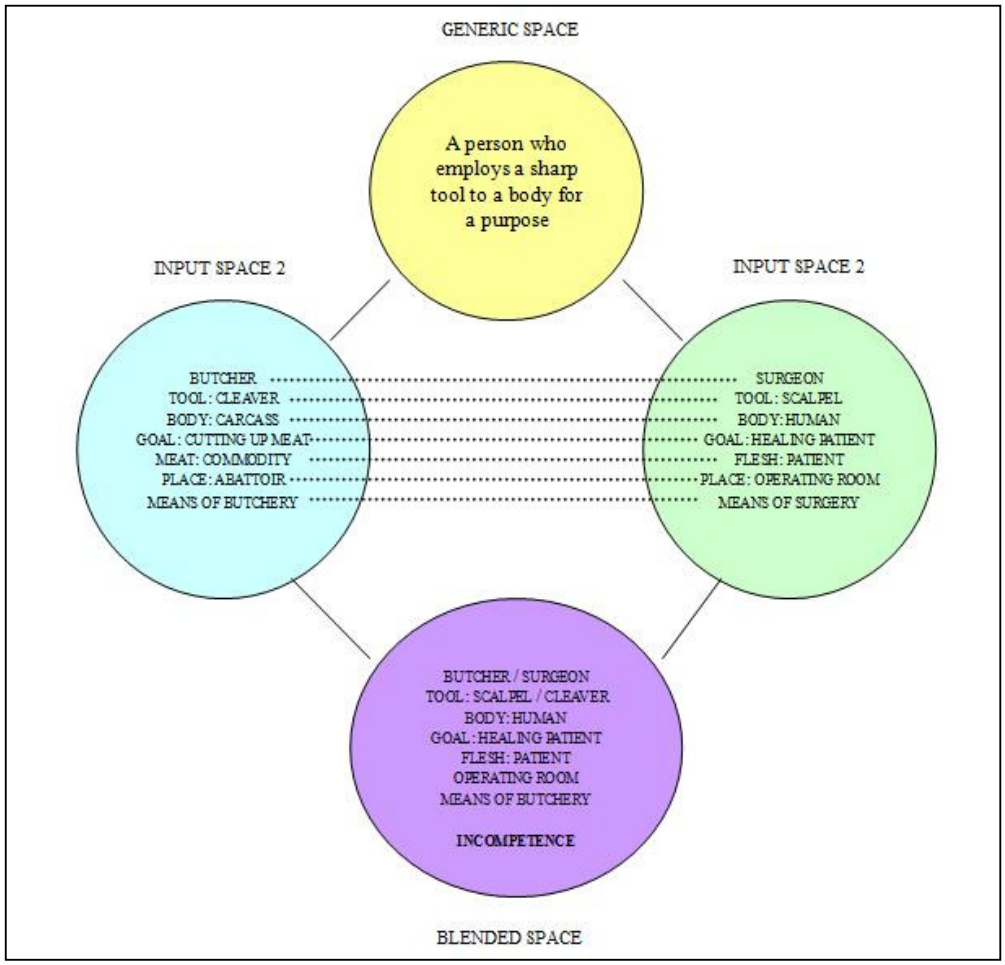

Figure 1.2 Understanding *That surgeon is a butcher* via conceptual integration (adapted from Kövecses 2011: 15)

As the figure shows, the process of (metaphorical) meaning construction involves a superordinate space that is generic enough to fit both the input spaces: in the case of the SURGEON/BUTCHER metaphor, this includes a person employing a sharp tool to a body for some purpose. The GENERIC SPACE functions as a bridge between the input spaces, sanctioning the creation of connections between comparable elements. Thus, the mental space element BUTCHER in INPUT SPACE 1 is mapped onto the corresponding element SURGEON in INPUT SPACE 2 on the basis of the common agentive role identified by the GENERIC SPACE; the mental space element CLEAVER in INPUT SPACE 1 is mapped onto the corresponding element SCALPEL in INPUT SPACE 2 and so on. The schematic structure of INPUT SPACE 1 and INPUT SPACE 2, which essentially gather background knowledge on BUTCHERY and SURGERY in the form of frames, facilitates the mappings. The input spaces then selectively project portions of their information structures onto the blended space, where they are integrated, and new meaning is produced. The BLENDED SPACE in Figure 2 receives the agent of BUTCHERY and the agent of

SURGERY, so that the BUTCHER and the SURGEON overlap; the remaining elements are inherited either from one input space or the other. As a result, the final picture (the word *picture* is here used on purpose, for mental images may play a key role in cases like this) contains a surgeon who is also a butcher in the operating room, performing surgery on a human patient with the means of butchery to achieve the goal of healing him/her[24]. The property INCOMPETENCE emerges precisely from the contrast between the two scenarios and the elements involved. In other words, the prototypical butcher is undoubtedly a skilled professional, like the prototypical surgeon, but butchery and surgery require (and are mentally associated with) very different skills: a butcher works on dead animals, and is thus allowed to make sharper movements, or to handle his tools with strength.

Kövecses arrives at the same conclusion in his elaboration of CMT on the basis of the *main meaning focus* (cf. Kövecses 2000; 2002/2010), which can be defined as knowledge of the central properties of a conceptual domain. In some cases, such knowledge is independent of the metaphorical use of a concept: for instance, solidity and strength are commonly identified as the central characteristics of the concept BUILDING; these underpin the conceptual metaphor ARGUMENTS ARE BUILDINGS[25]. In other cases, the main meaning focus is created on the fly within the metaphorical environment, as a result of the contrast between the two concepts produced by the metaphor itself. According to Kövecses (2011), this is what happens when we interpret the metaphorical statement *That surgeon is a butcher*. The features SLOPPINESS and CARELESSNESS emerge as the main meaning foci of a butcher's work when this is metaphorically associated with that of a surgeon: the process is sanctioned by the metonymic relationship CATEGORY FOR ITS PROPERTY, thanks to which the word *butcher* can be used to express the central features of the category BUTCHERY. Since the mappings between source and target domains are based on the main meaning focus, the surgeon's actions are represented as sloppy and careless, and the surgeon is consequently assigned the property INCOMPETENCE:

[24] In his graphic representation, Kövecses hypothesises that the blended space inherits the SCALPEL from INPUT SPACE 2 as TOOL. However, following Grady et al. (1999), I intentionally left this element unspecified in Figure 1.2, as this seems to be basically a matter of subjective integration (some people may instinctively visualise the SURGEON/BUTCHER with a SCALPEL in his/her hands, while other people would probably describe him/her as holding a CLEAVER).

[25] Peripheral properties, not belonging to the main meaning focus, may be involved in metaphorical mappings as well, but they usually lead to innovative metaphors. This is explained by Lakoff and Johnson (1980: 53) in terms of a metaphorical extension into the unused part of the source concept, as in their example: '*His theory has thousands of little rooms and long, winding corridors*'. Cf. also the INFLATION metaphor discussed in Section 3.1.

> […] why do we see the movements of the butcher as "careless, sloppy, imprecise"? In all probability, the reason is that the actions performed by the butcher appear that way in contrast to the surgeon. This perception of the butcher derives from the comparison of the butcher's actions with the "precise" and "refined" actions of the surgeon […]. In other words, we interpret the butcher's actions in reference to the surgeon's work. (Kövecses 2011: 18).

In the same article, Kövecses attempts to combine his framework with that of Conceptual Blending, by suggesting that the projection of the main meaning foci SLOPPINESS and CARELESSNESS from BUTCHERY to SURGERY can be seen as an instance of conceptual integration. Within this framework, the process represented in Figure 1.2 above would accommodate a further mental space between the inputs and the blend: this would contain a 'new version' of the mental space for BUTCHERY, including the elements of INPUT SPACE 1 plus the main meaning foci (SLOPPINESS, CARELESSNESS), which would then be directly transferred to the blended space (cf. Kövecses 2011: 18-19).

3.3 Relevance Theory

A different view on metaphor emerges from the Relevance theoretical approach to communication (Sperber and Wilson 1995; Wilson and Sperber 2004). Relevance theorists further develop one of the main tenets of Gricean pragmatics, namely, that the process of meaning construction of an utterance is underpinned by two distinct abilities, semantic decoding and pragmatic inference. The decoding of an utterance results in a basic semantic representation (or logical form), which must be completed through a set of pragmatic inferential operations in order to arrive at the propositional form. From the perspective of Relevance theory, such operations include not only the context-based adjustment of encoded concepts (enriching or loosening their interpretation), and the identification of unexpressed content, but also reference and sense disambiguation, marginally discussed by Grice as part of *what is said* rather than *what is implicated* (cf. Carston 1998). The inferential mechanisms that lead to the retrieval of the speaker's meaning are based on the Gricean maxim of Relevance (*Be relevant*), which accounts for the fact that utterances raise expectations of relevance in the audience. Relevance theorists maintain that the expectations of relevance are precise and predictable enough to function as guidelines for the hearer in the processes of

interpretation and comprehension. Indeed, one of the basic tenets of theory is that the speaker's production and the hearer's inferential processes are influenced by a search for optimal relevance, which is computed by comparing the processing costs with the positive cognitive effects:

- *Relevance is both a matter of cognitive benefits and a matter of degree*. A stimulus is taken as relevant by an individual, and thus processed, if s/he reckons that it will produce significant changes on his/her representation of the world. The main cognitive effect is a *contextual implication*, i.e. a conclusion that can be drawn from the connection between the input and some contextual element, which improves the individual's encyclopaedic knowledge, or his/her understanding of a specific situation. Other positive cognitive effects include the validation, revision, or even the abandonment of pre-existing assumptions. Furthermore, in order to be processed, an input must be considered more relevant than the other (usually numerous) inputs available in the same context.

- *Relevance is assessed with reference to the processing effort*. Positive cognitive effects are weighed against the processing effort, which is a negative factor. Other things being equal, the relevance of the input decreases as the effort required to have access to the positive effects increases.

The criteria guiding the choice of relevant stimuli reflect one of the basic features of our cognitive system, i.e. the universal tendency to maximise efficiency with the minimum amount of effort: this is summarised by the First (Cognitive) Principle of Relevance, *Human cognition tends to be geared to the maximisation of relevance*. When s/he engages in communication, a speaker must explicitly show his/her intention to attract the interlocutor's attention towards the meaning s/he want to convey; s/he does so by resorting to what in Relevance theoretical terminology is referred to as an *ostensive stimulus*, i.e. a stimulus relevant enough to be judged worth processing by the audience. This leads to the Second (Communicative) Principle of Relevance, *Every act of ostensive communication communicates a presumption of its own optimal relevance* (Sperber and Wilson 1995: 260). It is worth noting that ostensive-inferential communication requires two layers of intention, one informative and one communicative, and that both are conflated into the ostensive stimulus[26].

Besides attracting the audience's attention, expectations of relevance provide criteria to recover the speaker's meaning by discarding interpretations that do not 'fit' the context. As noted at the beginning of this section, according to Relevance theorists, both the explicit and

[26] However, differently from Grice's Cooperation Principle, Relevance Theory takes into account those cases in which speakers are incompetent or deliberately deceptive (Sperber and Wilson 1995).

the implicit components of meaning are retrieved through pragmatic inferential processes: reference assignment, sense disambiguation, lexical narrowings and broadenings are all pragmatically and inferentially motivated, as is the construction of implicatures. The Relevance-theoretic comprehension procedure includes two steps:

> Follow a path of least effort in computing cognitive effects: Test interpretive hypotheses (disambiguations, reference resolutions, implicatures etc.) in order of accessibility.
> Stop when your expectations of relevance are satisfied.
> (Wilson and Wharton 2006: 1567).

In order to meet his/her expectations of relevance, the reader performs a series of sub-tasks, including the elaboration of an appropriate hypothesis about the explicit meaning (*explicature*), which takes place through different pragmatic processes of enrichment of the linguistic material, and the identification of implicatures (*implicated premises* and *implicated conclusions*). Let us consider for a moment the following example (taken from Carston 2010: 303):

22) The water is boiling.

Depending on the context, (22) can be interpreted in different ways, leading to as many different explicatures:

- *literally*: the lexical unit *boiling* corresponds to the concept BOILING, i.e. the speaker is saying that the water has reached boiling point (or is so close to it that the difference is not perceptible).

- *As an approximation*: the lexical unit *boiling* corresponds to the concept BOILING*, meaning that the temperature of the water is near boiling point, although it has not reached it yet, the difference being perceptible.

- *Hyperbolically*: the lexical unit *boiling* corresponds to the concept BOILING**, meaning that the water is not at boiling point, nor close to it, but still it is too hot to be touched.

- *Metaphorically*: the lexical unit *boiling* corresponds to the concept BOILING***, meaning that the water is not hot, but shows other relevant features of literally BOILING water (e.g. it is moving and bubbling).

The last three interpretations involve the formation of *ad hoc concepts*, i.e. context-adapted concepts, "[…] fine-tuned to satisfy the particular expectations of relevance raised by the utterance" (Wilson and Carston 2006: 409). Literal and metaphorical uses may be seen as the two extremes of a single continuum along which speakers and hearers constantly move in their search for optimal relevance, with loose and hyperbolic uses as intermediate steps. In the different interpretations of (22), *ad hoc* concepts gradually emerge that modify the structure of the prototypical concept BOILING, until – at the metaphorical end of the continuum – one of the central properties of BOILING (HIGH TEMPERATURE) is lost. Such indeterminacy, or fuzziness, is typical of *ad hoc* concepts resulting from linguistic metaphorical expressions, which generally convey an array of weak implicatures (i.e. a set of possible implicated propositions, none of which is essential, for they can all lead to a relevant interpretation; cf. Sperber and Wilson 1995).

Therefore, metaphorical concepts deserve no separate or special treatment: they result from the same pragmatic process of mutual adjustment between propositional content and context that guides the formation of other *ad hoc* concepts. The Relevance theoretical approach also challenges Grice's view of metaphors and hyperboles as cases of flouting of the maxim of Quality: in fact, non-literal uses of language may trigger the formation of *ad hoc* concepts, and the search for related implicatures, even if they are not perceived as overt violations of the maxim (as when *boiling* is understood as BOILING* or BOILING** in example (22) above). Hence the proposal to replace Grice's maxim of Quality with the Principle of Relevance, according to which loose talk, hyperboles and metaphors are alternative paths that speakers can choose to achieve optimal relevance:

> Relevance theory's approach to metaphor is deflationary […] we see metaphors as simply a range of cases at one end of a continuum that includes literal, loose and hyperbolic interpretations. In our view, metaphorical interpretations are arrived at in exactly the same way as these other interpretations. There is no mechanism specific to metaphor, no interesting generalisation that applies only to them. (Sperber and Wilson 2008: 84).

In the same article, Sperber and Wilson also put forward an explanation for the interpretation of the metaphorical statement *That surgeon is a butcher* (cf. example (21), Section 3.2). In their view, (21) does not require any special cognitive operation besides the creation of the *ad hoc* concept BUTCHER*, which broadens the basic concept BUTCHER, and denotes people who

handle sharp tools and treat flesh in the way butchers do. From this perspective, the property INCOMPETENCE that we attribute to the surgeon results from the same inferential processes that guide the formation of BUTCHER*: both surgeons and butchers have something to do with flesh, but the way of treating flesh of a BUTCHER* clashes with the ideas of precision and caution that we associate with a prototypical SURGEON. The authors argue that the contrast between the two concepts is so deep that (21) should be treated "[…] not just as a metaphor, but also as a hyperbole" (Sperber and Wilson 2008: 97; emphasis added).

Recently, Carston has partially modified the *ad hoc* concept approach to metaphor, arguing that it does not adequately explain highly complex and imaginative cases, like the following:

23) Life's but a walking shadow, a poor player
That struts and frets his hour upon the stage
And then is heard no more: it is a tale
Told by an idiot, full of sound and fury,
Signifying nothing.
(Shakespeare: *Macbeth*, V, 24 -30, quoted in Carston 2010: 308)

Here, the presence of a long series of semantically interrelated items triggers a constant activation of the literal meaning and leads to multiple on-line re-adjustments that cannot be analysed in terms of *ad hoc* concept formation, since this would be extremely expensive in cognitive terms. Therefore, Carston proposes an alternative comprehension procedure for cases like (23), in which the literal interpretation is activated first, and mentally retained to undergo further inferential elaboration. As a result, deeper implications arise that merge the literal meaning with relevant encyclopaedic knowledge, such as available information concerning the literary work and its author, or subjective and experiential associations. This alternative route to metaphor understanding is slower than the one based on *ad hoc* concepts, not only in view of the higher expectations of relevance raised by creative or literary metaphors, but also because the time constraints imposed on the interpretive process by a literary work are usually less rigid than those of face-to-face communication.

This page is intentionally left blank

Chapter Two
Metaphor in Systemic Functional Linguistics

1. Overview of the Systemic Functional framework

1.1 Introduction

In his contribution to a collective volume published in honour of Michael Halliday in 2005, on the occasion of his eightieth birthday, Christian Matthiessen defines the history of Systemic Functional Linguistics (SFL) as "evolutionary" rather than "revolutionary", for its founder Michael Halliday "[…] built on his immediate predecessors instead of distancing himself from them and new findings have been added in a cumulative fashion" (2005: 505). The theory has indeed been undergoing a constant process of revision and enhancement carried out by an international community of scholars since its inception in the 1960s: this includes the modelling of systems of Interpersonal semantics that deal specifically with the resources used by speakers to negotiate their social relationship by expressing their subjective attitudes (APPRAISAL System: cf. Martin 2000; Martin and Rose 2003), and the development of an alternative branch that partially revises the mainstream approach (commonly referred to as the Cardiff Grammar, or the "Cardiff dialect of SFL" as in Hasan 2005a: 46; cf. Fawcett 2008). However, its central claims have stood the test of time, and remain valid across different formulations: language is seen as a multifunctional resource for producing and exchanging meanings, whose potential is realised by the actual choices made by the speakers within a social and cultural *context*, and the meaning-making options that language users have at their disposal are accounted for by networks of systems of choices, forming the continuum of lexico-grammar [1]. The rest of this section deals with the notion of context and introduces the relationship between it and the lexico-grammatical and semantic structure of language; a discussion of the different grammatical systems will be the object of the following paragraphs.

[1] The term *lexico-grammar* is used in SFL to express the unity between grammar and lexis, seen as the two ends of a cline that is characterised by different degrees of delicacy (whereby lexis may be defined as most delicate grammar, cf. Halliday 1961/2002) and by different types of system (closed in grammar, open in lexis). Thus, though in the rest of the work I will occasionally use the term *grammar* for the sake of simplicity, it should always be understood as *lexico-grammar* properly.

The focus on the interaction between text and context is inherited from John R. Firth, Halliday's mentor and PhD supervisor, and the anthropologist Bronislaw Malinowski, (cf. Chapter 1, Section 2), whose *context of situation* is re-defined and refined within the Systemic Functional model. Firth himself had felt the necessity to improve Malinowski's notion, which he saw as too general and too oriented towards the material and extra-linguistic aspects to be fruitfully applied to linguistic analysis; he had thus interpreted it in terms of a set of interrelated categories, treating the language event and the elements surrounding it as parts of a unique whole:

> A *context of situation for linguistic work* brings into relation the following categories:
> A. The relevant features of participants: person, personalities.
> (i) The verbal action of the participants.
> (ii) The non-verbal action of the participants.
> B. The relevant objects.
> C. The effect of the verbal action.
> (Firth 1957, quoted in Hasan 2005b: 57-58; original emphasis).

As Hasan recalls, Firth's proposal is already modified in the field of SFL in a seminal study by Halliday, McIntosh and Strevens (1964), where the three categories are replaced by three internal variables, each connected to a specific dimension of language use: the *style* of discourse – subsequently renamed *tenor* – the *field*, and the *mode*. The tenor of discourse refers to the participants to the interaction, in terms of their personal relationship, their attitude towards the subject matter and their fellow interlocutors, their temporary discourse roles and permanent social roles; the *field* of discourse refers to the type of social activity enacted and to the subject matter; the mode of discourse includes the channel used for communication, the medium (i.e. the position of the text in the cline between written and spoken, given by degrees of lexical density and structural complexity), and the rhetorical aim: I shall come back to this point in a moment. Such internal elaboration is complemented by the external link established in SFL with the broader notion of *context of culture*, to which the context of situation is inextricably tied (again in line with Malinowski, who considered the two contextual dimensions inseparable). The context of culture encompasses the multi-faceted cultural paradigm of shared traditions, beliefs, and world views that underlie, more or less

explicitly, every act of human communication. Therefore, linguistic productions are always embedded in a cultural context via a situational context[2].

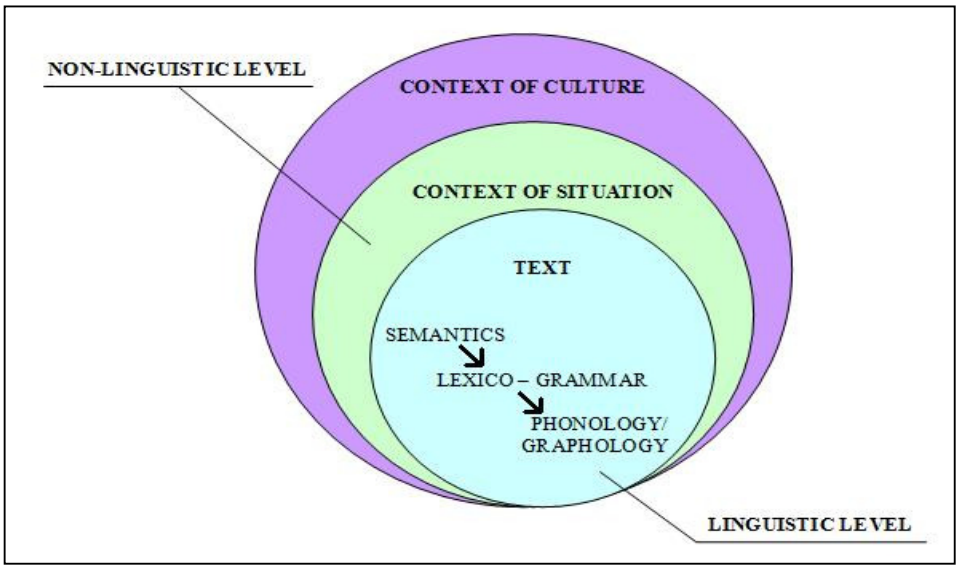

Figure 2.1 Interdependency between text and context in SFL (adapted from Martin 1992)

The connection of text and context establishes a two-way relationship between them, which can be delineated as follows:

- *Mutual construal*: the meaning of a text is recovered on the basis of its situational and cultural contexts, which also tend to motivate to a great extent its phonological (graphological), lexico-grammatical and semantic structure; conversely, the original context in which a text was produced can always be reconstructed – often with great accuracy – on the basis of the linguistic information realised in the text itself.

- *Mutual adjustment*: contexts shape texts (i.e. they affect the meanings chosen by the speakers, and the way in which these are realised into wordings), but at the same time texts shape contexts, too. For example, when two colleagues start using informal language and

[2] That of *stratification* is a core notion within SFL, involving both the higher contextual level and the deeper linguistic level (as shown by the diagram in Figure 2.1). The strata that make up the system of language are linked by *realisation*: the stratum of semantics is realised in and by lexico-grammar, which in turn is realised in and by phonology and graphology. Elements belonging to the same stratum, instead, are linked by *constituency*: higher-order units consist of lower-order units. Within the stratum of lexico-grammar, this part-whole relationship is represented as a rank scale that conforms with the distinctive features of the language it refers to: in the case of English and Italian, this is Morpheme – Word – Group/Phrase – Clause. As can be noticed, the rank scale of lexico-grammar does not include the text, which is a semantic unit, and belongs to a different stratum: as a consequence, texts do not *consist of* clauses (clause complexes), but are *realised* by them, and by the meaningful patterns they construct (cf. Halliday and Hasan 1976; Halliday and Matthiessen 1999). On the notion of stratification, see also Matthiessen (1995).

inserting confidential content in their discourse, the context in which they interact gradually changes, and so does their social relationship. Indeed, as observed by Hasan, the mutual influence between linguistic production and context is highlighted by the process of hybridization characterising present-day texts and discourses. In her view, thanks to this process speakers not only enhance their communicative potential – mixing features belonging to different genres – but also re-shape, or, as she puts it,

> […] extend, elaborate and reclassify their discursive contexts. Derrida's celebrated claim that one cannot not mix genres should really be rephrased as contexts of life cannot but be permeable; the rest follows by the dialectic of language and discursive situation. (Hasan 2000: 44)[3].

Thus, the two notions of register and genre are closely related to the topic of the inextricable link between text and context. Register in SFL is defined as variation according to use (Halliday and Hasan 1985: 41); in Thompson's words, this label refers to the use that we make of "[…] certain recognizable configurations of linguistic resources in certain contexts" (2004: 40). The fact that such configurations are *typical* and *recognizable* enables the speakers to make predictions concerning the types of wording that will appear in certain contexts as a result of specific semantic choices, and to decide whether to conform to them or not. Since variation of this type takes place within the three interrelated dimensions of field, tenor, and mode, registers are more directly linked to the context of situation. Genre, instead, is treated in what has become known as the Sydney School of SFL as a more comprehensive and higher-level notion, and is connected with the context of culture. Martin and Rose (2003: 7) use the label *genre* to refer to "[…] different types of texts that enact various types of social contexts", while Thompson (2004: 42) concisely explains it as the sum of "[…] register plus purpose". A genre thus encompasses one or more registers, and organises it (them) into meaningful patterns and meaningful sets of texts, in order to accomplish specific communicative goals against a certain socio-cultural background. An example of the distinction between register and genre within the present work could be provided by the two corpora from *The Financial Times* and *Il Sole 24 Ore* that form the object of analysis in Chapters Three and Four. While the *register* of journalism manifests itself in relevant lexico-

[3] This is a relevant topic in contemporary research, as also shown by the fact that it was recently selected as the Conference theme of the 23rd European Systemic Functional Linguistics Conference and Workshop (Bertinoro (FC), Italy: 9 – 11 July, 2012).

grammatical choices within each article, the whole set of texts, their semantic patterns, and the conventional features they present – such as the structural organisation in heading, sub-heading, byline indicating author and place, and body – all together instantiate the *genre* of financial journalism. However, it is worth noting that many scholars adhere to the classic Hallidayan model, to which this thesis also conforms, in questioning the necessity and even the theoretical validity of a distinction between lower-order register and higher-order genre, highlighting the fuzzy nature of the context/text relationship, and the impossibility to establish 'deterministic' correspondences between the layers of a text, its obligatory 'generic structure', on one side, and the context of situation or the context of culture, on the other (cf. Hasan 1995; Miller 2004).

Still, the two notions of register and genre are in themselves symptomatic of the socio-cultural foundations of the Systemic Functional theory. It is often claimed that one of the elements that most notably differentiate the Transformational-Generative from the Functionalist approach is that the former tends to push linguistics towards psychology and biology (i.e. the study of the cerebral structures and the formal processes that make language acquisition and production possible), while the latter tends to foreground its connections with sociology[4]. In both cases, the aim is ultimately that of investigating *how language works*, but the opposite tendencies emerge as a consequence of the different foci taken on the question: one could say that the Functionalist's story begins when the Generativist's ends, as in SFL *form* is but one of the aspects that make up the meaning of a linguistic expression, and meaning essentially equates with function in context. In Halliday's, words, a functional theory of language can be described as:

> […] one which attempts to explain linguistic structure, and linguistic phenomena, by reference to the notion that language plays a certain part in our lives, that it is required to serve certain universal types of demand. (1971/2002: 89).

The social perspective on language – i.e. the stress on language as a form of behaviour that human beings have at their disposal to establish and entertain social contacts – characterises Systemic Functional theory since the earliest stages (Halliday 1978; Halliday and Hasan

[4] The importance of sociological factors in the study of language is one of the assumptions of Firthian linguistics. Firth himself introduces the term "sociological linguistics" in his article "The Technique of Semantics" and describes it as "the great field for future research" (1935: 65).

1985). Halliday and Matthiessen (2004: 29) highlight the role of language in construing human experience:

> […] there is no facet of human experience which cannot be transformed into meaning. In other words, language provides a **theory** of human experience, and certain of the resources of the lexico-grammar of every language are dedicated to that function. (…) At the same time, whenever we use language there is always something else going on. While construing, language is always also **enacting**: enacting our personal and social relationships with the other people around us. (Original emphasis).

We can now explain in clearer terms the definition of language as a multifunctional system given at the beginning of this section. In fact, every act of linguistic communication calls forth three different dimensions of language use, which Halliday and Matthiessen prefer to label *metafunctions* rather than simply functions, to underline the fact that they are an intrinsic and integral part of language and of the theory itself:

(1) the *Interpersonal metafunction* accounts for the fact that speakers use language as an indication of their personal and social relationship with the interlocutor(s), to manifest their opinion or their attitude towards a topic, and as a means of interaction, i.e. to give information, goods, and services, or to elicit verbal and non-verbal responses in their audience.

(2) the *Ideational metafunction* involves two components (*Experiential* and *Logical*), and accounts for the fact that speakers use language to represent and organise their experience of the world, in terms of events and states of affairs (generally expressed by Verbal Groups), entities involved (generally expressed by Nominal Groups), other incidental information (generally expressed by Adjectival Groups, Adverbial Groups and Prepositional Phrases) and the logico-semantic relations involving them.

(3) the *Textual metafunction* cuts across the other two, in that it accounts for the fact that speakers construe extra-linguistic experience and enact social relationships by producing sequences of discourse and organising them into cohesive and coherent units: in short, by constructing meaningful texts. This is the 'enabling' function, without which the other two could not exist: in fact, it is at the textual level that Ideational and Interpersonal meanings are actualised (cf. Halliday and Matthiessen 1999: 7-8; Halliday 2007: 184).

Such configuration is linked to the situational context in which language is used. In fact, each of the variables that make up the context of situation tends to activate a specific linguistic metafunction: the tenor interacts with the Interpersonal metafunction, the field with the Ideational, and the mode with the Textual. At the same time, the three metafunctions tend to correspond to as many semantic layers, realised in lexico-grammar by specific systems of choices: the systems of MOOD, MODALITY, and APPRAISAL, expressing Interpersonal meanings; the systems of TRANSITIVITY, TAXIS, and LOGICO-SEMANTIC RELATIONS expressing Ideational meanings; the systems of THEME and COHESION, expressing Textual meanings[5]. However, the three semantic dimensions should not be understood as separate blocks: they are in fact deeply interrelated, and the choices made in one system inevitably affect other systems, and other semantic layers as well. This naturally follows from the fact that the three lines of meaning are pursued by the speakers simultaneously, and conflated in the structure of the clause, which is the basic unit of analysis in the Functional model[6]. Let us suppose, for instance, that a speaker wants the window of his/her office to be closed, and s/he wants his/her colleague to close it in his/her place: English provides him/her with a number of options to express this linguistically. Let us take the following realisations, without entering into the details of *why* the speaker should decide to convey his/her meaning through one of them and not the others:

(1) Close the window, please!
(2) Could you close the window, please?
(3) This office is really cold today!

The following diagrams provide a Systemic Functional analysis of clauses (1) – (3), while highlighting their tri-functional structure:

[5] By convention the names of the systems are written in upper case, while the names of the single functional elements within each system are written with an initial capital only (e.g. the system of MOOD vs. the Mood Block). Matthiessen, Teruya and Lam (2010: 138) observe that "Ideational grammar is often treated as semantics outside of systemic linguistics, while textual and interpersonal grammar are dealt with partly under the heading of pragmatics". However in SFL, they go on, "[…] all three metafunctions are found both at the level of semantics and the level of grammar: it is not possible to export transitivity from grammar into semantics, because this area of semantics is already occupied by the semantics of transitivity".

[6] This is because the clause is the upper bound of the system of lexico-grammar, and can thus be defined as the minimum unit that is capable of construing a quantum of information, a quantum of interaction, and a quantum of flow of events at the semantic level (cf. Halliday and Matthiessen 2004: 589).

(1)

	Close	**the window**	**please!**
Interpersonal meanings	Predicator	Complement	Modal Adjunct
	Residue		
Experiential meanings	Process: material	Goal	--
Textual meanings	Theme	Rheme	

(2)

Could	**you**	**close**	**the window**	**please?**
Finite	Subject	Predicator	Complement	Modal Adjunct
Mood Block		Residue		
--	Actor	Process: material	Goal	--
Theme		Rheme		

(3)

This office	**is**	**really cold**	**today!**
Subject	Finite (pres.) + 'be'	Complement	Adjunct
Mood Block		Residue	
Carrier	Process: relational: attributive	Attribute	circumstance: Time
Theme	Rheme		

The clauses instantiate three different choices within the MOOD system, and thus three different ways of interpersonally addressing the interlocutor: in (1), the speaker opts for the imperative form, in (2) s/he opts for the indicative: interrogative, and in (3) for the indicative: declarative (cf. Section 1.2 below) Though the rhetorical aim remains the same, the degree of directness or explicitness decreases from clause (1) to clause (3) as a result of a set of interrelated choices within different systems. In (1), the choice of the unmarked imperative form affects the experiential structure, by leaving the Actor of the material Process represented by the verb *close* formally unexpressed, and the textual structure, where the Predicator *Close* is inserted into the thematic slot. In (2), the choice of the interrogative mood goes hand in hand with the selection of the modal verb *could* within the system of MODALITY; the two functions of (interpersonal) Subject and (experiential) Actor are fulfilled by the same lexical element, *you*, and the entire Mood Block – comprising the Finite verb *could* and the Subject – functions as Theme of the clause in textual terms. Finally, in (3), the speaker opts for a relational Process represented by the verb *be*, which assigns a quality to the office: that of being cold at a particular time. In this case, there is no mention of the

material act of closing the window, and the three functions of Subject, Carrier of the quality, and Theme are conflated onto the same element, namely *This office*[7]. Thus, while the speech function of clauses (1) and (2) is clearly that of asking for a service, i.e. a *command*, albeit politely formulated in (2), clause (3) configures itself more as an act of giving information, i.e. a *statement* (Halliday and Matthiessen 2004: 108 and ff., or a *declarative-functioning-as-command*, as in Thompson 2004: 48). As a consequence, the implicit request to close the window has to be retrieved by the interlocutor through an inferential process. This is an instance of the phenomenon of grammatical metaphor, which is our main concern here and will be discussed in the second part of this chapter (cf. in particular Section 2.1 below, on interpersonal metaphors)[8].

The relationship linking context, semantics and wordings is visually represented below:

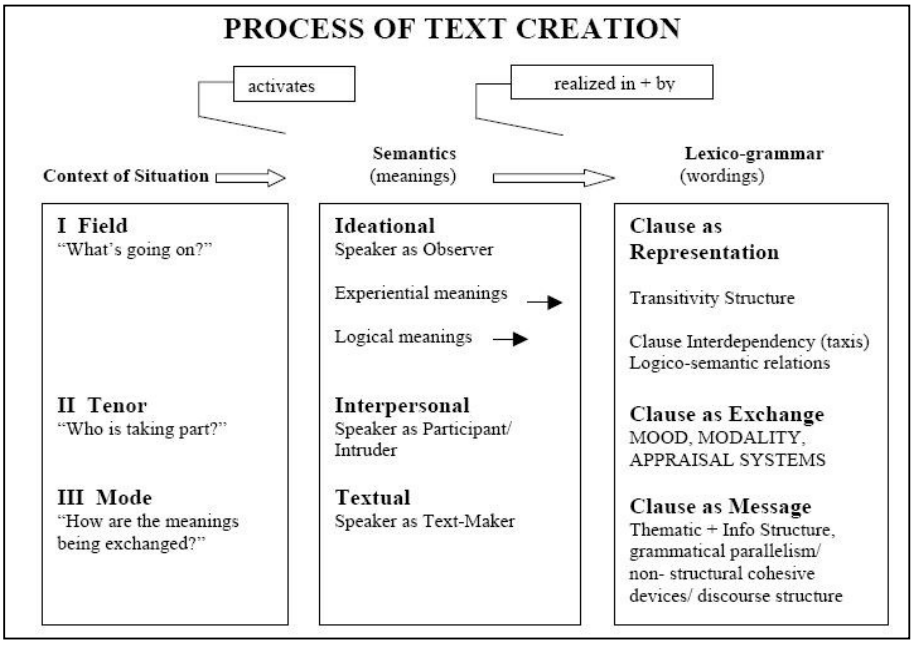

Figure 2.2 The Process of Text Creation (Miller 2004: 28)

[7] The labels Subject, Actor and Theme refer to the three different functions traditionally assigned to the sole notion of Subject: they express, respectively, (i) the entity of which something is being predicated, which is also responsible for the validity of the argument (traditional grammatical Subject); (ii) the 'doer' of the action (traditional logical Subject); (iii) the concern of the message (traditional psychological Subject). Each function corresponds to a specific semantic layer: the role of the Subject is fundamentally Interpersonal; that of the Actor is fundamentally Logical; that of the Theme is fundamentally Textual. The three functions may be mapped onto the same linguistic element, as shown by diagram (3) above (Carrier is, in fact, the specific label that replaces that of Actor in a relational attributive Process: cf. Section 1.3). In other cases, they may be distributed across different elements within the clause: in the famous example *This teapot my aunt was given by the duke*, *This teapot* is the concern of the message, i.e. the Theme; *my aunt* is the element of which something is predicated, i.e. the Subject; *the duke* is the material 'doer' of the action, i.e. the Actor (cf. Halliday and Matthiessen 2004: 53 and ff.).

[8] The labels that have been introduced in this discussion will also be given a more detailed explanation in the following sections.

Obviously, the risk with diagrams is that the processes they represent may appear as fixed and static, while in reality they are not: as the author herself specifies, the figure reproduced above "[…] is *not* to be interpreted as an automatic 'hook-up' hypothesis between the 3 situational components, the 3 semantic metafunctions and the lexico-grammar of the text as realized in the 3 functions of the clause" (2004: 27; original emphasis). Text creation is in fact a highly flexible and dynamic process, in which much depends on the speaker's personal attitude, on what s/he considers the best path to follow to achieve his or her purposes, on his or her awareness of the context s/he finds him/herself in, and on the relative weight s/he assigns to the various contextual factors; as I noted above, all these elements influence the speaker as s/he moves along the lines of different linguistic systems, and they are simultaneously influenced by the previous choices, in a sort of on-line mutual adjustment between text and context.

I shall now turn to a more detailed discussion (as detailed as space constraints permit) of the different semantic strata and their related systems. I will be paying special attention to the systems that are more directly involved in my analysis of grammatical metaphor, i.e. MOOD and MODALITY, TRANSITIVITY, TAXIS and LOGICO-SEMANTIC RELATIONS. I will necessarily go through Textual meanings briefly (on the debate on the appropriateness of the notion of textual metaphor, cf. Thompson 2004). I will also necessarily omit discussion of the complex area of APPRAISAL systems.

1.2 Tenor: Interpersonal meanings

Interpersonal meanings express the fundamentally interactive nature of language: as Halliday points out, they are the sum of "[…] all that may be understood by the expression of our own personalities and personal feelings on the one hand, and forms of interaction and social interplay […] on the other hand" (1997: 36). From this perspective, language can be seen as performing four basic functions, some of which have already been mentioned in the previous paragraphs: giving or demanding information (through *propositions*), and giving or demanding goods and services (through *proposals*). In the case of proposals, the role of language is actually secondary, as it is a means to elicit a concrete action that could virtually take place without any linguistic support[9].

[9] This also explains why children first learn how to use linguistic structures to exchange goods and services, and only much later do they start using them in the exchange of information, which is a more complex process, requiring a verbal rather than a bodily response (cf. Halliday 1984).

Role in exchange	**Commodity exchanged**	
	Goods and services (Proposition)	**Information** (Proposal)
(i) Giving	**Offer** Let me carry your shopping bags! Would you like me to carry your shopping bags?	**Statement** This is the time of the year I prefer.
(ii) Demanding	**Command** Take this shopping bag, please!	**Question** What is your favourite season?

Table 2.3 Basic speech roles and illustrative realisations (based on Halliday and Matthiessen 2004: 107)

As the table shows, the functions of command, statement and question are closely connected with a specific mood structure (that is, imperative, declarative and interrogative respectively), whereas offers – having more than one 'privileged' or 'standard' realisation in terms of mood – are strongly connected with the options of the system of MODALITY. The following diagram represents the system of MOOD:

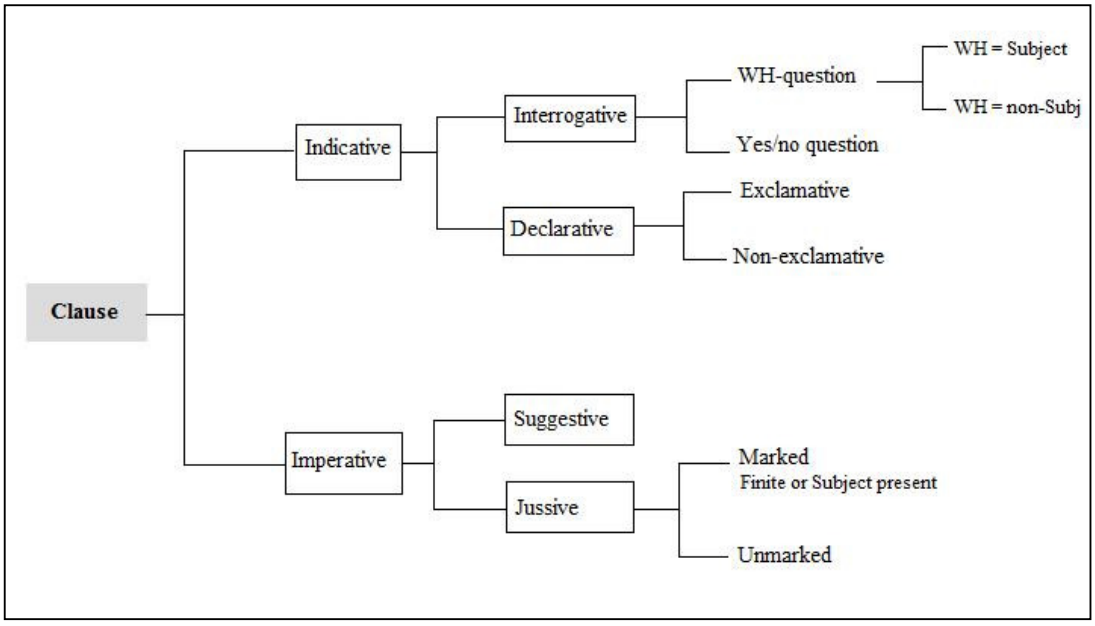

Figure 2.4 The system of MOOD at the lowest level of delicacy (adapted from Thompson 2004: 58)

The functional components making up the interpersonal structure of a major clause (i.e. a clause containing a Verbal Group) may be divided into two main sections, the Mood Block[10] and the Residue:

- within the Mood Block we find the *Subject*, the entity that is indicated by the speaker as responsible for the validity of the proposition (cf. Note 7), and the *Finite*, the element of the Verbal Group that anchors the proposition to the context of utterance (*interpersonal deixis*, as in Halliday and Matthiessen 2004: 116).

- Within the Residue we find the *Predicator*, which can be defined as the Verbal Group minus the Finite; one or more *Complements*, represented by "Any Nominal Group not functioning as Subject" (Halliday and Matthiessen 2004: 123), and one or more *Circumstantial Adjuncts*, typically realised by Prepositional Phrases or Adverbial Groups, providing additional information[11].

The Mood Block carries the main interpersonal burden because the validity of the proposition depends to a great extent on the two elements it contains. The Finite, in particular, specifies the conditions of validity through the expression of:

- *primary tense*, signalling whether the proposition refers to the here and now of the speech event, to the past, to the future, or to a hypothetical state of affairs;

- *polarity*, signalling whether the proposition has positive or negative validity;

- *modality*, signalling that validity is not absolute, but has to be assessed in terms of degrees of probability or obligation[12].

The Mood Block is the interpersonal core of the clause: it keeps the interaction going, and provides the ground for negotiation between speaker and hearer. This is particularly evident in the English system of tag questions and short answers, where the Mood Block is constantly picked up, accepted or rejected, over a series of turns, e.g. (A) *You visited John yesterday, didn't you?* (B) *Yes, I did* / *No, I didn't*. In English the Mood Block also has the function of realising the mood of the clause. The primary contrast between indicative and imperative mood is given respectively by the presence and the absence of the Subject or the entire Mood

[10] I use the label Mood Block instead of simply Mood (as in Halliday and Matthiessen 2004) to avoid any possible confusion with the name of the system (though this is entirely written in upper case).

[11] The functional distinction between Mood Block and Residue presented here may correspond to a definite structural distinction, but this is not always the case: for example, Finite and Predicator may be fused within the same lexical unit, as shown by the analysis of clause (3) in Section 1.1.

[12] Interpersonal meanings are based on consensus about the validity of a proposition, which can be negotiated over a series of moves in dialogic interaction, rather than on its truth. In other words, semantics in SFL is not strictly speaking truth-conditional (cf. Halliday and Matthiessen 2004: 117).

Block in the unmarked clause[13], e.g. *She will leave me alone* (indicative: declarative; Subject + Finite are present) vs. *Leave me alone!* (positive imperative: Mood Block is absent) and *Don't leave me alone!* (negative imperative: Subject is absent, but Finite is present). Marked imperatives are characterised by the presence of the Subject, as in *You listen to me now!* (marked for person) or of the entire Mood Block, as in *Don't you dare talking to me like that again!* (marked for polarity). Suggestive imperatives such as *Let's sing it again* are a special sub-type whose Subject is not *you* but *we*. According to Halliday and Matthiessen (2004: 139) *let's* can be analysed as a form of Subject for 'you and I', as shown by the negative form *Don't let's sing it again*: therefore, the structure equals that of an imperative marked for person (with the Subject expressed). Within the indicative branch of the MOOD system, the contrast between declarative and interrogative is generally realised by the order of the elements of the Mood Block, which is Finite^Subject in the former case and Subject^Finite in the latter. Differently from polar interrogatives, whose expected response is only a yes/no statement, WH-interrogatives are characterised by the presence of a WH-element in thematic position, which signals the request for a specific piece of information and may be conflated with either the Subject (e.g. *Who is the founder of the theory?*), the Complement (e.g. *What would you say to your favourite singer?*) or an Adjunct (e.g. *When are you leaving for your brother's wedding?*); when the WH- element has the role of Subject, the Mood Block exceptionally takes the form Subject^Finite that is typical of declarative clauses. The WH-elements *what* and *how* also appear in exclamative clauses, a sub-type of declaratives, but in this case they do not affect the structure of the Mood Block, for they can only take on the role of Complement (e.g. *What a strange hat you are wearing!*) or Adjunct (*How strange it was to hear from him after so much time!*).

The situation is different in Italian, where the configuration of the Mood Block, having fewer grammatical constraints, is not in itself predictive of the mood type, and language users generally resort to tone as a distinctive criterion. Furthermore, the Predicator is normally picked up together with the Mood Block in negotiation. For example, the same clause *Ho sbagliato io* may be uttered either with a falling^rising tone signalling an interrogative mood, or with a falling tone signalling a declarative mood, and in both cases the interlocutor may reply positively or negatively by repeating the Mood Block and the Predicator: *No, non hai sbagliato tu* (Finite + Predicator + Subject) / *Sì, hai sbagliato tu* (Finite + Predicator +

[13] There is no general consensus on the treatment of negative imperative forms in terms of the marked/unmarked distinction. I am here following Halliday and Matthiessen's proposal to consider negative imperatives with a contracted Finite (e.g. *Don't touch that book!*) as unmarked forms, and negative imperatives with a non-contracted Finite (e.g. *Do not touch that book!*) as marked for polarity (2004: 139).

Subject). However, the Mood Block maintains its primary function, that of making the clause something that can be argued about by introducing the Subject (either explicitly or implicitly) and the Finite.

The elements within the Residue carry out the remainder of the interpersonal work. Apart from providing the lexical content of the verb, the Predicator is responsible for signalling active or passive voice (*The burglars were* | *caught* | *by the police*), aspect (*He is* | *snoring*), and secondary tense, i.e. a secondary, intra-linguistic temporal reference besides the one expressed by the Finite (as in *Oh, we'll* | *have finished* | *by six o'clock for sure*[14]). Complements 'complete' the proposition by: (i) signalling the presence of another element that could have been chosen as Subject, but was not (as in *The burglars stole my precious necklace*, where *my precious necklace* could function as Subject with a change in voice: *My precious necklace was stolen by the burglars*); (ii) expressing a quality of the Subject: in this case, they serve the function of Attribute in experiential terms, as in the analysis of (3) above. Finally, Circumstantial Adjuncts enrich the proposition with various types of information, such as temporal or spatial location: however, these are not analysed further in delicacy within the interpersonal structure, as they are more directly connected with Experiential semantics, and in particular with the system of TRANSITIVITY, where they function as circumstances (cf. Section 1.3 below).

Actually, there are two other groups of Adjuncts that fall outside the Residue. The first is that of Modal Adjuncts: the only category of Adjuncts having a purely interpersonal function. It includes the two sub-groups of Comment Adjuncts and Mood Adjuncts, the former expressing a comment on the clause as a whole or on the speech function (e.g. *unfortunately*, *clearly*, *honestly*), the latter representing another resource besides the Finite (and often complementary with it) to express tense, polarity, modality, and the further category of intensity (e.g., respectively: *already*, *never*, *perhaps*, *only*). When they are present, both Comment and Mood Adjuncts generally fall within the Mood Block[15]. The second group of Adjuncts falling outside the Residue is that of Conjunctive Adjuncts, such as *however*, *on the other hand*, *therefore*: since their function is that of setting up relations between different portions of a text, they realise other meanings (either Logical or Textual) and are thus altogether excluded from the interpersonal analysis of the clause.

[14] Example taken from Thompson (2004: 60).
[15] The closeness between Mood Adjunct and Finite is structurally confirmed by the fact that the neutral location of a Mood Adjunct within the clause is next to the Finite, both in English and Italian.

In what follows, I focus on the section of the system of MODALITY that is represented in the figure below:

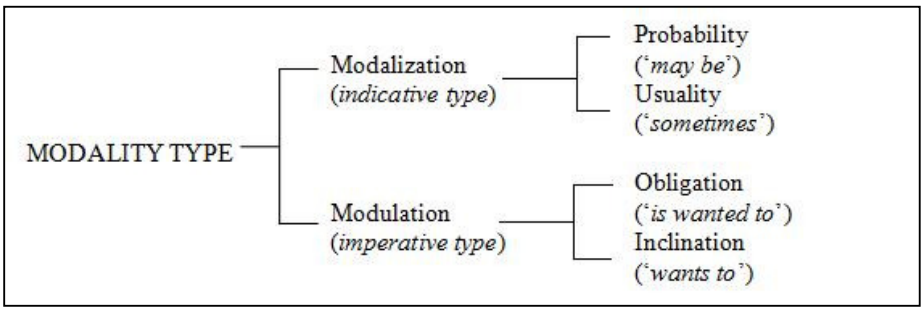

Figure 2.5 The system of MODALITY TYPE (adapted from Halliday 1994: 357)

In general terms, while polarity expresses a definite choice between *yes* and *no*, modality construes the continuum of intermediate degrees falling within these two extremes. The intermediate space takes a different form according to the commodity exchanged through language (cf. Table 2.3 above):

- *modalization* (or *epistemic modality*) in propositions. When information is the commodity exchanged, the two poles of the continuum take the form of an assertion and a denial: "it is" at the positive end, "it isn't" at the negative. In this case, the intermediate space includes degrees of *probability* (certainly/probably/possibly, from "more *yes* than *no*" to "more *no* than *yes*") and degrees of *usuality* (always/usually/sometimes, from "more often *yes* than *no*" to "more often *no* than *yes*"). Modalization may be expressed by the Finite element, a Mood Adjunct, or a combination of the two. In statements, the interpersonal function of modalization markers is that of conveying the speaker's opinion on the proposition to the hearer; in questions, conversely, the function is that of eliciting the hearer's opinion.

- *Modulation* (or *deontic modality*) in proposals. When the clause is about an exchange of goods and services, the two poles of the continuum take the form of a prescription and a prohibition: "do it" at the positive end, and "don't do it" at the negative end. There are two further cases to be distinguished here. In commands, the intermediate space includes degrees of *obligation* (required to / supposed to / allowed to, from more to less *forcefully*), while in offers it includes degrees of *inclination* (determined to / anxious to / willing to, from more to less *decidedly*). As modalization, modulation may be realised by the Finite element, a Mood Adjunct (e.g. *willingly*), or a combination of the two (*I'll do it happily*); in addition, it may be realised by an expansion of the Predicator (*you are supposed to study it*), or by an adjective functioning as Complement (*I am glad to help you*). A marker of modulation interpersonally

strengthens the rhetorical force of a command or an offer by making the speaker's commitment explicit: this is the reason why uses of *can* expressing ability or capacity to do something are generally considered as instances of modulation, even though here we are at the borders of the category of modality.

I shall go more in depth into the system of MODALITY in Section 2.1, when introducing the sub-system of ORIENTATION in relation to the notion of grammatical metaphor.

1.3 Field: Ideational meanings

Within the clause, Ideational semantics is realised by configurations of Processes, inherently related participants and circumstances expressing the factual content of the message (Experiential meanings), which Halliday and Matthiessen call *figures*: "Our most powerful impression of experience is that it consists of a flow of events, or 'goings-on'. This flow of events is chunked into quanta of change by the grammar of the clause: each quantum of change is modelled as a **figure**" (2004: 169; original emphasis). Above the clause level, Ideational semantics is realised by relations of logical dependency and logico-semantic relations that are set up between clauses in a clause complex (expressing Logical meanings)[16].

Experiential meanings are conveyed through choices in the system network of TRANSITIVITY, one of the earliest definitions of which can be found in Halliday (1967: 38): "The transitivity systems are concerned with the type of process expressed in the clause, with the participants in this process, animate and inanimate, and with various attributes and circumstances of the process and the participants". The label *Process* can be attributed to events, states of affairs, relations, and in general to "[…] all phenomena to which a specification of time may be attached" (Halliday 1969/1976: 159): in English and Italian, these are normally realised by Verbal Groups. The term *participant* refers to an entity that participates in the Process, whose congruent realisation in English and Italian is a Nominal Group (occasionally functioning as head of a Prepositional Phrase, as in *That teapot was given to my aunt by the duke*, where *the duke* takes on the participant role of Actor[17]). As we

[16] Logico-semantic relations between clause complexes, instead, realise Textual meanings (cf. Section 1.4).

[17] Cf. also Note 7 above. Participant roles that are indirectly introduced via a preposition are called *indirect participants* in Halliday (1969/1976: 160) to distinguish them from those that are introduced via a NG in direct relation to the verb, functioning as Subject or Complement in interpersonal terms (*direct participants*). It should be noted that the choice between a direct and an indirect participant, which is primarily a question of lexico-grammatical structure, has consequences on the semantic plane: indirect participants are formally presented as circumstantial elements, and as such may be more easily omitted than Subjects or Complements, leaving out

shall see below, each Process type has its own set of participant roles, some of which are *inherently* involved in the Process itself, i.e. they are an integral part of its conceptual representation, and can always be retrieved as a sort of background information. In other words, when he hear about, say, a material Process, we know that there must be an Actor for it, even if it might not be formally expressed, and thus we might not know exactly *who* or *what* the Actor is. Finally, circumstances are optional elements specifying additional information concerning the Process, such as its location in place and time, its extent, or its cause: they correspond to the Circumstantial Adjuncts of the interpersonal structure, and are normally realised by Adverbial Groups or Prepositional Phrases (a complete list of circumstantial elements, with examples of realisation, can be found in Halliday and Matthiessen 2004: 262-263)[18]. Differently from participants, circumstances cut across the various Process types, though some of them may show different frequency of occurrence in their literal use, mainly depending on the inherent semantics of the Process: circumstances of Matter, for example, usually occur with Processes of 'saying' (*verbal*), or 'sensing' (*mental*), but not with others.

From this perspective, every major clause expresses (typically through its lexical verb) one of six categories of Process, which are cross-linguistically valid: what changes from language to language, apart from their grammar, is the number and type of their lexical realisations. They are listed below, together with a brief definition:

- *Material*, Processes of physical doing and happening.

- *Mental*, Processes of sensing, taking place in the mental and the emotive sphere. Besides their semantics, mental Processes are characterised by a feature that they share only with verbal Processes, i.e. their ability to *project* separate clauses, as in *I suppose* <u>*that I should have told him the truth*</u> (reporting), or *I thought:* <u>*I should have told him the truth*</u> (quoting).

- *Relational*, Processes of being and having, which establish relations among entities. At a deeper level of delicacy, three groups of relational Processes can be identified: (i) *intensive* (of the type *x is y*), (ii) *possessive* (of the type *x has y*), and (iii) *circumstantial* (of the type *x is [circumstantial information] y*). Each group can be further divided into *attributive* (if *y* is presented as a non-defining trait of *x*) and *identifying* (if *y* is presented as a defining trait of *x*).

---

pieces of information which may be relevant in context. I shall come back to this point in the section concerning grammatical metaphor.

[18] Here and henceforth I follow the convention of using a capital letter for *Process* and a small letter for the specific type (e.g. material Process); a small letter for *participant* and a capital letter for the specific type (e.g. participant: Actor); finally, a small letter for *circumstance* and a capital letter for the specific type (e.g. circumstance of Time).

- *Behavioural*, Processes of physiological and psychological behaviour that are deeply connected with the mental and the emotive sphere. Halliday and Matthiessen (2004: 248) admit that they are "[…] the least distinct of all the six process types", being at the boarder between material and mental: for this reason, several scholars (among which those working within the Cardiff school, cf. Fawcett 2008) question the necessity to include them into a separate category. However, Thompson (2004: 103) underlines that "[…] they allow us to distinguish between purely mental Processes and the outward physical signs of those processes".

- *Verbal*, Processes of verbal communication. As I said before, a defining trait of verbal Processes (maybe even more defining here than in the case of mental) is that they can project separate clauses, reporting (*I told him that it was the truth*) and quoting speech (*She cried: "this is the truth!"*).

- *Existential*, Processes that predicate the existence of someone or something, commonly introduced in English and Italian by the fixed structures *there is / there are* and *c'è / ci sono*. A further (minor) category of Processes is located by Halliday and Matthiessen (2004) at the border between existential and material: these are meteorological Processes, representing meteorological conditions or phenomena, such as *the sun is shining* (presenting the grammar of a material Process), or *there was a storm* (presenting the grammar of an existential Process)[19].

In SFL the term *transitivity* has a wider application than it has in other approaches, for it is not limited to the Verbal Group, but designates a system of choices that spread over the whole clause. However, it maintains a trace of its traditional reference to actions that 'transit' or 'do not transit' from the Subject to an Object in the distinction between *transitive* and *intransitive* material clauses, the former being constructed with an Actor plus a Goal (clauses of 'doing'), the latter presenting the Actor as the only inherent participant, with no Goal (clauses of 'happening'). The transitive model distinguishes between forms of 'doing' and forms of 'happening' on the basis of the presence or absence of the Goal, the element onto which the Process extends or impacts, but the same distinction can be seen from the complementary perspective of the ergative model of transitivity, which for reasons of space can only be briefly sketched here (cf. Halliday 1967; 1967/2005; 1968/2005; Halliday and Matthiessen 2004). Before coming to that point, however, the diagram in the following page provides a general overview of the TRANSITIVITY system. Participant roles for each category are

[19] In some cases, meteorological Processes may also be grammatically constructed as relational Processes of the attributive type, e.g. *it's foggy*, or *it's windy*.

accompanied by a brief explanation of their semantics; oblique (non-essential or non-directly involved) participants are included in brackets.

TRANSITIVITY	material				Actor - *the source of energy, or physical doer* Goal - *the entity to which the Process is extended* (Range) - *the element specifying the domain of the Process* (Recipient) - *the beneficiary in a transfer of goods* (Client) - *the beneficiary in a transfer of services* (Initiator) - *an entity that causes the Process to take place but is not its source of energy*
	mental	perceptive emotive cognitive desiderative			Senser - *the (typically human) sentient entity* Phenomenon - *the stimulus of the mental activity; the entity or the fact that is sensed*
	relational	intensive	attributive		Carrier - *the entity to which a quality / class is ascribed* Attribute - *the quality / class ascribed* (Attributor) - *the entity assigning the attributive relationship*
		possessive	identifying		Identified - *the element to which an identity is assigned* Identifier - *the identifying quality* Token - *the more specific element* Value - *the more generalised element* (Assigner) - *the entity assigning the identifying relationship*
		circumstantial			
	behavioural				Behaver - *the entity that carries out the physiological or psychological behaviour* (Behaviour)
	verbal				Sayer - *the entity that carries out the verbal Process* Target - *the entity to which something is symbolically done through the Process* (Receiver) - *the entity to which the Process is addressed* (Verbiage) - *the communicative act or its content*
	existential				Existent - *the entity that is said to exist*

Figure 2.6 The system of TRANSITIVITY (based on Halliday and Matthiessen 2004: 168-305)

While the transitive model employs both semantic and grammatical criteria to identify several different Process types, with participant roles that are specific to each type, the ergative model

treats all Processes as equal, identifying one generalised representational structure of the clause, and one generalised participant, the *Medium*, i.e. the element through which the Process is actualised: this may either map onto the Actor (when the clause is intransitive), or onto the Goal (when it is transitive). On the ergative perspective, it is the distinction between 'happening' and 'doing' that is crucial: a Process represents a 'happening' if it is linguistically construed as being self-engendered by the configuration Process + Medium, whereas it represents a 'doing' if it is construed as being caused by a further participant that is external to such configuration, the *Agent*. As Halliday and Matthiessen point out, the transitive and the ergative model "[…] complement one another, giving us a balance in the account of transitivity between similarity and difference among process types" (2004: 281).

Logical meanings are realised above the clause level by the intersection of two systems, TAXIS and LOGICO-SEMANTIC RELATIONS, whose systemic representation is provided in the diagram below.

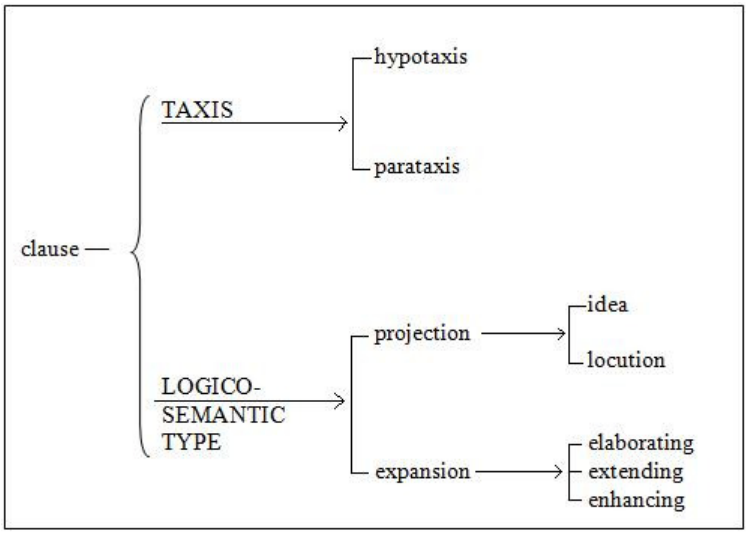

Figure 2.7 The systems of clause complexing (adapted from Halliday and Matthiessen 2004: 373)

The system of TAXIS has to do with relations of logical interdependency between clauses, which may express either an equal (*parataxis*) or an unequal status (*hypotaxis*), and are signalled by different connectives (conjunctions, Conjunctive Adjuncts or graphic signs reflecting different phonological realisations):

- two *paratactically linked* clauses are independent of one another: they are put together into a single clause complex, but each of them expresses a complete proposition, each with a finite verb; in fact, they can be separately tagged, and are free to select different mood

structures. In a paratactic nexus, the clause that comes first has an initiating function, and is labelled *primary clause*, the other has the function of continuing the exchange, and is labelled *secondary clause*.

- When two clauses are *hypotactically linked*, instead, one of them is dependent on (or subordinate to) the other, as it is not able to convey a complete meaning in its own right: as a consequence, only the dominant clause can accept a tag, or bear responsibility for the choice of mood[20]. In this case, the labels *primary* and *secondary clause* are assigned to the dominant clause and the dependent clause, respectively, without taking into account their order.

Clause complexes are thus formed nexus after nexus, and typically show a combination of paratactic and hypotactic links: a deeper analysis involves considering why the speaker may have opted for a relation of coordination or subordination within each nexus, or for a particular order, and assessing the effects of such choices on the hearer's understanding and interpretation of the content (cf. Thompson 2004: 202-203).

The system of LOGICO-SEMANTIC RELATIONS interacts with that of TAXIS to build a complete logical representation: from this perspective, at the least delicate level, secondary clauses may either represent projections of their primary clause, or expand on it in various ways. More specifically:

- *Projection* may involve an *idea* (a construction of meaning) or a *locution* (a construction of wording), depending on whether the primary clause accommodates a mental or a verbal Process in its experiential structure. Both ideas and locutions can be projected by means of a paratactic or a hypotactic structure, as in *I said: "honey, let's stay right here"* (projected locution: parataxis) *vs. He thought that the rest of the holiday would be a nightmare* (projected idea: hypotaxis).

- *Expansion* may take the form of (i) an *elaboration* (the secondary clause paraphrases, clarifies, exemplifies, or comments on the content or part of the content of the primary clause); (ii) an *extension* (the secondary clause extends the meaning of the primary clause by adding something new to it, offering an alternative, or providing an exception); (iii) an *enhancement* (the secondary clause adds specific information to the primary clause that is very close in function to the one played by Circumstantial Adjuncts, or circumstances, at the clause level: e.g. time, place, cause).

[20] The system of paratactic and hypotactic relations does not apply to embedded clauses, i.e. clauses that, having undergone rank-shifting, do not function as clauses in their own, but rather as constituents within other clauses: for example, in *The announcement [[that he would probably resign]] was communicated on television the night before, but nobody believed it, [[that he would probably resign]]* is embedded within a NG functioning as interpersonal Subject, experiential Verbiage and textual Theme of the primary clause within the paratactic nexus. Embedded clauses are conventionally inserted into double square brackets in the analysis.

As specified by Halliday and Matthiessen (2004: 377), "Expansion relates phenomena as being of the same order of experience, while projection relates phenomena to phenomena of a higher order of experience (semiotic phenomena – what people say and think)". Below is a conclusive example of analysis of clause complexes in terms of Logical meanings: the clause complex is taken from Lewis Carroll's *Alice's Adventures in Wonderland* [21].

(4) Soon her eye fell on a little glass box that was lying under the table: she opened it, and found in it a very small cake on which the words 'EAT ME' were beautifully marked in currants.

Soon her eye fell on a little glass box that was lying under the table: she opened it		
TAXIS	1	Soon her eye fell on a little glass box [[that was lying under the table]]:
	2	she opened it
LOGICO-SEMANTIC RELATION	1 ^ +2 Expansion: Extension	

she opened it, and found in it a very small cake		
TAXIS	1	she opened it,
	2	and found in it a very small cake
LOGICO-SEMANTIC RELATION	1 ^ +2 Expansion: Extension	

and found in it a very small cake, on which the words 'EAT ME' were beautifully marked in currants		
TAXIS	α	and found in it a very small cake,
	β	on which the words [['EAT ME']] were beautifully marked in currants
LOGICO-SEMANTIC RELATION	α ^ =β Expansion: Elaboration	

1.4 Mode: Textual meanings

When we consider the Textual metafunction of language, we come to the boundary between the internal organisation of the clause and the network of relationships it entertains with the external environment, both linguistic (the text surrounding it) and extra-linguistic (the language event in which it unfolds). Since, as I said at the beginning, I cannot dedicate the space it would deserve to this complex topic, the rest of this section presents only a few

[21] In parataxis, clauses are conventionally indicated using numbers: 1 for the primary clause, which is always the one that comes first, and 2 for the secondary clause. In hypotaxis, clauses are conventionally indicated using letters of the Greek alphabet: α for the primary (dominant) clause, and β for the secondary (dependent) one, which may appear in either order. Logico-semantic relations, instead, are indicated using the following symbols: within expansion, = (equals) for elaboration, + (is added to) for extension, and × (is multiplied by) for enhancement; within projection, double quotes " " (says) for locution, and single quotes ' ' (thinks) for idea.

general remarks on Theme and non-structural cohesive devices, for the sake of completeness: comprehensive accounts can be found, among other works, in Hasan and Fries (Eds, 1995) and Ravelli (1995) on Theme; Halliday and Hasan (1976) on Cohesion; Eggins (2004), Thompson (2004) and, as usual, Halliday and Matthiessen (2004) on both.

The syntagmatic organisation of the message in terms of the functional categories of Theme and Rheme is what realises Textual meanings within the clause. In SFL, the Theme is more than a question of topic, or Given information *tout court*: in fact, it represents the meaningful choice of a "[…] point of departure for what the speaker is going to say" (Halliday 1985: 36), and it is "[…] that which locates and orients the clause within its context" (Halliday and Matthiessen 2004: 64)[22]. In languages like English and Italian – where it is the position in the clause that gives thematic status to a part of the message – the Theme is what comes in the first part: the boundary is represented by the first constituent having an experiential function (the *topical Theme*), after which the Theme is completed, and the Rheme may start developing it. Therefore, even though the Theme has by definition an experiential core, it may nonetheless include other elements carrying different meanings (Interpersonal and Textual), which tend to occupy the initial position: such elements, together with the topical Theme, form a *multiple Theme*. An example is provided below:

<table>
<tr><td>However,</td><td>Alice,</td><td>honestly</td><td>I</td><td rowspan="2">don't think that's a good idea</td></tr>
<tr><td>Conjunctive Adjunct</td><td>Vocative</td><td>Modal (Comment) Adjunct</td><td>Senser</td></tr>
<tr><td>Textual</td><td>Interpersonal</td><td>Interpersonal</td><td>Topical Theme</td><td rowspan="2">Rheme</td></tr>
<tr><td colspan="4">(Multiple) Theme</td></tr>
</table>

Since the starting point of the clause has the function of 'setting the scene' for the hearer – signalling the speech function, marking contrast or continuity with reference to what comes before, preparing him/her for what comes after – the selection of the topical Theme, and in particular the distinction between marked and unmarked, bears a strong relationship with the system of MOOD. Indeed, it could be argued that the Theme, with its experiential core and its natural orientation towards the interpersonal structure of the clause, is the functional element that most clearly shows the fundamental interconnection existing among the different

[22] In SFL, THEME/RHEME and INFORMATION are considered as two different (though closely interrelated) systems: "Theme + Rheme is speaker-oriented, whereas Given + New is listener-oriented" (Halliday and Matthiessen 2004: 93). Since the Theme is the starting point of the message, and the ordering Given ^ New Information represents the standard choice in English and Italian (as signalled also by its tonicity), the unmarked pattern in both languages maps Given onto Theme and New onto Rheme. However, there are other marked options available to speakers to change the relation between the two systems, conflating Theme with New and Rheme with Given. Some examples will be discussed in connection with textual metaphor (cf. Section 2.3 below).

metafunctions (cf. also Berry 1996). For example, in declarative clauses – where the primary aim is that of giving information (although a statement may be used to accomplish further, implicit goals, as we saw when analysing example (3) in Section 1.1) – the standard choice is that of putting the Subject in thematic position: the speaker chooses the element that is responsible for the validity of the proposition as the point of departure of his/her message. Other patterns are possible, but are evidently marked: the topical Theme may be realised by a Circumstantial Adjunct, a Complement, and even a Predicator, but in all these cases, and especially in the last two, the element that is chosen as Theme is strongly foregrounded[23]. The difference between these choices and their decreasing degree of 'naturalness' can be noticed in the following examples (taken from Jack London's *White Fang*):

Indicative: declarative	**Unmarked**: Theme and Subject conflated	*The front end of the sled was turned up*
Indicative: declarative	**Marked** [1]: Circumstantial Adjunct in thematic position	*Down the frozen waterway toiled a string of wolfish dogs*
Indicative: declarative	**Marked** [2] : Complement in thematic position	*Another advantage he possessed was that of correctly judging time and distance*
Indicative: declarative	**Marked** [3] : Predicator in thematic position	*But endure it he must*

If we take interrogative clauses instead – where the primary aim is to elicit a response from the hearer, either in the form of a yes/no statement, or by providing a specific piece of information that is missing – the natural choice is to begin with the element that signals the kind of information and the type of answer required: the Mood Block, or the interrogative adjective/pronoun. Marked thematic patterns, by contrast, foreground other elements by putting them in the thematic slot and moving the Mood Block or the interrogative word to the Rheme, as in the following examples:

Indicative: interrogative: polar	**Unmarked**: Finite + Subject in thematic position (In Italian Finite may be fused with Predicator; Subject may be unexpressed)	*Do you ever read contemporary novels?* *(Ø) Leggi mai romanzi contemporanei?*

[23] In fact, the Complement is "[…] a nominal element which, being nominal, has the potentiality of being Subject; which has not been selected as Subject; and which nevertheless has been made thematic" (2004: 73), while the Predicator is not a nominal element at all, and it is quite rare to find it in thematic position, except in imperative clauses, where, however, the implied full meaning is 'I want you to do X'.

Indicative: interrogative: polar	**Marked**: Circumstantial Adjunct in thematic position	*After the wedding, will you find time for a chat?*
Indicative: interrogative: polar	**Marked:** Preposed Theme	*That book I was reading a moment ago, can you see it?*
Indicative: interrogative: WH-	**Unmarked**: Interrogative element in thematic position	*Who wrote that letter?* *What did he write in it?*
Indicative: interrogative: WH-	**Marked:** Circumstantial Adjunct in thematic position	*After the wedding, who's going to take us home?*
Indicative: interrogative: WH-	**Marked:** Preposed Theme	*That book I was reading a moment ago, where is it?*

Beyond the boundaries of the clause, thematisation functions as a cohesive device that enables speakers to produce coherent texts, and helps hearers to identify meaningful stages in the textual chain, thus guiding their comprehension and interpretation processes. Thompson (2004: 105) identifies four main ways in which the thematic structure builds up the textual structure:

- it signals the *maintenance* or *progression* of the text's topic, by either sticking to the same Theme clause after clause, or selecting an element from the Rheme of the preceding clause, or a totally new element;

- it provides a *framework* for the interpretation of the following clause(s), by anticipating what it (they) will be talking about;

- it signals the *boundaries* of different sections in a text (usually, thematic progression is associated with the beginning of a new section, while thematic maintenance indicates that the same section is being developed);

- it is a clear sign of what the speaker considers as a useful or important starting point for the message, or the transfer of information[24].

Other grammatical and lexical cohesive devices that strengthen the text as a semantic unit, i.e. create 'texture' by reinforcing its connection with the context of situation and the context of culture, collectively belong to the system of COHESION. This is schematically represented by the diagram below.

[24] On the clause as a unit of information, cf. also Halliday and Matthiessen (2004: 87 and ff.).

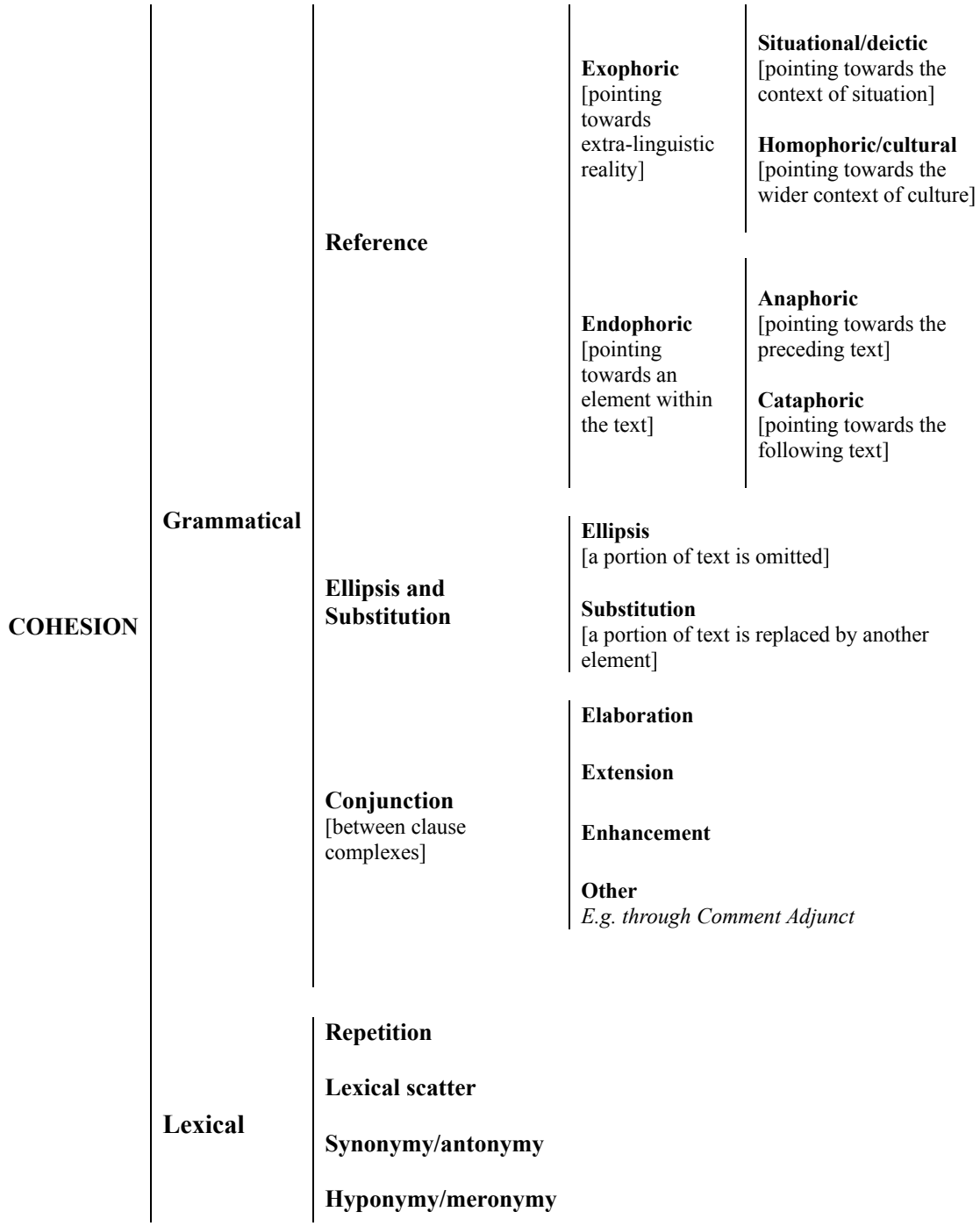

Figure 2.8 The system of COHESION (based on Halliday and Matthiessen 2004: 524-585)

The grammatical and lexical cohesive devices represented in Figure 2.8 all function at the non-structural level, that is, right beyond the internal structure of the clause, and even of the clause complex. At the structural level, instead, a key role in enhancing cohesive strength is played by *grammatical parallelism*, which "[…] consists of the regular reiteration of *equivalent units*, such as, in increasing order: sounds (or phonemes); syllables (or

morphemes); metrical feet; words; groups and clauses – i.e., lexical units, but also simply structural ones" (Miller 2004: 15; original emphasis). This implies, as the author goes on, that "[…] **grammatical parallelism** is seen as being *at the same time* some sort of **semantic parallelism**, and *not* just at the level of textual meanings, meaning that Ideational and Interpersonal meanings are often being reiterated too" (original emphasis; on the role of grammatical parallelism in the construction of text, and the purposes for which it can be used, which go beyond cohesive effects, cf. also Miller 2007a and 2012).

2. Grammatical metaphor

In the previous section, in discussing some key concepts in SFL, I also introduced the notion of standard or congruent linguistic realisation, which can be defined as the unmarked option, i.e. the linguistic candidate that typically realises a particular meaning. For instance, while dealing with the MOOD system in English and Italian, I observed that each speech function happens to be most naturally expressed by one (or – in the case of offers – more than one) specific type of mood: (indicative) declarative for statements, (indicative) interrogative for questions, imperative for commands, and (indicative) interrogative or imperative for offers. This picture emerges as a consequence of the languages' evolutionary patterns, in which certain lexico-grammatical configurations originally developed as primary structures to perform certain functions, thus growing to be typically associated with the expression of certain meanings (as also shown by studies in language acquisition, or ontogenesis: cf. for example Derewianka 2003; Painter 2003; Painter, Derewianka and Torr 2007). However, far from being a constraint on the speakers' creative potential, the very existence of a set of congruent lexico-grammatical choices opens up a wide range of options for construing meaning, which arise precisely from the possibility to 'go against the grain': for example, sentences (1) – (3) in Section 1.1 above showed that a command can be less explicitly realised by an interrogative or a declarative mood structure. In this sense, grammatical metaphor represents one of the most powerful semiotic resources available to language users. As Taverniers (2003) recalls in her historical reconstruction of the notion, grammatical metaphor first makes its appearence in the first edition of Halliday's *Introduction to Functional Grammar* in 1985 – a period in which, as we saw in Chapter One, a revival of interest in metaphorical uses of language was permeating different streams of research. It is made clear from the beginning that the concept of grammatical metaphor is deeply embedded in the

Systemic Functional framework and is thus different from both the traditional view of metaphor and the then emergent view of Cognitive Linguistics. Halliday argues that, in dealing with metaphor, a view from below is usually adopted, whereby lexical choices are taken into account, and a word (or a group of words) is said to convey a meaning that is not its literal one. However, metaphor in language can be approached from another, complementary view that proceeds from above, taking meanings rather than lexemes as the input or the starting point for analysis. In Taverniers' words, the concept of grammatical metaphor is introduced by Halliday "[…] as an equivalent of lexical metaphor on the opposite end of the lexico-grammatical continuum" (2003: 12). The relevant questions in the view from above concern (1) the high-level, generalised meaning expressed by the metaphorical clause as a whole, and (2) the effects of choosing to express that particular meaning in terms that are not those of its congruent realisation, that is, "[…] one in which the relation between semantic and grammatical categories is natural" (as defined by Martin 1993: 238). The difference between the lexical and the grammatical view of metaphor is illustrated in the following scheme:

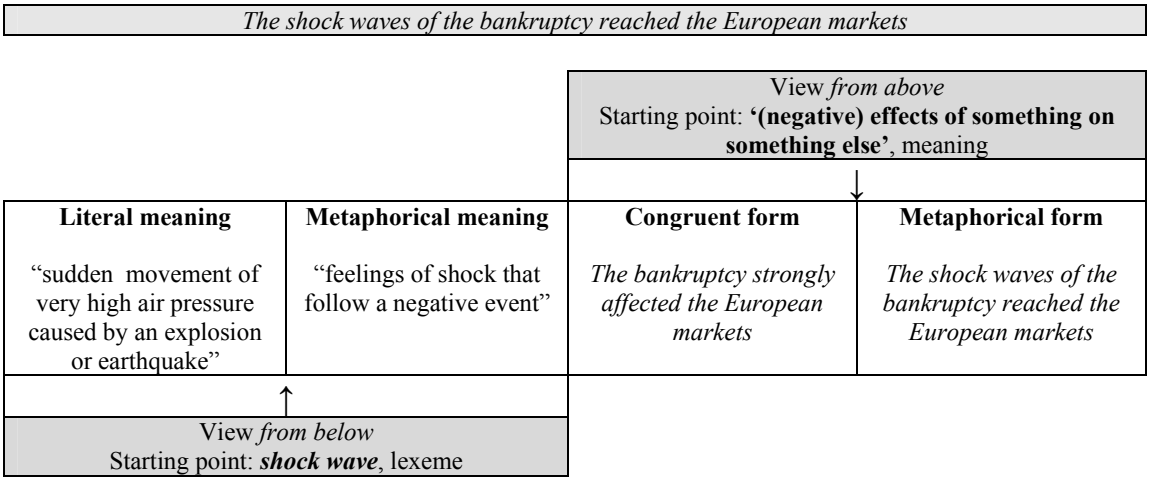

Figure 2.9 Views on metaphor: *from below* and *from above* (based on Halliday 1994: 342)

As can be noticed, the view *from above* encompasses the view *from below* but goes beyond it, taking into account the meanings activated by the whole structure of the clause. As Halliday puts it:

> Metaphor is usually described as variation in the use of words: a word is said to be used with a transferred meaning. Here however we are looking at it from the other end, asking not "how is this word used?" but "how is this meaning expressed?" A

> meaning may be realized by a selection of words that is different from that which is in some sense typical or unmarked. From this end, metaphor is variation in the expression of meanings. (1985: 320).

However, he immediately clarifies that the definition is not to be taken in an evaluative sense, and that to say that a wording is typical or unmarked does not mean that it is in any way preferable, more frequent, or normal. Indeed, one of the tenets of current metaphor studies is that in many cases metaphors gradually become the norm, thus losing their deviant or metaphorical status (cf. also Chapter 1, Section 3.1 in particular). In fact, as I said at the beginning, what SFL defines as congruent expressions of meanings are identified on the basis of language ontogenesis and evolution, independently of their frequency values or the speakers' subjective evaluation. The example given in Figure 2.9 above shows the inextricable connection between lexical and grammatical choices in the construction of a metaphorical clause. Only when the event, *bankruptcy*, is congruently realised as a Nominal Group can it simultaneously take on the roles of Subject, Theme, and Actor of the material Process represented by the verb *affect*, with *the European markets* functioning as the Goal. In this configuration, on the interpersonal plane, *the bankruptcy* clearly bears responsibility for the clause as a whole and the events it describes; on the textual plane, it is chosen as the starting point for the exchange of information, the concern of the message; on the experiential plane, it is explicitly presented as the element that enacts the Process whose consequences fall upon the Goal. In the metaphorical clause, by contrast, the introduction of a new lexeme (*shock waves*) in first position brings about a series of changes in the entire lexico-grammatical structure. What is the main event in the semantics of the clause, *the bankruptcy*, is now realised as an embedded Prepositional Phrase, and as such it can no longer be thematised, nor act as the Subject, or as an independent participant within the experiential structure. In terms of Experiential meanings, the lexeme *shock waves* triggers the choice of the verb *reach* in place of *affect*: though both represent material Processes of the transformative type (i.e. having as outcome some change in an already existing Actor or Goal), the substantial difference between them is that *affect*, belonging to the transitive type, admits the presence of a Goal, whereas *reach*, belonging to the intransitive type, does not (cf. Halliday and Matthiessen 2004: 184-190). As a consequence, the Nominal Group *the European markets* shifts from the role of Goal (i.e. the element to which the Process actually *extends*, with all its possible implications) to that of Range (i.e. the domain of the Process: cf. Figure 2.6 above). On the whole, the idea that the bankruptcy had negative effects on the conditions of the

European markets is less clearly delineated, and less directly conveyed[25].

Thus, grammatical metaphor takes place at the intersection between the stratum of semantics and the stratum of lexico-grammar. In fact, on the one hand, it is realised through configurations of non-congruent lexico-grammatical choices; on the other, such choices always come at a price in terms of expressed meaning. This naturally follows from the fact that grammatical metaphor implies "[…] the expression of a meaning through a lexico-grammatical form that originally evolved to express a different kind of meaning" (Thompson 2004: 223), and that inevitably retains some aspects of the meaning it is typically associated with. For example, when a Process is expressed through a Nominal Group rather than a Verbal Group, as in *comparison* for *compare* (nominalization: cf. Section 2.2 below), the informative contribution of the verb in terms of tense and polarity is lost, but the noun adds some of its properties to the representation of the Process itself, such as discreteness and quantifiability – what Thompson calls its "thingness" (2004: 224)[26]. The non-congruent form can 'pass on' some of its qualities to the meaning it is called upon to express thanks to the fact that grammatical metaphor creates a channel between semantic and grammatical *categories*, rather than between individual words: in the example above, *comparison* is a junction between a Process (*compare*) and the category meaning of a noun, that is, *entity* or *thing* (cf. Webster 2009: 3).

So far, we have seen the central features of the Systemic Functional treatment of metaphor: that is to say, the focus on the lexico-grammatical configuration of the clause rather than on single lexemes, whereby lexical metaphor can be considered as a sub-category of grammatical metaphor; the identification of congruent correspondences between semantic and grammatical categories, against which metaphorical occurrences can be tested and identified; the choice of the stratum of semantics, rather than that of wordings, as the starting point for analysis; the interest towards the effects of bridging different semantic categories through grammar. However, there is one final point that has not been explicitly mentioned in the previous

[25] As the example suggests, SFL sees metaphor as a multi-faceted phenomenon that may affect all the layers of meaning of a clause. Indeed, though in the three editions of *Introduction to Functional Grammar* only two types of grammatical metaphor are discussed – namely, interpersonal and ideational – several scholars (e.g. Martin 1992; Thompson 2004) have argued that metaphor can interact with the third semantic layer of the clause, that of Textual meanings, as well, and have included textual metaphors in their accounts, as I shall do in the rest of this Chapter (Section 2.3 below, in particular).

[26] The effects of nominalising a Process – i.e. the fact that an action is represented by grammar as a stable *entity*, something that can be more easily described, classified and even measured – are particularly evident in the discourse of science, as explained by Halliday: "[…] if you are trying to understand something, then in the early stages of your inquiry it is helpful if it does not change while you are examining it … scientists had to create a universe that was made of things" (quoted in Webster 2009: 4; cf. also Halliday 2004 for a compendium of his extensive work on scientific English).

discussion, and which needs to be stressed before moving on to examine the three types of grammatical metaphor more in depth.

Within the Systemic Functional framework, congruent and metaphorical realisations are not in simple one-to-one opposition; there is in fact a *gradient*, or *scale of congruency*, that accounts for several alternative expressions of the same meaning, some of which are further from the congruent realisation, and thus more metaphorical than the others[27]. To illustrate this final point, let us consider for a moment the following list of examples, ordered from the most congruent to the most metaphorical (taken from Halliday 1998/2004: 34):

(5) Glass cracks more quickly the harder you press on it.
(5a) Cracks in glass grow faster the more pressure is put on.
(5b) Glass crack growth is faster if greater stress is applied.
(5c) The rate of glass crack growth depends on the magnitude of the applied stress.
(5d) Glass crack growth rate is associated with applied stress magnitude.

As we move from the congruent to the metaphorical extreme of the list, a series of grammatical metaphors of the ideational type compact the grammar of the text, making it necessary for the reader to 'unpack' the grammatical structures in order to recover the meaning that is so straightforwardly conveyed by version (5). As Halliday explains, in (5) we have a sequence of two hypotactically linked clauses, the first of which contains a participant (*glass*), a material Process (*crack*), and a circumstance (*more quickly*), while the second contains a participant (*you*), a material Process (*press*), a second participant presented as a circumstantial element (*on it*) and a circumstance proper (*the harder*). In (5a), the Processes introduced in (5) are nominalised, through conversion (*glass cracks* → *cracks in glass*) and affixation (*press* → *pressure*), and replaced by *grow* and *put on*, which still belong to the material type; in the second clause of the clause complex, as a consequence of the change in voice (from active to passive), the Actor slot is left blank (*the more pressure is put on* by whom?), while the second participant (*it*) disappears. In the first clause of (5b), we have a complex abstract Nominal Group (*glass crack growth*, with the abstract noun *growth* functioning as the Head, pre-modified by the classifiers *glass* and *crack*); a relational Process replaces the material Processes seen before; the second clause, too, presents a complex abstract Nominal Group, in which the adverb *more* of version (5a) has been turned into an

[27] In this work, for convenience, I often use the terms 'congruent' and 'metaphorical' *tout court*, though, in line with this view, these should always be understood as shorthand for 'more congruent' and 'more metaphorical'.

adjective functioning as Pre-modifier (Epithet)[28]. In (5c), the clause complex is condensed into a single clause, including a circumstantial relational Process (*depend*) and two participants: these are represented by two complex abstract Nominal Groups, each post-modified by an embedded Prepositional Phrase (the second participant is in turn embedded in a circumstance, *on the magnitude of the applied stress*). Finally, version (5d) is a single clause consisting of three elements: two highly complex Nominal Groups, whose abstract Heads are preceded by a long series of classifiers, functioning as participants in a circumstantial relational Process (*is associated*); the second Nominal Group is again inserted into a circumstance, introduced by *with*. As Halliday points out, "[…] the process, instead of 'cracking' or 'pressing on', is now one of 'causing or being caused by', which we could also characterize as being abstract" (1998/2004: 35). Such progression from concrete to abstract Process types and from simple concrete to complex abstract Nominal Groups, which begins in version (5b), is a key factor in increasing a text's level of grammatical metaphoricity.

2.1 Interpersonal metaphor

Interpersonal metaphor is defined by Matthiessen, Teruya and Lam as "[…] a resource for enacting a wider range of social roles and relationships in relation to tenor, allowing interactants to calibrate their interpersonal relations with respect to power (status) and contact (familiarity)" (2010: 111). An interpersonal metaphor arises from playing with that part of the lexico-grammar that is most centrally influenced by the contextual variable of tenor, that is, from a non-congruent choice realised within the systems of MOOD and MODALITY (cf. Section 1.2 above). Differently from ideational metaphors – which, as we began to see in the discussion of examples (5) - (5d) above, generally compress the grammar, packing more complex meanings into simpler grammatical structures – the tendency in interpersonal metaphors is towards the expansion of grammar, frequently taking the form of an upgrade from group to clause, and from clause to clause complex. According to Thompson (2004: 231) an area in which metaphors of this type are particularly used is that of informal spoken language, which is primarily interaction-oriented and concerned with negotiating and developing interpersonal relationships; ideational metaphors, by contrast, are typical of formal written language, which is primarily content-oriented and focused on the exchange of information.

[28] On the experiential and logical structure of the Nominal Group in SFL, cf. Halliday and Matthiessen 2004: 311-335.

2.1.1 Metaphors of mood

Interpersonal metaphors within the MOOD system produce a clash between the rhetorical function of an utterance and the lexico-grammatical form it takes, which differs from the unmarked, or most natural, realisation in terms of mood[29]. However, Halliday (1985: 342-343) notes that the basic speech function performed by an utterance is generally identified even in presence of a metaphor, thanks to a number of contextual and co-textual factors: these include aspects of the context of situation and of the broader context of culture in which the communicative act takes place, paralinguistic features, and other lexico-grammatical choices that constitute the frame of the metaphorical wording, such as tone selection, collocates, preceding and following grammatical structures. Metaphors of mood increase the speakers' potential to adjust their contributions to the characteristics of the relationship linking them to the interlocutor(s) – which may be one of intimacy and equal status or one of distance and asymmetry – while keeping their communicative intents clear. From this point view, it is no surprise that commands are particularly sensitive to grammatical metaphor: in all those cases in which the choice of the imperative mood may sound as inappropriate to the Tenor of discourse (too direct, informal, even rude), a metaphorical alternative provides a means to act upon the interlocutor's behaviour without compromising the interpersonal relationship, as in the following example:

(6) Could you contact our CEO on his mobile phone before the meeting, please?

<table>
<tr><td colspan="8">(6) Speech role: command (asking for goods and services)</td></tr>
<tr><td rowspan="2">(a)</td><td>Could</td><td>you</td><td>contact</td><td>our CEO</td><td>on his mobile phone</td><td>before the meeting,</td><td>please?</td></tr>
<tr><td>Finite</td><td>Subject</td><td>Predicator</td><td>Complement</td><td>Circumstantial Adj</td><td>Circumstantial Adj</td><td>Modal Adj</td></tr>
<tr><td colspan="8">Metaphorical realisation</td></tr>
<tr><td rowspan="2">(b)</td><td colspan="2">Contact</td><td colspan="2">our CEO</td><td colspan="2">on his mobile phone</td><td>before the meeting!</td></tr>
<tr><td colspan="2">Residue</td><td colspan="2">Complement</td><td colspan="2">Circumstantial Adj</td><td>Circumstantial Adj</td></tr>
<tr><td colspan="8">Congruent realisation</td></tr>
</table>

[29] Interpersonal metaphors of mood are studied in pragmatics and philosophy of language from the perspective of speech act theory (Austin 1975), in connection with the three components of linguistic acts (locutionary, illocutionary, perlocutionary) and their interrelationship. Halliday, by contrast, argues that, "From a linguistic point of view they are not a separate phenomenon, but another aspect of the general phenomenon of metaphor […]. They can be represented in the same way, by postulating some congruent form and then analysing the two in relation to each other" (1985: 343). However, beyond the terminological and theoretical differences, the two approaches are linked by the emphasis they lay on the context of situation, and on the central role it covers in the processes of disambiguation and comprehension that make communication possible.

The lexico-grammatical configuration of the metaphorical clause is more complex but more explicit than that of the congruent form, thanks to the presence of the Mood Block. Furthermore, it is worth noting that the selection of the interrogative mood to express a command in English generally correlates with the introduction of a modal auxiliary that agrees with the Subject and politely 'mitigates' the request, as in (a) above, or in other similar variants (*Will you contact our CEO on his mobile phone before the meeting, please*?, *Can you contact our CEO on his mobile phone before the meeting, please?*, or even *May I ask you to contact our CEO before the meeting, please?*); in Italian, it is possible to resort to a pure interrogative clause without modal operators, but this is a less frequent and slightly more informal choice (e.g. *Contatti il direttore sul cellulare prima della riunione (per favore)?*). While shifts in mood can be exploited by speakers to construct all the four basic speech functions metaphorically[30], another reason why this process is particularly effective when applied to commands is that here the metaphorical expression requires a transfer between two different branches of the MOOD system, i.e. from imperative to indicative, so that the distance between the mood of the congruent form and that of the metaphorical form is more noticeable (cf. Figure 2.4 above). In the following examples, by contrast, the transfer takes place within the same area of the system, i.e. from indicative: declarative to indicative: interrogative and vice versa. A contrastive analysis of (7) – (9) and their congruent counterparts is provided below:

(7) I won't let you go without tasting my famous apple pie!

(8) I wonder what happened at the party yesterday.

(9) Did you know that Paul split with his wife last month?

(7) Speech role: ***offer*** (giving goods and services)	
Would you like slice of apple pie?	*I won't let you go without tasting my famous apple pie!*
Congruent realisation Indicative: interrogative	*Metaphorical realisation* → Indicative: declarative

[30] For reasons of space, here I shall limit the discussion to the basic speech functions. However, grammatical metaphor may also affect the more delicate options of each category, e.g. threatening and promising (specific ways of giving goods and services), or complaining and insulting (specific ways of giving information). Cf. Halliday 1985: 342.

(8) Speech role: ***question*** (demanding information)	
So, what happened at the party yesterday?	*I wonder what happened at the party yesterday.*
Congruent realisation Indicative: interrogative	*Metaphorical realisation* → Indicative: declarative (with declarative annotating clause)
(9) Speech role: ***statement*** (giving information)	
Paul split with his wife last month.	*Did you know that Paul split with his wife last month?*
Congruent realisation Indicative: declarative	*Metaphorical realisation* Indicative: interrogative

2.1.2 Metaphors of modality

The second type of interpersonal metaphor concerns the resources available to speakers to construe their attitude and judgement towards the degree of probability/usuality (modalization) or obligation/inclination (modulation) of the proposition, through choices in the system of MODALITY (cf. Section 1.2 above). As Halliday and Matthiessen maintain, this area of the semantic system is particularly elaborated metaphorically, since "[…] speakers have indefinitely many ways of expressing their opinions – or rather, perhaps, of dissimulating the fact that they are expressing their opinions" (2004: 616): choices within such a wide range of variants are regulated by the two systems of ORIENTATION and VALUE, which combine with the system of MODALITY TYPE to create a number of more delicate modal categories. In what follows, I shall focus on the system of ORIENTATION, represented below:

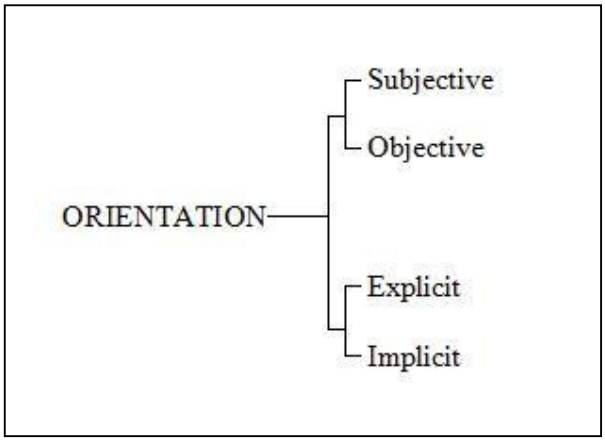

Figure 2.10 The sub-system of ORIENTATION within MODALITY
(adapted from Halliday and Matthiessen 2004: 619)

The variable of orientation refers to degrees of acknowledgement of modal responsibility on the part of the speaker. From this point of view, the options provided by the system produce four alternatives, forming a cline. These are listed below (corpus examples are taken from Halliday and Matthiessen 2004: 614-615):

- *Subjective explicit modality*, in the form of a projecting mental clause preceded or followed by an idea clause, e.g. ||| Em, *I suppose* || that made your pain worse, did it? |||.
- *Subjective implicit modality*, in the form of a modal auxiliary, e.g. ||| Family background, fellow artists and friends *may* be glimpsed in amiable disguise.|||
- *Objective* implicit *modality*, in the form of a modal adverb, e.g. ||| Under the Montreal Protocol, the concentration of chlorine will *certainly* rise to at least 5 ppbv || and *possibly* to as high as 8 or 9 ppbv.|||
- *Objective explicit modality*, in the form of a relational clause preceded or followed by a fact clause functioning as Carrier, e.g. ||| *It is probable* [[that some of Tony's compositions will be used]]. ||| [31]

As can be seen above, modal responsibility is congruently realised by modal auxiliaries and modal adverbs functioning as Mood Adjuncts, that is, through the selection of subjective implicit or objective implicit modality. At the two ends of the cline, however, grammatical metaphor is at work in that the Interpersonal semantics of the congruent reading is actually spread over two clauses. In both subjective explicit and objective explicit modality, the speaker encodes his/her modal commitment in a separate projecting clause, while the proposition that is being modalised comes as part of the projected clause; at the same time, his/her opinion or attitude are experientialised through the insertion of a mental, a verbal, or a relational Process. Indeed, the fact that in such cases the elements of the transitivity structure only apparently convey Experiential meanings is clearly shown by the form taken by the tag clause, which in the example of subjective explicit modality presented above is *Em, I suppose that made your pain worse, did it?* and not *Em, I suppose that made your pain worse, don't I?*. According to Halliday and Matthiessen (2004: 614), the tag question picks up the Mood Block of the projected/modalised proposition precisely because the 'real' function of the

[31] Facts are a type of embedded clause, and they differ from projected ideas and locutions in terms of logical and experiential structure. For instance, in *She admitted that she had never been there before*, *that she had never been there before* is a projected (reported) locution, and *she* is a participant in the projecting Process (i.e. the Sayer). In *It is probable [[that some of Tony's compositions will be used]]*, by contrast, the clause in square brackets is an embedded fact clause, and *it* is only a Subject placeholder (cf. Halliday and Matthiessen 2004: 470 and ff.; on projected ideas and locutions, cf. also Section 1.3 above).

mental clause is that of a Mood Adjunct, and the proposition it expresses is not, in fact, 'I suppose', but rather 'it is so'. This is the reason why projecting clauses in subjective explicit and objective explicit modality can be regarded as metaphorical variants of a more congruent modal operator (auxiliary, or adverb): in other words, as a modal element "[…] dressed up as a proposition" (Halliday 1994: 355)[32]. As Thompson points out (2004: 232), a double transitivity analysis that takes into account both the metaphorical and the congruent realisations can visually represent what he calls the "tension" between the "structural dominance" of the modal/projecting clause and the "semantic dominance" of the modalised/projected clause. A double transitivity analysis for the above examples would read as follows:

I	*suppose*	*that*	*made*	*your pain*	*worse,*	*did it?*
Senser	Process: mental	Attributor	Process: relational: attributive	Carrier	Attribute	
Probably		*that*	*made*	*your pain*	*worse,*	*did it?*
		Attributor	Process: relational: attributive	Carrier	Attribute	

It	*is*	*probable*	*that some of Tony's compositions will be used*	
Carrier	Process: relational: attributive	Attribute	Carrier	
Probably			*some of Tony's compositions*	*will be used*
			Goal	Process: material

The double analysis also shows that in both cases the interpersonal metaphor acts upon the degree of explicitness and the negotiability of the speaker's modal assessment. In subjective explicit modality, modal responsibility is more easily negotiable than in the congruent reading because it is attributed to the Subject *I*, who as it were explicitly proclaims him/herself responsible for the modal judgement s/he expresses (it is *I* who suppose, you can agree or disagree with me on what I am going to say). In objective implicit modality, by contrast, modal responsibility is less easily negotiable, for the modalised proposition is embedded as a

[32] A further proof of the metaphorical status of these constructions is that the negative polarity may be transferred from the projected to the projecting clause without actually negating the Process. For example, in *I don't think that she will be here in time for the show* (as opposed to *I think she won't be here in time for the show*), or *It isn't likely that she knows* (as opposed to *It is likely that she doesn't know*), we have a sort of 'metaphor within the metaphor', since – despite the transfer – negative polarity still refers to the proposition expressed by the projected clause, and not to the mental or the relational Process. In Halliday and Matthiessen's words, "On the face of it, these are nonsensical: it is not the thinking that is being negated, nor can there be any such thing as a negative probability. But non-thought and negative probabilities cause no great problems in the semantics of natural language" (2004: 616).

fact and, since the modal assessment is presented as an attribute of the fact, no source is indicated (it is probable according to whom?). On this point, Thompson notes that it is possible for speakers to push ahead with the experientialisation and the non-negotiability of Interpersonal meanings by nominalising the modal element: this, he says, "[…] can clearly be a powerful weapon in cases where the speaker or writer wishes, for whatever reason, to avoid negotiation, with its possible outcome of rejection" (2004: 234). He gives, among others, the following example:

(10) Doubts remain whether BSE can infect man.

When we compare the wording in (10) with the more congruent realisations *It is doubtful whether BSE can infect man*, or *BSE might (not) affect man*, we notice that it is a non-negotiable monoglossic assertion (cf. Miller 2004): first, as in the objective implicit option, it is not clear *who* doubts this; in addition, the nominalization has transformed a clause into a Nominal Group by removing the Mood Block, which – as we saw in Section 1.2 above – is the element that provides the ground for negotiation. Here, however, interpersonal metaphor shades into ideational (experiential) metaphor, which is the subject of the next section.

2.2 Ideational metaphor

Ideational metaphor is an umbrella term covering two additional delicate metaphorical categories: experiential metaphors, non-congruent realisations of Experiential meanings within the system of TRANSITIVITY – and logical metaphors, non-congruent realisations of Logical meanings having to do with the system of LOGICO-SEMANTIC RELATIONS (cf. Section 1.3 above). Halliday and Matthiessen highlight the connection between the two categories, observing that one visible effect of ideational metaphor in general is "[…] a shift from the logical to the experiential – an experientialization of experience" (2004: 642): we have already seen that, differently from interpersonal metaphors, ideational metaphors tend to compact the grammar of a text, downgrading its elements and thus also affecting its logical structure. I provide below a non-exhaustive list of examples, with the aim of showing the ways in which ideational metaphor may change the congruent realisation of clause

complexes, figures, and even single elements within figures[33].

(1) S*equence of figures*. These are congruently realised by clause complexes, which may be internally linked either by a logical relation of expansion, or by one of projection. In the case of projection, the projected clause may be incongruently realised as a Verbiage/Phenomenon in connection with the verbal/mental Process of the main clause: e.g. *He regretted that he had decided to leave school early → He regretted his decision to leave school early*. Alternatively, the entire clause complex may be metaphorically converted into a Nominal Group, in which the formerly projecting clause is represented by a noun of projection and serves as Head, while the formerly projected clause functions as Qualifier: e.g. *The audience agreed with the President, // who claimed // that the most recent events had only aggravated a pre-existing condition → The audience supported the President's claim* [[*that the most recent events had only aggravated a pre-existing condition*]]. In the case of expansion, one of the clauses may be incongruently realised as a Prepositional Phrase serving the function of circumstantial element within another clause: e.g. *Once his first novel was published, he booked a flight to Johannesburg → He booked a flight to Johannesburg after the publication of his first novel*. Another possibility is to convert the sequence of clauses in a single circumstantial relational clause, in which the Process incongruently expresses the original logical relation, and the two former clauses take on the roles of Token and Value: e.g. *The roof collapsed because several tiles had been displaced → Displacement of several tiles led to the collapse of the roof*. In all these cases, the grammatical metaphor transforms a sequence of two clauses into a single simple clause.

(2) *Figure*. The incongruent realisation of a figure may either retain the clause as the domain of realisation, or downgrade the domain from clause to group/phrase. If the domain of realisation is retained, the metaphor may either affect the whole figure, or involve only a part of the figure, the one containing the Process. In the former case, the entire figure will be metaphorically realised as a Nominal Group, with the creation of a new Process expressing a general meaning of 'happen': e.g. *The Futurist Manifesto was published by Marinetti in 1909 → The publication of the Futurist Manifesto by Marinetti took place in 1909*. In the latter case, the Process will be incongruently represented by a Verbal Group with the general meaning of 'perform' – with a phenomenon of delexicalisation – and combined with a Range, in order to complete the Experiential semantics of the figure: e.g. *She smiled wryly to the woman at the front desk → She gave a wry smile to the woman at the front desk*. If the domain

[33] The list is based on Halliday and Matthiessen 2004: 646-652. For a more detailed typology of ideational metaphor in English and Italian, cf. Chapter Three, Section 3; cf. also Halliday and Matthiessen 1999.

of realisation is downgraded from clause to group/phrase, the metaphorical realisation of the figure will be a group/phrase serving as Head or as Postmodifier within a Nominal Group: e.g. *She remembered when she had announced her pregnancy* → *She remembered the announcement of her pregnancy*.

(3) *Element*. As already shown in the previous point, when the domain of realisation of a figure is metaphorically downgraded from clause to group/phrase, the downgrading affects the functional elements within the same figure, which pass from the condition of 'independent' groups/phrases to that of modifiers within other groups/phrases. In the last example, the verbal Process represented by the verb *announce* was reified and converted into a noun (*announcement*), functioning as Head of the Nominal Group; the Verbiage represented by the Nominal Group *her pregnancy* was converted into a Prepositional Phrase (*of her pregnancy*), serving as Qualifier of the Head *announcement*, and thus downranked.

The examples discussed above show two important characteristics of ideational metaphors. The first is what Halliday and Matthiessen (2004: 646) call their "domino effect", i.e. the fact that the downgrading process they activate spreads down the rank scale, affecting not only the 'target' unit, but also its lower-rank components; the second is the key role played in their realisation by the nominalization of Processes, i.e. the choice of a nominal form instead of a Verbal Group to express a Process meaning. In his examination of the use of grammatical metaphor in scientific writing, Banks (2003) observes that nominalizations have almost invariably attracted special attention on the part of scholars, as a consequence of their frequency in written and spoken formal language, to the point that in some accounts they are the only type of ideational metaphor considered. In the same article, Banks also identifies a number of options for creating nominalised Processes in English, basically falling within three categories: nouns that are morphologically identical with the agnate verb, through conversion (e.g. *change*), nouns that have no agnate verb, but nonetheless indicate a Process (e.g. *trend*), and nouns that are not morphologically identical with the agnate verb, usually because they include a suffix (e.g. *tracking*, *identification*, *movement*); the same options are available in Italian, where verb → noun conversion is generally realised by verbal nouns derived from the infinitive form (e.g. *errare è umano*). Thompson (2004: 228-231) lists a number of important functional reasons for the use of nominalization, which also explain its frequency in formal texts. Nominalization allows for meanings that have been previously introduced in the text in the form of clauses to be more economically referred to as Nominal Groups, and thus to be presented as a sort of 'thing' whose existence the reader has acknowledged by simply continuing reading: this phenomenon is known as *encapsulation*.

Nominalizations are also a resource for developing technical terminologies in the field of specialised languages, where Nominal Groups often condense complex concepts (either previously explained in the text, or pointing to a more general background knowledge) in the space of a few words. In both cases, however, nominalizations produce what Thompson calls an effect of *meaning condensation*, whereby Processes are objectified and made non-negotiable in the passage from clause to group/phrase, as the human doer is often removed, and the Mood Block inevitably gets lost. In Thompson's words, "[…] a nominalized process is detached from the here-and-now in a way that is not normally possible for a process expressed by a verb" (2004: 230). However, as stressed by Martin (1992), there are other, perhaps less frequent, strategies available to speakers to construct experiential metaphors besides nominalization: the following table provides a summary of the range of possible metaphorical realisations of Experiential meanings.

Action:			
Congruent	Finite Process Non-finite Process	*use* *using*	*deceive* *deceiving*
Metaphorical	Thing Epithet	*use* (N) *useful*	*deception* *deceitful*
Quality:			
Congruent	Epithet	*quick*	*sad*
Metaphorical	Adjunct Thing Process	*quickly* *speed* *quicken*	*sadly* *sadness* *sadden*
Participant:			
Congruent	Thing	*disaster*	*computer*
Metaphorical	Epithet Process	*disastrous*	*computerized* *computerize*

Table 2.11 Congruent and metaphorical realisations of Experiential meanings (adapted from Martin 1992: 410)

As we shall see in more detail in Chapter Four, ideational metaphors are exploited in news discourse precisely for the reasons identified by Thompson, summarised above: nominalizations, in particular, are frequently used to offer 'a snapshot' of the relevant information concerning an event, condensing it in a shorter string of words than a more congruent realisation would require, often with the secondary (and covert) effect of concealing the perpetrator or the cause of the event itself. The following is an example taken from my corpus of first page articles from *The Financial Times*:

(11) Emergency legislation to take Northern Rock into public ownership is due to be introduced in the Commons today after a five-month search for a private buyer ended in failure on Sunday. (*The Financial Times*, First page, February 19th 2008).

Below is the proposal for a much longer but more congruent reading of (11):

(11a) The Government searched for a private buyer willing to purchase Northern Rock for five months, but as they didn't find anyone they decided to stop searching on Sunday; as a consequence, today the Commons are going to pass an emergency law, thanks to which the Government will be able to nationalise Northern Rock.

The major differences in terms of form and function between (11) and (11a) are commented below:

- when the Nominal Groups *emergency legislation* [[*to take Northern Rock into public ownership*]] and *a five-month search for a private buyer* are converted into the Processes they actually stand for, it becomes necessary to express their doers, which can also function as grammatical Subjects, as is the case in (11a). As we saw in Section 1.2 above, the grammatical Subject functions within the interpersonal structure (more specifically, within the Mood Block): it is the element that is assigned responsibility for the veracity of the clause and for the events described in it. The notion of grammatical Subject differs from those of logical Subject (the 'doer' of the action, functioning within the transitivity structure) and psychological Subject (the concern of the message, functioning within the textual structure), although the three functions may be conflated into a single element. This is the case in (11a), where *the Government* and *the Commons* are explicitly presented not only as the starting point of the message, but also as the inherently human participants enacting the material Processes of *searching*, *passing* a law and *nationalising* a bank, for which they assume full interpersonal responsibility[34]. At the textual level, the same elements can function as Theme, and can thus be explicitly presented as the concern of the message. In (11), by contrast, human involvement is effaced, and has to be inferred, as two complex abstract Nominal Groups take on the roles of grammatical Subject and Theme in their respective clauses. In the main clause, *emergency legislation* [[*to take Northern Rock into public ownership*]] is the Goal of the

[34] An even more congruent representation of the doers, in which human agency would be more explicitly brought to the surface, could be *members of Government* and *members of the House of Commons*.

material Process represented by the verb *to introduce*: since the passive voice allows for agency deletion, the Actor is left unexpressed, and information concerning who will actually take care of promulgating the new law is left to the reader to reconstruct, on the basis of his/her background knowledge. In the dependent (temporal) clause, *a five-month search for a private buyer* substitutes a whole figure, including a material Process (*search*), an Actor and a circumstance of Time: someone (supposedly the members of the Government) authorised the Process and finally decided to stop it, but such information does not show up in the clause, since it is 'packaged' within the Nominal Group. These are all instances of what Thompson calls the "knock-on effect" of nominalization: the fact that it inevitably calls forth "[…] a re-alignment of all the other elements of the message" (2004: 226).

- Nationalising a bank is a complex procedure, involving a political authority that assumes responsibility for the decision and for the purchase of shares, which is made possible by the investment of public money: these aspects explicitly emerge only from the structure of (11a), also thanks to the presence of the congruent verb *nationalise*. In (11), by contrast, the Process of passing a law is nominalised and thus made non-negotiable, while the expression *nationalise Northern Rock* is rendered through a lexical metaphor *to take into* + abstract location, which is also embedded as Qualifier within the Nominal Group. A similar type of metaphorical rendering (Process → circumstance) is at work in the dependent clause, where the Prepositional Phrase *in failure* stands for the material Process *fail*.

- As the previous two points have already shown, the 'unpacking' of meanings produces a higher degree of lexico-grammatical complexity. When the Nominal Groups are converted into more congruent realisations of Processes, i.e. Verbal Groups, the number of clauses naturally increases, and the logical relations linking them are made explicit through conjunctions and Conjunctive Adjuncts of various type: as consequence, the text itself becomes more readily accessible.

The following is an even more intricate example of the use of nominalization in the news discourse, taken from my corpus of first page articles from *Il Sole 24 Ore*:

(12) L'analisi di Bruxelles sulle ragioni della scarsa performance italiana è scoraggiante. Viene spiegata con la caduta dei consumi privati sotto la spinta del caro-prezzi e del conseguente calo del reddito disponibile, con la riduzione dei profitti delle imprese e relativi investimenti (*Il Sole 24 Ore*, Prima pagina, September 11th 2008).

The second clause contains numerous nominalised Processes – some of which are embedded

within the others – all comprised within a single circumstance of Manner: Means, as in a sort of Chinese puzzle. The increasing complexity of the structure makes it very difficult for the reader to discern the logical relations holding among the various elements (especially those in the domain of cause and effect), while the Processes are represented as just 'happening', without any Initiator or cause. First of all, the Verbal Group *viene spiegata* has a two-fold experiential and logical function: on the experiential plane, it represents a verbal Process with unknown Sayer and paves the way for the introduction of the following circumstance; on the logical plane, it realises a logical metaphor in that it signals a relation that would be more congruently expressed by a causal conjunction (*Secondo l'analisi di Bruxelles, la performance italiana è scarsa perché…*). The less explicit logical relation and the omission of the Sayer have the overall effect of 'softening' the assertion[35]. When we 'unpack' the meanings expressed by the following Prepositional Phrase, the logical relations become more explicit (consumer spending falls because prices surge, and also because the disposable income lowers, which is itself a consequence of the fact that prices surge); however, the text does not say anything about who or what should be deemed responsible for what seems to be the source of all these problems, i.e. the rising prices[36]. The same considerations can be made for the second Prepositional Phrase: first, it is not clear who or what caused corporate profits and investment to decrease (*la riduzione dei profitti delle imprese e relativi investimenti*); second, does *relativi investimenti* mean investment *made by* corporations or *for the benefit* of corporations[37]?

The examples presented above also provide evidence for Halliday and Matthiessen's claim that "[…] the significance of grammatical metaphor of the ideational kind extends beyond the ideational metafunction to both the textual and the interpersonal ones" (2004: 642). In fact, the power of ideational metaphor to produce rank-shifts and subsequent realignments in the elements of the clause (or clause complex) is much stronger than that of interpersonal and textual metaphors, whose sphere of influence is generally limited to the Mood Block and the Theme/Rheme slots, and whose rank-shifting mechanisms (as we have already seen with respect to interpersonal metaphors, and as we shall see in a moment with reference to textual

[35] As can be noticed, a trace of figurative language persists even in this more congruent reading in the use of the name of the city (*Bruxelles*) to indicate the institution it houses (the European Commission); this is an instance of what Lakoff and Johnson call a metonym of the type THE PLACE FOR THE INSTITUTION (1980: 38). Although the focus here is on grammatical metaphor, it is worth noting that such metonym contributes to the effect of 'impersonalisation' of the text, at the same time making it less accessible (because it requires more background knowledge).

[36] *Caduta* and *calo* can also be seen as two lexical metaphors realising the same conceptual metaphor, namely LESS IS DOWN / DOWNWARD MOVEMENT (cf. Chapter 1, Section 3.1).

[37] On the ambiguity inherent in many instances of nominalization, cf. also Banks (2003).

metaphors) are quite different.

2.3 Textual metaphor

As already observed, the category of textual metaphors does not appear in many descriptions of grammatical metaphor: Halliday (1985; 1994) and Halliday and Matthiessen (2004) limit their analysis to interpersonal and ideational metaphors, and so do other scholars in their descriptions (such as Eggins 2004, or Matthiessen, Teruya and Lam 2010). According to a second stream of research within the Systemic Functional framework, however, textual metaphors deserve a place in a comprehensive account of the phenomenon of grammatical metaphor (cf. among others Martin 1992; Martin and Rose 2003; Simon-Vanderbergen, Taverniers and Ravelli, Eds, 2003; Thompson 2004). Thompson (2004) includes textual metaphor in his survey on the basis of a parameter he uses to detect the presence of metaphor in a text, i.e. the need for a double transitivity analysis, one for the metaphorical wording and one for the congruent wording. In line with this view, the two types of textual metaphor he identifies (and to which I shall limit my discussion here) are those realised by the two thematic structures that require a double analysis in terms of transitivity: thematic equatives (also called pseudo-cleft sentences in traditional grammar) and predicated Theme.

The label thematic equative refers to a particular type of identifying relational clause, in which the relational Process constructs an equation between Theme and Rheme:

<table>
<tr><td colspan="4">a) Metaphorical: unmarked thematic equative (Nominalization = Theme)</td></tr>
<tr><td colspan="2">What the duke gave to my aunt</td><td>is</td><td>a teapot</td></tr>
<tr><td colspan="2">Value/Identified</td><td>Process: relational: identifying</td><td>Token/Identifier</td></tr>
<tr><td colspan="2">Theme / Given</td><td colspan="2">Rheme / New</td></tr>
<tr><td colspan="4">b) Metaphorical: marked thematic equative (Nominalization = Rheme)</td></tr>
<tr><td>A teapot</td><td>is</td><td colspan="2">what the duke gave to my aunt</td></tr>
<tr><td>Token/Identifier</td><td>Process: relational: identifying</td><td colspan="2">Value/Identified</td></tr>
<tr><td>Theme / New</td><td colspan="3">Rheme / Given</td></tr>
<tr><td colspan="4">Congruent</td></tr>
<tr><td>The duke</td><td>gave</td><td>a teapot</td><td>to my aunt</td></tr>
<tr><td>Actor</td><td>Process: material</td><td>Goal</td><td>Beneficiary</td></tr>
<tr><td>Theme / Given</td><td colspan="3">Rheme / New</td></tr>
</table>

Table 2.12 Thematic equative as textual metaphor (based on Thompson 2004: 235-237)

The double transitivity analysis reveals a discrepancy between the congruent and the metaphorical wordings: this – as is typical – implies a phenomenon of rank-shifting, in the form of a nominalization that affects a whole figure (*what the duke gave to my aunt*). The double analysis also shows the main effects of the metaphorical structure: on the one hand, it marks off a relation of exclusivity between Theme and Rheme (i.e. the elements are presented as the only possible fillers of the thematic and the rhematic slots); on the other hand, it opens up different possibilities to link the system of THEME with that of INFORMATION, and thus to map Theme/Rheme onto Given/New. In (a) above, *a teapot* is selected as Rheme and conflated with New Information, as in the unmarked English pattern, while the thematic slot is made more prominent through a structure that unfolds more slowly, and whose ultimate meaning is 'I want to attract your attention towards this point'. In (b), however, *a teapot* is strongly marked for informational status, as shown by its probable tonicity, and foregrounded as New Information. According to Halliday and Matthiessen, the general meaning expressed by (b) can be paraphrased as "[…] take special note: this is improbable, or contrary to expectation" (2004: 95). Indeed, a few pages beforehand they had observed that thematic equatives evolved "[…] as a thematic resource, enabling the message to be structured in whatever way the speaker or writer wants" (2004: 71).

Predicated Themes are a second type of equative construction: they are characterised by the structure *it was/wasn't x who/which/that y*, and differ from thematic equatives in the patterns of informational markedness they tend to give rise to. Let us consider a final example:

c) **Metaphorical: predicated Theme**			
It	*was*	*a teapot*	*that the duke gave to my aunt*
Value/Identified	Process: relational: identifying	Token/Identifier	Value/Identified
Theme / New			Rheme / Given
Congruent			
The duke	*gave*	*a teapot*	*to my aunt*
Actor	Process: material	Goal	Beneficiary
Theme / Given	Rheme / New		

Table 2.13 Predicated Theme as textual metaphor (based on Thompson 2004: 235-237)

In (c), the relation of exclusivity between Theme and Rheme is maintained, and *a teapot* is again selected as Theme and conflated with New Information, as in (b) above; yet, its informational status is not foregrounded, as was the case with the marked thematic equative:

the Theme carries the unmarked focus of information, and there is no additional implication that the proposition is improbable or contrary to expectations. As Halliday and Matthiessen observe (2004: 96), "It is this mapping of New and Theme (…) that gives the predicated theme construction its special flavour". This type of metaphorical construction is frequently used to mark off a contrast in validity/veracity between different elements (e.g. *it was x who/which/that y, it was not z*); furthermore, in written language – where no indication of the tonic prominence is given – it functions as an explicit guideline for the reader towards the correct interpretation of the information structure.

It is now time that we apply the theoretical notions discussed in this and in the previous chapter to the analysis of the corpora of articles from *Il Sole 24 Ore* and *The Financial Times*. This is the 'focus of information' in Chapters 3 and 4.

This page is intentionally left blank

Part II
Corpus Analysis

This page is intentionally left blank

Chapter Three
Corpus Construction and Methodology of Analysis

As stated in the Introduction, this work aims to analyse the metaphorical representation of the global financial and economic crisis in the British and the Italian specialised press in the course of the year 2008, using corpus methodologies, and making reference to Conceptual Metaphor Theory, on the one hand, and to the notion of grammatical metaphor, as it has been developed within the framework of Systemic Functional Linguistics, on the other. This chapter describes the procedure followed in assembling the corpora for analysis, and the methodology used to, firstly, limit the difficulties inherent in corpus-based research into metaphor, and then, to identify and classify the various instances of conceptual and grammatical metaphor. The final results of analysis are discussed in Chapter Four.

1. Building the corpora

Two *ad hoc* corpora were built for the purposes of this study, collecting articles from all the issues of *The Financial Times* (London Edition) and *Il Sole 24 Ore* in the year 2008. The year was chosen for the significance of the financial events it hosted, among which the federal takeover of the two American housing finance giants Fannie Mae and Freddie Mac (announced on September 6th) and the bankruptcy of the financial services firm Lehman Brothers (September 15th), after which concerns about the real size of the crisis rapidly spread throughout the world. Since my original aim was to carry out a contrastive analysis of the metaphorical representation of the crisis in the English and the Italian language, the range of potential sources of texts for the English corpus included American business newspapers such as *The Wall Street Journal* or *Forbes*. However, the final decision was to narrow down the selection of sources to the European area, mainly for two reasons. On the one hand, the crisis originated in the United States as a consequence of the high risk factors connected with subprime lending, and its effects here were felt earlier than in the rest of the world (indeed, for several months after its outbreak, the crisis in Europe was considered purely as an American problem). Such discrepancy might cause difficulties in comparing data coming from the same year. On the other hand, Europe represented an interesting case-study for the presence of the

European Economic Area (EEA), comprising the European Union member countries and the EFTA states, with shared practices, common rules and, possibly, similar reactions to the crisis. The second criterion I followed in selecting the sources of texts for the corpora concerned the importance and the circulation of the newspapers. From this point of view, for the Italian corpus the choice fell upon *Il Sole 24 Ore*, which is undoubtedly the most authoritative business newspaper in Italy, with more than 250.000 daily copies and an average of 1.191.000 readers (source: system24.ilsole24ore.com). For the English corpus, the choice was between the two major business newspapers in English language, *The Economist* and *The Financial Times*; the former was finally discarded for reasons of corpus comparability. First, *The Economist* is published weekly, while *Il Sole 24 Ore* is a daily newspaper, and this would have caused great differences in the amount of data between the two corpora; second, *The Economist*, differently from *Il Sole 24 Ore*, is widely known for its creative use of language: this might cause bias in the evaluation of the results of analysis[1]. Finally, since *The Financial Times* has four different main editions published around the world (UK, US, Europe and Asia), the UK (London) edition was selected for the purposes of this study.

One possible criterion for deciding on which texts from the newspapers to include in the corpora was to look for all the occurrences of the words *crisis* and *crisi* during the whole year, and consider only the relevant articles. However, my original intention was to take into account not only the metaphors, but also the section of the newspaper in which they appeared: as a consequence, I decided to follow a different sampling procedure, based on the type of article rather than on the presence of one or more keywords, and to populate the corpora with the main front-page articles and the leading articles from all the 2008 issues of *The Financial Times* and *Il Sole 24 Ore*. In fact, headline news seem particularly interesting, not only because they focus on what the members of the editorial board consider as the most important event of the day, but also because, differently from articles from the internal sections, they are likely to be read by a larger group of people, which in the case of the business press includes non-specialists. On the other hand, though the traditional distinction between reporting and commenting is in fact inaccurate, for markers of subjective attitude can be traced in hard news stories as well (Morley 1998), leading articles are the most authoritative expression of the newspaper's stance on a topic, their language is likely to be more 'colourful' than that of first page articles, and their analysis may unveil the use of metaphorical expressions to achieve

[1] "[…] *The Economist* believes in plain language. Walter Bagehot, our most famous 19th-century editor, tried "to be conversational, to put things in the most direct and picturesque manner, as people would talk to each other in common speech, to remember and use expressive colloquialisms". That remains the style of the paper today" (from *The Economist*'s official website, www.economist.com).

persuasion. In the words of Morley: "Editorials are the voice of the newspaper. […] One of the prime functions of editorial comment is that of persuading the newspaper's readers of its point of view" (2004: 239).

The final procedure I followed in building the two corpora involved the following steps:

a) For each issue, the main article from the first page and the leader were identified by referring to the microfilm version of *The Financial Times* and the pdf version of *Il Sole 24 Ore* (stored in *Il Sole 24 Ore Banche Dati Online*, www.banchedati.ilsole24ore.com, online access granted by the University of Bologna). In the case of *The Financial Times*, the microfilm reels from the year 2008, in London Edition, were consulted during a week's bibliographical research at the Newspapers Section of The British Library (Colindale, North London), funded by the University of Pisa.

b) Once identified, the articles were retrieved in electronic form (.doc files) by searching for their titles in the databanks *LexisNexis Academic* (academic.lexisnexis.eu, online access granted by the University of Bologna) and *Il Sole 24 Ore Banche Dati Online*.

c) The downloaded files (one for each article) were automatically converted in plain text and copied into four single .txt files (one for each section: Italian and English first page articles, Italian and English leaders) using a software program elaborated in MatLab specifically for this purpose.

As a result, both the English and the Italian corpora were subdivided into two sub-corpora, one collecting first page articles (henceforth FT_FirstPage and S24O_PrimaPagina), and one collecting leading articles (henceforth FT_Leaders and S24O_Editoriali). Details for each corpus are given in Table 3.1 below.

Corpus name	Sub-corpus	Number of articles	Average length (in words)	Total number of words in sub-corpus
Financial Times 2008 (307.181 words)	FT_First_page	310	498	154.408
	FT_Leaders	310	493	152.773
Il Sole 24 Ore 2008 (556.096 words)	S24O_Prima_pagina	349	893	311.640
	S24O_Editoriali	297	823	244.456

Table 3.1 Size of the corpora (and related sub-corpora)

In considering the differences in the number of articles, it should be noted that: (a) *The Financial Times* has a 'weekend' edition covering Saturday and Sunday (published on Saturday) while *Il Sole 24 Ore* comes out everyday; (b) *Il Sole 24 Ore* has a special edition on Monday (*Il Sole 24 Ore del Lunedì*), which is edited by a different editorial staff and does not have a leading article. Differences in the number of tokens, instead, are due to the average length of the articles, which is higher in Italian. The corpora were subsequently uploaded to the online Corpus Query System *Sketch Engine* (Kilgarriff, Rychlý, Smrz and Tugwell 2004) and tagged using the pre-loaded Tree Tagger for English and the Tree Tagger for Italian developed by Marco Baroni (Schmid, Baroni, Zanchetta and Stein 2007).

2. Analysing the corpora for conceptual metaphors

Though corpus methodologies certainly smooth the way for the researcher – enabling him/her to process large quantities of data in a reasonably short period of time, and providing him/her with computational tools that make it much easier to retrieve meaningful patterns and compute statistics – the identification of metaphors within corpora is a complex task, and a close reading of at least part of the texts is always required. Indeed, substantial research has been carried out in recent years to achieve automatic extraction of metaphors from corpora, but these procedures are based on a scrupulous annotation work, requiring the presence of multiple researchers (cf. MIPVU: Steen *et al.* 2010). Attempts have also been made to build specific software programs (cf. Berber Sardinha 2010), which, however, at present do not match the level of accuracy of manual analysis. At the same time, manual analysis always comes at a cost: it brings in issues of consistency, besides being time-consuming and subject to bias, not only because the risk of 'seeing metaphors everywhere' after reading hundreds of concordance lines is literal, and real, but also because the researcher is often confronted with 'borderline cases', whose metaphorical status is doubtful, or whose connection with an underlying conceptual metaphor is very unclear. Obviously, bias can never be completely avoided, no matter what the researcher is focusing on, or which theoretical framework s/he is adopting: it is something that "[…] we can only be *a*ware, and *be*ware, of – and, of course, declare" (Miller 2007b: 178; original emphasis). In order to beware of biased judgment, it is necessary to establish a set of *a priori* guiding principles for the researcher to follow in evaluating the data (cf. Low and Todd 2010): in the case of conceptual metaphor analysis,

these include, as a first step, an operational definition of linguistic metaphor. In my work, I adopted the one suggested by Deignan (2005: 34):

> A metaphor is a word or expression that is used to talk about an entity or quality other than that referred to by its core, or most basic meaning. This non-core use expresses a perceived relationship with the core meaning of the word, and in many cases between two semantic fields.

According to this definition, an expression like *Grasping the essentials of the Constitution at any given moment is clearly a demanding and confusing task* (from the British National Corpus) would be marked as metaphorical, for the verb *grasp* in its core meaning denotes the material action of holding or gripping something firmly, and thus applies to the domain of physical objects, while here it is used with reference to an abstract entity (*the essentials of the Constitution*). The expression would then be classified as a realisation of a conceptual mapping between the domains of UNDERSTANDING and SEIZING, which we would express in terms of Conceptual Metaphor Theory as a conceptual metaphor UNDERSTANDING IS SEIZING. The operational definition of linguistic metaphor can be complemented by a rigorous procedure for discriminating between metaphorical and non-metaphorical occurrences, such as the Metaphor Identification Procedure (MIP) proposed by the Pragglejaz group (2007), which is usually employed in corpus annotation. The method involves the repetition of several steps, which I felt were required in order to achieve a certain standardisation of selection criteria, thus improving the reliability of the findings as well:

3. (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.
   (b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one it has in the given context. For our purposes, basic meanings tend to be:
      (i) More concrete [what they evoke is easier to imagine, see, hear, feel, smell and taste];
      (ii) Related to bodily action;
      (iii) More precise (as opposed to vague);

(iv) Historically older.

Basic meanings are not necessarily the most frequent meanings of the lexical unit.

(c) If the lexical unit has a more basic current – contemporary meaning in other contexts than in the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

4. If yes, mark the lexical unit as metaphorical.

(Pragglejaz group 2007: 3).

It is worth noting that the Pragglejaz group procedure is not specifically concerned "[…] with identifying metaphorical utterances or with finding conventional linguistic metaphors that may arise from postulated conceptual metaphors" (2007: 2): in fact, on the same page, the authors describe it as "[…] a research tool that is relatively simple to use and flexible for adaptation by scholars interested in the metaphorical content of natural discourse".

A second difficulty for corpus research into metaphor is that, unless the researcher is working on a very small corpus, a decision about which items to focus on has to be made, even though this necessarily means limiting the analysis to a portion of the texts. As observed by Deignan and Potter (2004: 1234):

> There is a risk that patterns of potential interest may be missed, a risk which is difficult to avoid completely, because without a vast team of researchers and unlimited time, it is not possible to examine every linguistic realisation of a whole semantic field.

This is also true for the specialised corpora used in this study, which are relatively small if compared with the average size of a general corpus, but still contain hundreds of thousands of words. According to Stefanowitsch (2006), three strategies are generally adopted to extract linguistic realisations of conceptual metaphors from non-annotated corpora: manual analysis, usually performed by reading all the texts from a (necessarily limited) corpus; search for metaphorical expressions on the basis of source domain vocabulary; search for metaphorical expressions on the basis of target domain vocabulary. In his view, the latter is the most effective strategy, since it works well on large corpora and it does not imply choosing *a priori* a set of words from the source domain(s), which, besides being complex, is a task of dubious

value. He thus proposes a method called Metaphorical Pattern Analysis (MPA), in which one or more keywords are selected from the target domain and extracted from the corpus in the form of KWIC concordances: the metaphorical patterns involving the keyword(s) are then identified and classified according to the conceptual metaphor they instantiate in the context. Since the present study focuses on the target domain of CRISIS, two main keywords were selected for analysis in the two languages, i.e. *crisis* and *crisi*. A query for all the occurrences of the keywords in the corpora initially yielded a total of 414 results in *The Financial Times* corpus (203 in FT_FirstPage and 211 in FT_Leaders) and 1090 in *Il Sole 24 Ore* corpus (563 in S40_PrimaPagina and 527 in S24O_Editoriali). Collocations and Word Sketches (cf. Introduction: Section 3) were subsequently scanned in order to identify potential metaphor candidates and discard irrelevant results, such as mentions of the Georgian crisis[2] and the crisis in Zimbabwe[3] in *The Financial Times*, and mentions of the Alitalia crisis in *Il Sole 24 Ore* (though it was indeed a major event in Italy, the imminent bankruptcy and privatization of the national flagship airline in 2008 was not directly connected with the financial crisis)[4]. Concordances for the relevant occurrences were finally manually analysed, and the results were classified as instances of orientational, ontological or structural metaphors (orientational and ontological metaphors were hierarchically organised following the Extended Great Chain of Being paradigm, cf. Lakoff and Turner 1989; cf. also Chapter One, Section 3.1). It must be pointed out that the term concordance in this work does not refer to the conventional 9-word span KWIC concordance line. In fact, in order to ensure that all the metaphors (both conceptual and grammatical) involving the words *crisis* and *crisi* were retrieved, a much wider concordance window was selected, corresponding to the entire sentence in which the node words occurred (i.e. Sentence mode in the Sketch Engine). Finally, the one presented above was by no means the only possible method for searching the corpora for conceptual metaphors, although it seemed the most suitable given the aims of the study. A well-known alternative technique is the one proposed by Charteris-Black (2004), involving two steps: first, a large sample of the corpus is manually analysed; the results are then deployed to perform a number of automatic searches on the whole corpus.

Once an operational framework has been established and the focus of analysis has been defined, at least three further questions that can influence the final results need to be

[2] An international crisis between Russia and Georgia, which led to the outbreak of an armed conflict in South Ossetia in August 2008.
[3] A serious political crisis faced by Zimbabwe during the 2008 presidential elections, when the former president Robert Mugabe led a campaign of violence and terror against the opposition party.
[4] Some relevant results from this phase of analysis are commented in Chapter Four, Section 1.

addressed. These are the degree of perceived metaphoricity of an expression, the relationship between metaphor and simile, and the treatment of grammatical words: each of these issues is briefly discussed below.

2.1 Degree of perceived metaphoricity

The degree of perceived metaphoricity refers to the status of a metaphorical expression in terms of conventionality, and its assessment is central to points (b-iv) and (c) of the metaphor identification procedure described in Section 2 above. This is the most complex question, because whether a lexical unit will be marked as metaphorical in the analysis of corpus data depends on it to a great extent. As we have seen in Chapter One, the fact that many linguistic metaphors are extremely conventional does not pose a problem to Conceptual Metaphor Theory: on the contrary, it is taken as evidence of the key role played by metaphorical processes in our conceptual system. The conventionality of a metaphorical expression is not problematic from the perspective of discourse studies either: conventional metaphors are all the more interesting because the conceptual associations they trigger have become covert with time, without losing their power. As noted by Goatly: "[…] metaphors are used quite unconsciously much of the time, but nevertheless structure the way we think and act" (2007: 35). However, conventional metaphors – in which the cross-domain mapping is unconscious, but still considered to be active – must be distinguished from other cases, in which the cross-domain mapping that originally led to the metaphorical use of a word or phrase has completely disappeared.

Goatly (1997: 32 and ff.) proposes a typology of linguistic metaphors that comprises four different classes, namely *Active*, *Inactive*, *Buried* and *Dead*; the class of Inactive metaphors is further divided into two sub-classes, *Tired* and *Sleeping*. According to his description, a lexical unit can be classified as an instance of a Dead or Buried metaphor when the former literal sense is not in use anymore, or the connection between the literal and the metaphorical senses has become opaque to most speakers, so that they are perceived as homonymic; in the case of Buried metaphors, the two senses have also become formally different. An example of a Dead metaphor is the word *pupil*, in which the connection between the two senses ('small round black area at the centre of the eye' and 'young student') has been lost; an example of a Buried metaphor is represented by the pair *clew* (meaning 'ball of thread') – *clue* (meaning 'fact or piece of evidence'). Such instances are not generally taken into account when analysing corpus data for metaphorical occurrences. Lexical units having a literal and a

metaphorical sense, both active and perceived as polysemous, are regarded as Sleeping metaphors; Tired metaphors present the same features, but the metaphorical sense is more likely to activate the literal one. Examples of Sleeping and Tired metaphors given by Goatly include, respectively, the words *crane* (literal sense 'species of bird', metaphorical sense 'machine used to lift heavy objects') and *cut* (literal sense 'hole or opening in something made with a sharp instrument', metaphorical sense 'budget reduction'). Finally, the category of Active metaphors comprises lexical units whose metaphorical use is immediately recognisable and can only be understood by making reference to the literal sense; Goatly illustrates it with a line taken from Causley's poem *Death of a Poet*: "He held five icicles in each hand" (i.e. 'five fingers that were as cold as ice'). Instances of Sleeping, Tired and Active metaphors will generally be taken into account in a corpus-based analysis.

Deignan (2005:39 and ff.) discusses Goatly's classification, which – while being useful for many applications – basically relies on assumptions about speakers' processing of metaphorical language, and can cause problems if the researcher is working with linguistic data rather than with informants. She outlines an alternative model that has the further advantage of incorporating corpus linguistic criteria: she thus identifies four main categories of metaphorically-motivated linguistic expressions, as illustrated by the Table below.

Types of metaphorically-motivated linguistic expression	**Identification**	**Example**
1. Innovative metaphors	Fewer than one use per thousand corpus citations of word, or all citations from a single source.	He held five *icicles* in each hand (cf. Goatly 1997)
2. Conventional metaphors	Not innovative or historical by corpus criteria (see 1 and 4). Metaphorical sense dependent on a core sense by corpus linguistic and/or semantic criteria.	The wind was *whispering* through the trees (Allbritton, quoted in Deignan 2005: 47)
3. Dead metaphors	Not innovative or historical by corpus criteria (see 1 and 4). Metaphorical sense *not* dependent on a core sense by either corpus linguistic or semantic criteria.	*deep* (of colour) *crane* (meaning 'machine for moving objects', cf. Goatly 1997)
4. Historical metaphors	The former literal sense is either not represented in corpus or is so different in meaning as to be homonymic for current speakers.	*comprehend*, *pedigree*, *pupil* (meaning 'young student', cf. Goatly 1997)

Table 3.2 Identification and classification of metaphorically-motivated linguistic expressions on the basis of semantic and corpus criteria (adapted from Deignan 2005: 47)

In the present work, I followed Deignan's model in treating problematic or uncertain cases of metaphor. No instances of Innovative metaphors were found in the analysis of the concordances for *crisis* and *crisi* in the corpora from *The Financial Times* and *Il Sole 24 Ore*. Linguistic expressions realising Conventional metaphors were found to be statistically significant, and were all taken into account in the analysis. Historical metaphors were excluded on the basis of the lost association with a former literal sense, while instances of Dead metaphors were excluded because they do not satisfy the operational definition introduced at the beginning of Section 2 above.

In deciding to which class a problematic case should be assigned – and thus whether it should or not be marked as metaphorical and incorporated into the list of final results – I took its etymology into account, and checked the existence and the frequency of use of related, more basic meanings within larger reference corpora: Bank of English (BoE), British National Corpus (BNC) and the web-based corpus ukWaC for English; CORIS and the web-based corpus itWaC for Italian (cf. Chapter Four, Section 1). In some cases, I also referred to the lexical database FrameNet (https://framenet.icsi.berkeley.edu/fndrupal/; cf. Fillmore, Baker and Sato 2002), which is based on Fillmore's Frame Semantics theory (cf. Chapter One, Section 2), to check the prototypical sense of English words. For example, the adjective *large* is used as a pre-modifier of *crisis* in the concordance line below (extracted from the FT_First_page sub-corpus):

(1) Charlie Bean, the bank of England deputy governor, said in a local newspaper interview the market turmoil was "possibly the largest financial **crisis** of its kind in human history".

Large appears equally frequently in connection with physical and non-physical objects in a random sample of 500 concordance lines taken from the BNC. However, according to the FrameNet data, this lexical unit activates a semantic frame Size, in which the amount of *three-dimensional* space occupied by an Entity is assessed in terms of the Degree by which it deviates from a norm. As a consequence, the concrete meaning of *large* was defined as prototypical, or more basic, and the use of the word large in (1) above was marked as metaphorical (i.e. a linguistic realisation of the conceptual metaphor THE CRISIS IS A PHYSICAL OBJECT/SUBSTANCE).

Corpus criteria also led to the exclusion of the Anglicism *gap* from the list of metaphorical lexical units in Italian. *Gap* in English has a primary physical sense, that of a space between

two things, or a break in a physical object; however, a survey of a sample of 1000 concordances for the word in itWaC revealed that in Italian it is always used metaphorically, to denote a condition of disparity between abstract qualities or states (e.g. the term *gap tecnologico* refers to the difference that separates the countries that are able to constantly introduce innovative products in the market, as a result of advanced research activities for instance, from those that are not). If, as the corpus data seem to suggest, only the metaphorical sense of *gap* has been transposed to Italian, not all the speakers will be aware of its basic physical sense, and thus of the mapping between concrete and abstract domains that the word activates in certain contexts: therefore, the use of the word in connection with *crisi* was not marked as metaphorical.

2.2 Metaphor and simile

Metaphors and similes have been traditionally regarded as two distinct phenomena: in fact, while in metaphor the basic meaning of a word or phrase contrasts with the context in which it appears, such incongruity is not always found in simile and, when it is, it is mitigated by the presence of a functional word that formally signals the association between two contrasting meanings (e.g. English *like* or *as*; Italian *come* or *quale*). For this reason, Aristotle spoke of simile as a less powerful cognitive tool than metaphor (cf. Chapter One, Section 1). Cameron and Maslen (2010: 110-111) discuss the relation between metaphor and simile, noting that contemporary metaphor studies make an important distinction between metaphorical and non-metaphorical similes. In a metaphorical simile there is incongruity between the two terms: for example, in *he was like a whirlwind* the pronoun *he* refers to a male human being, while the noun *whirlwind* belongs to the semantic field of meteorological phenomena. In a non-metaphorical simile, by contrast, the two terms are not incongruous: for example, in *she is like her sister*, both the pronoun *she* and the noun *sister* refer to a (female) human being. Metaphorical similes are frequently taken into account in contemporary research on metaphor in discourse, while non-metaphorical similes are obviously excluded, because they do not satisfy a key condition for metaphor (i.e. incongruency between the basic and the contextual meaning of a word or phrase). In my analysis, I came across several instances of metaphorical simile involving the words *crisis* and *crisi*, as in the following examples:

(2) Sui conti dei big del credito la **crisi** è passata come un ciclone, imponendo svalutazioni record [S24O_Prima_pagina]

(3) While the Kremlin can hardly contain its joy at the course of events in Georgia, the **crisis** has come as a shock to Russian business [FT_Leaders]

The Pragglejaz group procedure would mark the words *ciclone* and *shock* as metaphorical, while the functional words *come* and *as* would be treated as signals of metaphoricity (and would be assigned a specific label in the annotation process). However, since my original aim was to focus on 'pure' metaphorical representations of the global crisis, my final decision diverged from the MIP on this point, and cases like (2) and (3) above were not considered in the list of final results.

2.3 Grammar words

In Conceptual Metaphor Theory, grammatical/function words such as prepositions and lexically empty verbs can realise metaphors as lexical words do: Lakoff and Johnson (1980) provide numerous examples, while Lindstromberg (1997) analyses most abstract senses of prepositions – as opposed to their concrete senses – as metaphorical. Within the class of prepositions, particular attention is paid to those that have a basic physical meaning, like spatial prepositions, because they can be marked as metaphorical when they are used in non-physical contexts. The analysis of the hits for *crisis* and *crisi* in combination with a preposition (which can be extracted from the corpora by activating the Part of Speech filter in the Concordance form in the Sketch Engine) retrieved several noteworthy results, such as the following:

(4) The move to extend the credit facility is likely to soothe Wall Street, by confirming Fed support for investment banks through the **crisis** [FT_First_page]
(5) Ma ancora di più perché il Tesoro non ha le risorse per salvare tutte le banche in **crisi** [S24O_Editoriali]

These two prepositions have a clear basic physical meaning, which is one of movement from one side to another of a physical object or area in the case of *through*, and one of location within the limits of a physical object or area in the case of *in*: as a consequence, their use in connection with the words *crisis* and *crisi*, denoting an abstract entity, was marked as metaphorical. The case presented in (4) was classified as an instance of a JOURNEY metaphor (in view of the motion sense inherent in the preposition *through*), activating a scenario in

which the crisis plays the role of PATH; (5) was classified as an instance of a CONTAINER metaphor, in which the crisis acts as a metaphorical (i.e. non-physical) container for banks. As we shall see in the discussion of the results, CONTAINMENT metaphors based on a metaphorical use of prepositions like *in* and *out* are frequent in both the English and the Italian corpus. By contrast, no metaphorical uses of semantically empty verbs were found.

3. Analysing the corpora for grammatical metaphors

As clearly emerged from the analysis of the concept presented in Chapter Two, grammatical metaphor is a wide-ranging phenomenon based on the interaction between semantics and lexico-grammar, and can involve different types of lexico-grammatical structure at various levels of delicacy: thus, in terms of complexity, its identification in corpora presents similar problems to those discussed in the previous pages, particularly as far as difficulties in establishing *a priori* principles for automatic identification are concerned. Indeed, several specific software programmes have been developed in recent years that can be used to annotate and analyse corpora for MOOD, TRANSITIVITY and THEME structures: among them, the UAM Corpus Tool (O'Donnell 2008) and SysFan (Wu 2009). However, at present automatic systemic functional parsers reach high levels of accuracy only when they are set to work on relatively small amounts of data; further, though functional parsing can be very useful, it only represents the first step in research on grammatical metaphor: as for conceptual metaphor, a combination of computational tools and close reading of the texts is always required. From this perspective, effective corpus-assisted research on both conceptual and grammatical metaphor can be said to depend on what Miller (2000), with reference to the study of evaluation through APPRAISAL SYSTEMS in corpora, has suggestively called "ticklish trawling": a blending between automated procedures and the researcher's unavoidable personal contribution.

Since one of the basic assumptions of this work was that the two perspectives of conceptual and grammatical metaphor can complement each other (cf. Introduction, Section 1), leading to a more comprehensive analysis of the data, the same concordances of the two keywords (*crisis* and *crisi*) were scanned for grammatical metaphors. Indeed, the sentence format for the concordances (cf. Section 2 above) was also selected with this phase of analysis in mind: since grammatical metaphor works at various levels within the lexico-grammatical rank scale, involving different units, from clause complexes to group/phrases, it would have

been impossible to carry out a thorough investigation of its use in connection with *crisis*/*crisi* in a traditional KWIC concordance window; further, as will become clearer below, in the case of textual metaphors even expanded concordances may not be enough to unveil all significant patterns.

The analysis initially exploited the fact that some linguistic elements, which can be automatically identified using corpus tools, can be taken as pointers to the presence of grammatical metaphor in a text: for example, nouns ending in – *tion* and – *zione* usually indicate nominalizations of Processes, while lexical units like *possible* and *probable*, or verbs representing mental Processes, are prime candidates for research when the focus is on metaphors of modality (cf. Chapter Two: Sections 2.2 and 2.1.2). Thus, the first step of analysis involved searching for metaphor candidates in the lists of collocates (lemmatised and part-of-speech tagged) and the Word Sketches of the two keywords, and running concordances for *crisis* and *crisi* in combination with Modal Adjuncts and mental Process verbs (e.g. *probably*, *possibly*, *think*, *guess*, *believe* and their Italian equivalents: the set of words was defined according to Halliday and Matthiessen 2004: 82 and 210). As a result, a first group of relevant concordance lines were identified and analysed. Table 3.3 below shows, by way of example, a set of lemmas that were marked as potential realisations of grammatical metaphor within the collocate list for *crisis* in the FT_First_page sub-corpus, in the range from 5 items to the left to 5 items to the right of the node word. For each word in the table, the raw frequency and the supposed metaphorical shift are indicated.

Lemma	Raw frequency	Metaphorical shift (?)
response	6	Process (congruent) → Thing (metaphorical)
fear (N)	6	Process (congruent) → Thing (metaphorical)
deepen	5	Quality (congruent) → Process (metaphorical)
repeat (N)	4	Process (congruent) → Thing (metaphorical)
possible	2	Modality: objective: explicit (e.g. *it is possible that*)

Table 3.3 Metaphor candidates in the list of collocates for *crisis* in FT_First_page

Since there was a high risk of overlooking meaningful patterns by relying only on corpus-assisted investigation, after this pilot survey the remaining concordances of *crisis* and *crisi* were manually searched. Overall, the analysis showed a significant presence of ideational metaphors, as opposed to a much lower frequency of metaphors of modality (limited to

modalization: probability and modulation: obligation, though nominalizations of inclination were occasionally found in lexical units like *willingness* and *volontà*). Even if they represent a small percentage of the total occurrences of grammatical metaphor in the texts, metaphors of modality were nonetheless taken into account in the final discussion, due to the significant role they play in the expression of attitude and authorial stance (cf. Chapter Four, Section 3.2). Textual metaphors, by contrast, hardly emerged from the analysed data set at all and so are not considered at this stage; it must be noted, though, that the low figures in this case may be a consequence of the technique of analysis employed. In fact, concordance analyses necessarily work on limited chunks of text, and thus 'clash' with the function of the Theme/Rheme structure, which is inherently textual, and *logogenetic*[5]: it links each clause to the wider co-text, and makes a substantial contribution towards creating 'texture' through its progression (cf. Miller 2004: 93; cf. also Chapter Two, Section 1.4). Hence, the use of textual metaphors in relation to the words *crisis* and *crisi* might have only partially emerged within the boundaries of the analysed concordances[6].

Ideational metaphors were identified on the basis of the same criteria in English and Italian, since the congruent pattern of realisation of sequences, figures, and elements within figures is equivalent in the two languages: this is summarised in Table 3.4 below.

Semantics	**Lexico-grammar**
Sequence of figures	↘ Clause complex
Figure	↘ Clause
Element: Process	↘ Verbal Group
Element: Participant: Thing	↘ Nominal Group
Element: Participant: Quality	↘ Adjectival Group
Element: Circumstance	↘ Prepositional Phrase / Adverbial Group
Logical relation	↘ Conjunction / Conjunctive Adjunct

Table 3.4 Congruent realisation of sequences, figures and elements in English and Italian (based on Halliday and Matthiessen 1999: 236)

[5] Logogenesis is defined by Halliday and Matthiessen as "[…] the instantial construction of meaning in the form of a text […] in which the potential for creating meaning is continually modified in the light of what has gone before" (1999: 118).

[6] Indeed, as a possible future development of this work, it would be interesting to study the thematic development (including but not limited to textual metaphors) of the articles concerning the crisis, although this would imply changing the method of analysis, and focusing on their full-text version.

The metaphorical realisation of Ideational meanings also proceeds along the same lines in English and Italian (the typology follows the one proposed for English by Halliday and Matthiessen 2004: 646-652; cf. also Chapter Two, Section 2.2):

1. A sequence of figures can be downgraded via metaphor from the domain of clause complex to that of clause.
   a) If the logical relation in the congruent clause complex is one of expansion, one of the figures may be metaphorically realised as a Prepositional Phrase (matching the meaning of the congruent relator), and inserted into the other. Alternatively, both figures may be incongruently realised as groups/phrases, which function as participants in a new (usually relational) clause. In the latter case, it is the verb representing the Process that matches the meaning of the congruent relator.
   b) If, on the contrary, the logical relation in the congruent clause complex is one of projection, the projected figure may be incongruently realised as a Nominal Group functioning as Phenomenon or Verbiage (depending on the nature of the Process in the projecting figure, i.e. whether it is mental or verbal), or as an embedded fact clause. Alternatively, the projecting figure may be realised incongruently as a noun of projection (e.g. *assertion*, *claim*, *osservazione*, *affermazione*), functioning as Head of a Nominal Group: in this case, the projected figure is also incongruently realised as a downranked clause, serving as Qualifier within the same Nominal Group.
2. A figure, or part of a figure, can be metaphorically realised as a group.
   a) In some cases, the metaphor only involves the part of the figure containing the Process: this is nominalised, but the clause is retained as the domain of realisation through the insertion of a new Process. This happens when a time-phased Process (e.g. *we begin to inspect*, It. *iniziamo a ispezionare*) is re-construed as Thing plus separate Process (*inspection begins*, It. *l'ispezione inizia*), or when a Process is re-construed as Range plus new Process meaning 'perform' (e.g. *act* → *take action*, It. *agire* → *fare un'azione*).
   b) In other cases, the metaphor involves all of the figure, but the clause is still retained as the domain of realisation through the insertion of a new Process meaning 'happen', or of an Existential Process (e.g. *there are constant interruptions*, It. *ci sono interruzioni continue*).

c) In other cases still, the metaphor involves all of the figure, and the domain of realisation is downgraded from clause to group. Perhaps the most frequent pattern involves the nominalization of the Process, but another possibility is the nominalization of a Quality (e.g. *loyal friends are important → the importance of loyal friends*, It. *gli amici leali sono importanti → l'importanza degli amici leali*). As a result, the other elements are generally rank-shifted and function as Modifiers within the metaphorical Nominal Group.

3. As already shown by points 1 and 2 above, ideational metaphor starts at a certain level within the rank scale (i.e. with a clause nexus or a clause as the congruent domain of realisation), but its effects extend to the lower-rank components of the same structure, by means of what might be called a "domino effect" (Halliday and Matthiessen 2004: 646). Thus, when a metaphor downgrades a figure (either single, or one belonging to a sequence), it also simultaneously produces a re-alignment in the lexico-grammatical realisation of its elements. Various possible metaphorical shifts involving elements in English and Italian are examined in more detail below:

a) A Process may be realised as a Nominal Group, or even as a Modifier within a Nominal Group.

b) A participant (Thing) may be realised as a Modifier within a different Nominal Group, or as a Verbal Group serving as Process.

c) A participant (Quality) may be realised as a Nominal Group serving as Thing, or as a Verbal Group serving as Process.

d) A circumstance may be realised as a Nominal Group serving as Thing, as a Modifier in a Nominal Group, or as a Verbal Group serving as Process.

e) Finally, the relator may be realised as a Prepositional Phrase introducing a circumstance, or as a Verbal Group serving as Process (cf. point 1 above).

In the analysis of the data from *The Financial Times* and *Il Sole 24 Ore* corpus, different types of grammatical metaphor were identified on the basis of this general typology and classified accordingly (cf. Chapter Four, Section 3).

In the case of metaphors of modality, in the absence of a typology for the Italian language, it was necessary to develop a specific paradigm on the basis of the one devised for English by Halliday and Matthiessen (2004: 613-625), to account for the variety of impersonal expressions of deontic modality that the system of Italian makes available. A proposal for a

comparison between the patterns of realisation of metaphors of modality in English and Italian is summarised in the table below.

Modalization: probability				
	Subjective: explicit	**Subjective: implicit**	**Objective: implicit**	**Objective: explicit**
English	*I think* John knows	John *may* / *will* know	John *probably* knows	*It is likely that* John knows (John is likely to know)
Italian	*Credo* / *penso* che John sappia	John *potrebbe* sapere / John *saprà* [senz'altro]	John *probabilmente* sa	*È possibile* / *probabile* che John sappia

Modalization: usuality				
	Subjective: explicit	**Subjective: implicit**	**Objective: implicit**	**Objective: explicit**
English	[systematic gap]	John'*ll* / *would* go to church every Sunday	John *usually* goes to church on Sunday	*It's usual* for John to go to church on Sunday
Italian	[systematic gap]	John *va* in chiesa tutte le domeniche [modal meaning expressed by tense + aspect rather than by modal verb]	John *di solito* / *abitualmente* va in chiesa di domenica	*È normale* / *è consuetudine* per John andare in chiesa di domenica

Modulation: obligation				
	Subjective: explicit	**Subjective: implicit**	**Objective: implicit**	**Objective: explicit**
English	*I want* John to know	John *should* / *must* know	John *is supposed* to know	*It is expected* that John knows
Italian	*Voglio* che John sappia	John *dovrebbe* / *deve* sapere	John *è tenuto* a sapere	*Ci si aspetta* / *bisogna* / *occorre* / *è necessario* che John sappia; *Bisogna* / *occorre* / *è necessario* sapere / *va saputo* [impersonal]

[continues on the next page]

Modulation: inclination				
	Subjective: explicit	**Subjective: implicit**	**Objective: implicit**	**Objective: explicit**
English	[systematic gap]	I'*ll* help you	I *am keen* / *eager* to help you	[systematic gap]
Italian	[systematic gap]	Ti *aiuto* / *aiuterò* io [usually with S/V inversion]	Sono *desideroso* [marked] / *impaziente* / di aiutarti	[systematic gap]

Table 3.5 Congruent and metaphorical realisations of modalization and modulation in English and Italian (based on Halliday and Matthiessen 2004: 620)

As can be noticed, the main differences between English and Italian can be found in the area of modulation: obligation; in fact, in Italian objective explicit orientation is frequently realised by verbs with modal connotations such as *bisognare* and *occorrere* within impersonal constructions, and by periphrastic structures such as *andare* + past participle of the lexical verb (e.g. *va detto*, *va fatto*), or *essere da* + infinitive of the lexical verb (e.g. *è da fare*, *è da dire*). The expression *essere necessario* + infinitive or fact clause was also considered as a metaphorical realisation of modulation (obligation), on the objective: explicit side of the cline. In this case there was a direct equivalent in English, i.e. *it is necessary to*/*that*, though no instances of it were found in the data under examination.

The results of the analysis in terms of both conceptual and grammatical metaphors, carried out following the methodology described in the previous pages, are presented and discussed in the next chapter.

This page is intentionally left blank

Chapter Four
Metaphorical Representations of the Crisis in *The Financial Times* and *Il Sole 24 Ore* 2008

1. Preliminary considerations

Towards the end of 2007, several events in the European banking system suggested that the so-called *U.S.* or *subprime* crisis would soon go beyond the United States' national borders and affect other economies. According to Goddard, Molyneux and Wilson (2009), the crisis hit the United Kingdom already in September 2007, when the Bank of England, as a lender of last resort, granted financial support to the retail bank Northern Rock, which was experiencing serious liquidity problems. The move did not solve the bank's financial difficulties, and several other national aids followed. A few months later (February 2008), Northern Rock was finally nationalised, after a long but fruitless search for a private buyer. Financial institutions in other European countries faced similar problems in the same period: in Germany, IKB Deutsche Industriebank called on an emergency line of credit in August 2007, while, in Switzerland, UBS (one of Europe's largest banks) started announcing write-downs related to the mortgage crisis in October 2007. According to the authors, the situation of the banking sector was less alarming in Italy, where "[…] banks faced a lower subprime exposure than those in some other countries" (2009: 370). Still, as a quick look at the titles of the first page articles in *Il Sole 24 Ore* shows, the effects of the credit crunch on the money and the financial markets were felt here too; further, in the first half of 2008 Italy was already grappling with rising inflation rates, surging commodity prices, and a slowing economy. Concerns about the size and severity of the crisis grew during the year 2008, especially after Lehman Brothers' bankruptcy in September. The lexical structure of *The Financial Times* corpus and *Il Sole 24 Ore* corpus seems to reflect this general situation, presenting the crisis as a recurring theme. The figures in the following pages show the top 40 results, ordered by frequency, of a lemmatised Wordlist for each of the four sub-corpora:

S24O_Prima_pagina [311.640 words]				**S24O_Editoriali** [244.456 words]			
Lemma (1-21)	Frq.	Lemma (22-40)	Frq.	Lemma (1-21)	Frq.	Lemma (22-40)	Frq.
banca	903	borsa	370	mercato	703	tempo	306
mercato	724	fiscale	364	banca	605	dire	301
euro	685	titolo	343	economia	545	crescita	300
governo	620	impresa	326	crisi	527	problema	279
crisi	563	lavoro	324	perché	510	Paesi	279
ministro	548	settore	324	impresa	510	dare	270
dollaro	545	Street	315	pubblico	509	interesse	265
finanziario	537	fondo	313	politica	490	rischio	261
dire	518	Wall	311	finanziario	486	mondo	256
tasso	448	perché	305	Italia	456	fondo	250
Italia	441	credito	301	europeo	445	lavoro	246
prezzo	440	aumento	299	politico	439	costo	243
economia	434	inflazione	298	paese	434	nazionale	242
presidente	431	intervento	295	sistema	418	fiscale	238
europeo	429	rischio	289	italiano	390	punto	222
pubblico	418	economico	288	parte	389	internazionale	221
piano	409	dato	287	economico	353	euro	220
parte	400	Tremonti	280	prezzo	341	mettere	212
crescita	399	costo	280	governo	327	Stato	210
punto	385			americano	314		
italiano	384			Europa	312		

Figure 4.1 Wordlist for S24O_Prima_pagina and S24O_Editoriali: top 40 results

As clearly emerges from Figure 4.1, the frequency of *crisi* (same form in singular and plural contexts) is significantly high in both the Italian sub-corpora, where it appears among the five most frequent lemmas. In S24O_Prima_pagina, *crisi* ranks fifth with a total of 563 occurrences, i.e. approximately 1 every 553 words: a high value, especially if we take into account the average length of an article in this sub-corpus, which is 893 words. Its use appears even more relevant in S24O_Editoriali, where it ranks fourth with a total of 527 occurrences, approximately 1 every 464 words, and the average length of a single article is 823 words. On the basis of the rough picture of the vocabulary offered by Wordlists, we could tentatively say that crises (not necessarily the global crisis, as far as we know at this stage) were a major subject in *Il Sole 24 Ore* in 2008, at least in first page articles and leaders; further, in both these sections finance and economics were closely intertwined with politics, as indicated by the high frequency of lemmas such as *banca*, *mercato*, *borsa* on the one hand, and *governo*, *ministro*, *politica* on the other.

FT_First_page [154.408 words]				**FT_Leaders** [152.773 words]			
Lemma (1-21)	Frq.	Lemma (22-40)	Frq.	Lemma (1-21)	Frq.	Lemma (22-40)	Frq.
say	1362	new	265	bank	725	tax	227
bank	1352	move	264	government	580	crisis	210
market	639	credit	256	US	502	public	209
US	542	deal	249	price	435	economic	209
government	476	mortgage	242	need	418	world	206
rate	435	capital	232	market	412	inflation	205
price	419	high	232	now	381	interest	198
fall	407	executive	230	rate	352	oil	189
company	389	tax	228	UK	300	rise	185
last	378	big	222	financial	299	Obama	184
financial	351	business	221	economy	298	right	183
UK	342	close	220	policy	293	last	179
cut	320	Treasury	212	good	268	high	177
share	313	economy	212	credit	265	plan	175
plan	304	inflation	209	new	261	Brown	173
take	289	Darling	206	fall	260	problem	166
dollar	285	pound	203	risk	258	big	165
investor	277	crisis	203	take	256	look	161
come	274	fund	200	country	251	minister	160
expect	273			time	238		
rise	269			cut	230		

Figure 4.2 Wordlist for FT_First_page and FT_Leaders: top 40 results

Turning now to the English data, Figure 4.2 shows a different ranking for *crisis* (a lemmatised form grouping the inflected forms *crisis* and *crises*) in *The Financial Times* sub-corpora, though in both cases the frequency values, considered against the total number of words, are still significant. In FT_First page, where the average length of an article is 498 words, *crisis* is number 39 of the Wordlist with 203 occurrences, i.e. approximately 1 every 761 words. In FT_Leaders, *crisis* is slightly more frequent: it ranks twenty-third, with 210 occurrences, approximately 1 every 727 words, the average length of a single article being almost the same as that of FT_First-page (493 words). The semantic fields of the top 40 items in the Wordlists for the English sub-corpora confirm the observations already made for *Il Sole 24 Ore* with reference to the close interconnection between economic and political matters, which are clearly given much space in the business press (as shown by lexical units such as *government*, *policy*, *minister* and *Darling* – referring to Alistair Darling, chancellor of the Exchequer under the Labour government in 2008).

However, a Wordlist only orders the words (or lemmas) that appear in a corpus according to their frequency of occurrence, without disambiguating their different senses or referents. As already noticed in Chapter Three, *crisi* in *Il Sole 24 Ore* corpus may well refer to the near-collapse of Italy's flag-carrier airline, Alitalia, which was rescued by a group of Italian entrepreneurs only in September 2008, after months of negotiations and the failure of a takeover bid by AirFrance-KLM. A clearer picture of a word's (or lemma's) grammatical and lexical environment is provided by a collocate list. Figure 4.3 in the following page shows the top 15 immediate left hand collocates for *crisis*, and the top 15 immediate right hand collocates for *crisi* in the four sub-corpora. The results are sorted by logDice (Rychlý 2008), a measure of collocational strength that, differently from other statistics such as MI3 and log-likelihood, tends to exclude very frequent functional words from the top of the list. Overall, the financial/economic sense of the search terms *crisis* and *crisi* prevails in all the four sub-corpora. Other possible senses emerge only sporadically: these include mentions of the *food crisis* and the *Georgia crisis* in *The Financial Times*, and mentions of the Alitalia crisis in *Il Sole 24 Ore*. Indeed, in the latter case, the number of occurrences is lower than expected: as shown by Figure 4.3, the collocation *crisi Alitalia* appears only 3 times in S24O_Prima_pagina, while it is never used in S24O_Editoriali; even a closer scrutiny of the concordances for *crisi del* and *crisi della* retrieves only a few other results (e.g. *la crisi del trasporto aereo italiano*). The collocate lists also reveal the multifaceted nature of the crisis affecting the world's finance and economy. Though it is mainly referred to as a *financial crisis* (or *crisi finanziaria*), in three of the four sub-corpora (with the exception of FT_First_page, where *credit* appears more frequently as a pre-modifier), it is also represented as spreading across different interconnected sectors, as shown by modifiers such as *economic*, *banking*, *market*, *currency*, *equity*, and *creditizia*, *economica*, *bancaria*, *immobiliare*. Interestingly, the collocation *global crisis*/*crisi globale* appears relatively late in all the sub-corpora: it is first mentioned on May 1st in FT_First_page and S24O_Editoriali; on September 23rd in S24O_Prima_pagina, and on November 3rd in FT_Leaders.

Finally, it is worth noting that – even though the two words are clearly polysemous, and can be used in both languages in a number of different contexts, provided that these share a semantic trait of 'danger' or 'difficulty' – *crisi* seems to be a more flexible term, i.e. it seems to spread across a wider semantic space than that covered by *crisis* in English.

FT_First_page			FT_Leaders			S24O_Prima_pagina			S24O_Editoriali		
	Freq	logDice		Freq	logDice		Freq	logDice		Freq	logDice
credit	46	11.681	financial	39	11.294	finanziario	70	11.026	finanziario	94	11.570
financial	25	10.530	credit	14	9.916	economico	12	8.852	economico	16	9.219
economic	7	9.381	banking	8	9.800	immobiliare	8	8.593	sistemico	10	9.200
banking	5	9.050	current	8	9.752	globale	7	8.492	globale	10	8.850
mortgage	7	9.010	economic	6	8.874	del	87	8.383	attuale	8	8.692
Rock	4	8.902	immediate	3	8.727	creditizio	6	8.354	bancario	6	8.152
global	4	8.599	another	3	8.318	internazionale	6	8.083	del	43	7.903
Georgia	3	8.585	currency	3	8.259	profondo	4	7.793	immobiliare	4	7.845
equity	3	8.245	Georgian	2	8.193	nascere	3	7.347	internazionale	5	7.775
subprime	2	8.193	systemic	2	8.180	attuale	3	7.219	americano	5	7.606
funding	2	8.040	subprime	2	8.161	Alitalia	3	6.902	?	5	7.075
cash	2	7.850	Rock	2	7.886	americano	3	6.885	violento	2	6.942
market	4	7.282	food	2	7.860	economico-finanziario	2	6.845	.	36	6.925
flow	1	7.279	a	22	7.598	sistemico	2	6.840	della	15	6.894
systemic	1	7.265	political	2	7.561	innescare	2	6.815	subprime	2	6.855

Figure 4.3 Left hand collocates for *crisis* and right hand collocates for *crisi*, sorted by logDice

In order to provide evidence for this claim, I carried out a study of the collocational behaviour of the two words within two larger corpora, itWac (1,6 billion words) and ukWaC (1,3 billion words)[1], in the conviction that:

> The meaning of a word cannot be observed. The only thing that we can observe is evidence from which meanings can be reliably inferred, and the most reliable sources of evidence for the study of word meanings able to complement the necessarily partial lexical competence of native speakers are corpora. (Bertuccelli Papi and Lenci 2007: 27).

I thus ran a search for the collocates of *crisis* and *crisi* in the two corpora, asking the program to order them according to logDice, excluding those with less than 30 occurrences; I then compared the results, with a view to identifying similarities and differences in the semantic fields of the collocates in English and Italian[2]. Table 4.4 below illustrates some relevant

[1] These are two lemmatised, part-of-speech tagged corpora, constructed by crawling the .it and the .uk Internet domains respectively (cf. Baroni and Ueyama 2006; Ferraresi, Zanchetta, Baroni and Bernardini 2008). The corpora are available in the Sketch Engine.

[2] For *crisis*, the search was performed in the range from the node word up to three items to the left; for *crisi*, it was performed in the range from the node word up to the three items to the right, in order to include phrases like *crisi di* + Noun.

findings, primary among which is that the number of hits in the Italian corpus is much higher (more than three times that of the English corpus).

Corpus: itWaC Total hits for *crisi*: 185.966			Corpus: ukWaC Total hits for *crisis*: 59.782		
Collocate + ranking	logDice	Freq.	Collocate + ranking	logDice	Freq.
a. Semantic fields: Business / Politics / Environment					
1) economico	8.358	8584	2) economic	7.946	1753
12) finanziario	7.011	2398	3) financial	7.594	1595
19) politico	6.479	2804	20) political	6.545	819
27) energetico	6.154	545	50) energy	5.584	402
38) ambientale	5.640	683	53) environmental	5.491	276
b. Semantic field: Physical health					
59) cardiaco	5.312	246	--	--	--
72) convulsivo	5.121	198	--	--	--
75) respiratorio	5.057	204	--	--	--
--	--	--	6) foot-and-mouth	7.240	284
--	--	--	31) AIDS	6.182	195
--	--	--	49) injury	5.632	248
67) ipertensivo	3.850	82	163) hypertensive	4.023	30
c. Semantic fields: Mental state / Emotions					
5) identità	7.345	1642	11) identity	6.849	510
14) depressivo	6.590	559	--	--	--
15) esistenziale	6.588	596	81) existential	4.909	57
30) isterico	6.007	373	--	--	--
39) coscienza	5.651	483	--	--	--
42) coniugale	5.619	291	--	--	--

Table 4.4 Comparison between the collocates of *crisi* and *crisis* in itWaC and ukWaC

According to the results, as far as the semantic fields of business, politics and environment are concerned, *crisis* and *crisi* show considerable similarities in terms of collocate selection, with only slight differences in frequency. A different picture emerges from the domain of physical health: here, the two words generally exhibit different collocational preferences, which may be culturally or socially motivated (e.g. the culture-specific collocation *foot-and-mouth crisis*, at the top of the list in ukWaC, refers to the crisis that hit British agriculture and tourism in 2001, after a severe epidemic of foot-and-mouth disease spread across the country, causing massive death of cattle, sheep and poultry). When we consider the last part of the table, the usage of the two words, as emerges from their collocational patterns, diverges to a great

extent. In fact, *crisi* seems to be more strongly connected than *crisis* with the semantic fields of mental state and emotions: the latter, in particular, emerges only sporadically from the English collocate list, and always in quite generic expressions such as *personal crisis* (243 occurrences in the whole corpus), or *emotional crisis* (90 occurrences). Furthermore, *crisi* covers a multifaceted semantic space within these general domains, ranging from the area of mental health (*depressivo*, *isterico*), to that of private life (*coniugale*) and morals (*crisi di coscienza*). Even when equivalent collocates are found in the two languages, they still differ significantly in terms of frequency (as is the case with *crisi di identità*, 1642 occurrences in itWaC, *vs. identity crisis*, 510 occurrences in ukWaC). Such differences are reflected in the conceptualisation of the financial/economic crisis as HEALTH in the two languages; I shall come back on this point in Section 2.3 below.

2. Conceptual metaphors

After discarding irrelevant results following the methodology described in Chapter Three (Section 2), the analysis was carried out on the total number of concordances for *crisis* and *crisi*: 999 in the Italian corpus (514 in S24O_Prima_pagina and 485 in FT_First_page), and 357 in the English corpus (180 in FT_First_page and 177 in FT_Leaders). Before discussing the metaphors in more detail, it is worth noting that the number of metaphorical concordances, i.e. sentences that contain at least one metaphor involving *crisis* or *crisi*, was found to be significantly high in the four sub-corpora (in all cases exceeding 50% of the total analysed concordances), as shown by the table below:

Sub-corpus	Analysed concordances	Metaphorical concordances	%	Total % in corpus
FT_First_page	180	95	52.8 %	55.2 %
FT_Leaders	177	102	57.6 %	
S24O_Prima_pagina	514	282	54.9 %	54.5 %
S24O_Editoriali	485	263	54.2 %	

Table 4.5 Percentage of metaphorical concordances (conceptual metaphor) in *The Financial Times* corpus and *Il Sole 24 Ore* corpus

The tables in the following pages show, for each sub-corpus, the number and types of identified conceptual metaphors (at least one, but in some cases more than one per concordance), together with their lexical realisations. Each metaphor was assigned to one of two main categories (a. orientational/ontological or b. structural) and, within these, to a specific class, depending on the source domain involved in the mapping. Orientational and ontological metaphors were grouped together and separated from structural metaphors in view of the different levels of complexity involved: in fact, structural metaphors are based on highly structured source domains, which are in turn composed of more basic, or primary, metaphors (cf. Chapter One, Section 3.1). The category of orientational/ontological metaphors includes 8 classes:

1. RELIGION
2. SUPERNATURAL FORCE
3. LIVING BEING (UNSPECIFIED)
4. HUMAN BEING
5. ANIMAL
6. PLANT
7. PHYSICAL OBJECT/SUBSTANCE
8. CONTAINER

For the purposes of classification, these are hierarchically arranged in the tables below on the basis of the Great Chain of Being paradigm (Lakoff and Turner 1989; cf. also Chapter One, Section 3.1). The category of structural metaphors, instead, includes 7 classes:

1. COMPETITION/GAME
2. HEALTH
3. MACHINE/VEHICLE
4. NATURAL FORCE/WEATHER
5. SHOW BUSINESS
6. JOURNEY
7. WAR/CONFLICT

Each table indicates: a. the lexical units instantiating the metaphors; b. their frequency of occurrence; c. the area of the source concepts they tend to foreground, if present ('Focus_on' column). Indications in brackets within the 'Lexical Units' column refer to the grammatical relationship between the lexical unit and the node word: (Obj_of) means that *crisis*/*crisi* is the Object of the lexical unit (verb), while (PP_prep) means that it is the Head of a Prepositional Phrase that is directly dependent on the lexical unit. When no indication is given, it is implied that either *crisis* / *crisi* functions as the grammatical Subject of the lexical unit (verb), or it is connected to the lexical unit by another type of grammatical or logical relationship.

Item: **CRISIS** Sub-corpus: FT_First_page Total number of metaphors: 118			
a. ONTOLOGICAL / ORIENTATIONAL METAPHORS (based on the *Extended Great Chain of Being*)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
SUPERNATURAL ELEMENTS			
RELIGION → --	--	--	
SUPERNATURAL FORCE → --	--	--	
NATURAL / PHYSICAL ELEMENTS			
LIVING BEING (UNSPECIFIED) → **1**	*grow*	1	
HUMAN BEING → **3**	*await*	1	
	face (PP_of)	1	
	take toll	1	
ANIMAL → --	--	--	
PLANT → **1**	*ramifications* (PP_of)	1	EXTENSION
PHYSICAL OBJECT / SUBSTANCE → **33**	*ahead* (PP_of)	1	
	brew	1	LIQUID SUBSTANCE
	contain (Obj_of)	1	IMPEDE MOTION
	curtail (Obj_of)	1	
	decline	1	DOWNWARD MOTION
	engulf	2	LIQUID SUBSTANCE
	faced (PP_with) [different from intentionally facing the crisis → WAR / CONFLICT]	1	
	fuel (Obj_of)	1	INFLAMMABLE SUBSTANCE
	get rid (PP_of)	1	
	halt (Obj_of)	1	IMPEDE MOTION
	handle (Obj_of)	1	
	impact (PP_of)	1	UNCONTROLLED MOTION + PHYSICAL CONTACT
	large	1	EXTENSION

	peak (PP_of)	1	NATURAL PHYSICAL OBJECT
	roil	1	MOTION + LIQUID SUBSTANCE + LACK OF TRANSPARENCY
	scale (PP_of)	2	
	slash	1	SHARP OBJECT + VIOLENCE
	spot (Obj_of)	1	
	spread / *spread* (PP_of)	3	MOTION
	surround	1	
	tackle (Obj_of)	6	
	turn around (Obj_of)	1	CAUSE MOTION
	wake (PP_of)	2	MOTION IN WATER
CONTAINER → **18**	*deepen*	4	
	depth (PP_of)	2	
	dig stg. (PP_out of)	1	
	emerge (PP_from)	1	
	(*be*) (PP_in)	7	
	shop one's way (PP_out of)	1	
	*steer stg. (*PP_out of)	2	

b. STRUCTURAL METAPHORS (in alphabetical order)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
COMPETITION / GAME → --	--	--	
HEALTH → **11**	*claim*	1	crisis = CAUSE OF DEATH
	dislocation	1	
	fall victim (PP_to) / *victim* (PP_of)	3	crisis = CAUSE OF DEATH
	immune (PP_to / PP_from)	2	crisis = ILLNESS

	nurse stg. back to health	1	crisis = ILLNESS
	survive (Obj_of)	1	crisis = CAUSE OF DEATH
	vulnerable	1	crisis = ILLNESS
	weaken	1	crisis = ILLNESS
MACHINE / VEHICLE → **2** *Entails*: PHYSICAL OBJECT	*trigger* (Obj_of)	2	
NATURAL FORCE / WEATHER → **13** *Entails*: PHYSICAL OBJECT / SUBSTANCE	*bleakest day* (PP_in)	1	
	call for all hands on deck	1	EMERGENCY AT SEA
	devastate	1	NATURAL DISASTER
	epicentre (PP_of)	1	NATURAL DISASTER
	expose (PP_to)	1	
	fallout (PP_from)	2	NUCLEAR DISASTER
	lifeline	1	EMERGENCY AT SEA
	rock	1	
	stem (Obj_of)	1	crisis = RIVER / TIDE
	storm	1	
	upheaval	1	NATURAL DISASTER
	weather (Obj_of)	1	crisis = STORM
SHOW BUSINESS → --	--	--	
JOURNEY → **8** *Entails*: PHYSICAL OBJECT + MOTION + PATH SCHEMA	*bring stg.* (PP_to)	1	crisis = DESTINATION
	(*be* / *get*) *through*	4	crisis = PATH
	come	1	crisis = TRAVELLER
	run-up (PP_to)	1	crisis = DESTINATION
	turn (PP_in)	1	crisis = PATH
WAR / CONFLICT → **28** *Entails*: LIVING BEING	*casualty* (PP_of)	4	
	combat (Obj_of)	2	crisis = ENEMY
	face	3	crisis = ENEMY
	face (Obj_of)	3	crisis = ENEMY
	fuel turmoil	1	
	hit	5	PHYSICAL COMBAT
	inflict harm	1	PHYSICAL COMBAT
	jolt	1	PHYSICAL COMBAT
	pose threat	1	crisis = ENEMY
	present united front	1	crisis = ENEMY

	quell (Obj_of)	1	
	scramble	1	
	strangle	1	PHYSICAL COMBAT
	struggle	1	PHYSICAL COMBAT
	threaten	1	crisis = ENEMY
	three-pronged strategy	1	crisis = ENEMY

Table 4.6 Conceptual metaphors and linguistic realisations in the FT_First_page sub-corpus

Item: **CRISIS** Sub-corpus: FT_Leaders Total number of metaphors: 118

a. ONTOLOGICAL / ORIENTATIONAL METAPHORS (based on the *Extended Great Chain of Being*)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
SUPERNATURAL ELEMENTS			
RELIGION → --	--	--	
SUPERNATURAL FORCE → --	--	--	
NATURAL / PHYSICAL ELEMENTS			
LIVING BEING (UNSPECIFIED) → --	--	--	
HUMAN BEING → **7**	*be the child of stg.*	1	
	deflect blame towards someone	1	
	legacy (PP_of)	1	
	lesson (PP_of)	1	
	(*not*) *respect national borders*	1	
	teach lessons	1	
	thrust Sarkozy and Brown together	1	
ANIMAL → --	--	--	
PLANT → **2**	*full-blown*	1	
	roots (PP_of)	1	
PHYSICAL OBJECT / SUBSTANCE → **33**	*ahead of*	2	
	arise from	1	UPWARD MOTION
	be with us	1	
	crucible (PP_of)	1	
	drive	1	CAUSE MOTION
	emerge	1	UPWARD MOTION
	engulf	1	LIQUID SUBSTANCE
	escalate	1	UPWARD MOTION

	grasp (Obj_of)	2	
	halt (Obj_of)	1	IMPEDE MOTION
	handle (Obj_of)	2	
	have an impact	1	UNCONTROLLED MOTION + PHYSICAL CONTACT
	long line (PP_of)	1	
	overcome (Obj_of)	1	
	precipitate (Obj_of)	1	DOWNWARD MOTION
	scale (PP_of)	2	
	size (PP_of)	1	
	spiralling	1	CIRCULAR MOTION + SPEED
	spread	2	MOTION
	stave off (Obj_of)	3	
	tackle (Obj_of)	2	
	turn (Obj_of)	2	CAUSE MOTION
	turn page (PP_on)	1	
	weight (PP_of)	1	WEIGHT
CONTAINER → **25**	*deep*	1	
	depth (PP_of)	1	
	emerge (PP_from)	1	
	(*be*) (PP_in)	18	
	in the middle / midst (PP_of)	2	
	way out (PP_of)	2	

b. STRUCTURAL METAPHORS (in alphabetical order)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
COMPETITION / GAME → **5**	*beat* (Obj_of)	1	crisis = OPPONENT
	challenge	1	

	change the rules of the game	1	
	confront [in challenge]	1	crisis = OPPONENT
	raise stakes	1	crisis = GAMBLING GAME
HEALTH → **20**	*claim victim*	1	crisis = CAUSE OF DEATH
	diet	1	EXCESSIVE FOOD
	folly	1	MENTAL HEALTH
	hangover	1	EXCESSIVE DRINKING
	palliative measure	1	crisis = ILLNESS
	paralyse	1	
	prescribe	1	crisis = ILLNESS
	revive stg. [after crisis]	1	crisis = ILLNESS
	suffer (Obj_of / PP_for)	2	crisis = ILLNESS
	symptom [crisis is symptom of stg.]	1	
	symptom (PP_of) [stg. is symptom of crisis]	2	crisis = ILLNESS
	survive (Obj_of)	1	crisis = CAUSE OF DEATH
	toxic assets	2	crisis = ILLNESS
	vulnerable	1	crisis = ILLNESS
	(*reveal* / *expose*) *weakness*	2	crisis = ILLNESS
	win someone a new lease of life	1	crisis = CURE
MACHINE / VEHICLE → -- *Entails*: PHYSICAL OBJECT	--	--	
NATURAL FORCE / WEATHER → **8** *Entails*: PHYSICAL OBJECT / SUBSTANCE	*fallout* (PP_from)	1	NUCLEAR DISASTER
	meltdown	1	NUCLEAR DISASTER
	sweep	3	crisis = STORM / WIND
	turn tide (PP_on)	1	
	umbrella (against crisis)	2	
SHOW BUSINESS → --	--	--	
JOURNEY → **11** *Entails*:	*arrive*	2	crisis = TRAVELLER
	bring stg. home	1	crisis = TRAVELLER

PHYSICAL OBJECT + MOTION + PATH SCHEMA	*come*	1	crisis = TRAVELLER
	head (PP_into)	1	crisis = DESTINATION
	lead (PP_to) [e.g. collapse would have led to crisis]	1	crisis = DESTINATION
	lead to [e.g. crisis must lead to reforms]	2	crisis = PATH
	pass	1	crisis = TRAVELLER
	run-up (PP_to)	1	crisis = DESTINATION
	short-cuts (PP_through)	1	crisis = PATH
WAR / CONFLICT → **7** *Entails*: LIVING BEING	*beleaguer*	1	crisis = ENEMY
	combat (Obj_of)	2	crisis = ENEMY
	fight (Obj_of)	1	PHYSICAL COMBAT
	focus fire (PP_on)	1	crisis = ENEMY
	hit	1	PHYSICAL COMBAT
	throw obstacles	1	crisis = ENEMY

Table 4.7 Conceptual metaphors and linguistic realisations in the FT_Leaders sub-corpus

Item: **CRISI** Sub-corpus: S24O_Prima_pagina Total number of metaphors: 330

a. ONTOLOGICAL / ORIENTATIONAL METAPHORS (based on the *Extended Great Chain of Being*)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
SUPERNATURAL ELEMENTS			
RELIGION → **1**	*sacrificare sull'altare* (PP_di)	1	
SUPERNATURAL FORCE → **1**	*spettro* (PP_di)	1	
NATURAL / PHYSICAL ELEMENTS			
LIVING BEING (UNSPECIFIED) → **5**	*anatomia* (PP_di)	1	
	nascere	3	
	trovare alimento	1	
HUMAN BEING → **7**	*a due facce*	1	
	complice	1	
	conto (PP_di)	1	
	dettare una fusione	1	
	distinguere tra colletti bianchi e colletti blu	1	
	testarda	1	
	volto (PP_di)	1	
ANIMAL → **3**	*mordere / morsi* (PP_di)	2	FIERCENESS
	preda (PP_di)	1	FIERCENESS
PLANT → --	--	--	
PHYSICAL OBJECT / SUBSTANCE → **96**	*a catena*	1	EXPLOSIVE SUBSTANCE
	accelerazione (PP_di)	1	MOTION + SPEED
	affondare	1	CAUSE DOWNWARD MOTION
	all'ombra (PP_di)	1	DARKNESS
	allargarsi	1	
	attanagliare	1	IMPEDE MOTION
	base (PP_di)	1	

	cadere (PP_su)	1	CAUSE DOWNWARD MOTION
	capitolo (PP_di)	1	
	contorni (PP_di)	1	
	di fronte (PP_a)	4	
	durezza (PP_di)	1	
	esaurirsi	1	
	esplodere / esplosione (PP_di)	5	EXPLOSIVE SUBSTANCE
	essere alle spalle	1	
	fonte	2	NATURAL PHYSICAL OBJECT
	frenare	1	IMPEDE MOTION
	governare (Obj_of)	2	
	impattare / avere un impatto / impatto (PP_di)	13	UNCONTROLLED MOTION + PHYSICAL CONTACT
	infrangere	1	
	innescare (Obj_of)	4	EXPLOSIVE SUBSTANCE
	intrecciarsi	1	
	investire	5	UNCONTROLLED MOTION + PHYSICAL CONTACT
	montare	1	UPWARD MOTION
	nodo	1	
	ombre lunghe (PP_di)	2	DARKNESS
	portare alla luce	1	UPWARD MOTION + LIGHT
	pesare / peso (PP_di)	4	WEIGHT
	precipitare	2	DOWNWARD MOTION + SPEED
	punta dell'iceberg	1	NATURAL PHYSICAL OBJECT
	respirare (Obj_of)	1	
	(*far*) *rientrare*	3	IMPEDE MOTION
	schiacciare	3	WEIGHT
	scoppiare	3	EXPLOSIVE SUBSTANCE
	sfiorare	1	PHYSICAL CONTACT
	spirale (PP_di)	2	CIRCULAR MOTION + SPEED
	(*essere / stazionare*) *su*	2	
	superare (Obj_of)	5	
	termometro (PP_di)	1	HEAT
	toccare	1	PHYSICAL CONTACT

	toccare il fondo	1	DOWNWARD MOTION
	tracciare un solco	1	
	trasferirsi	3	
	travolgere	2	UNCONTROLLED MOTION + PHYSICAL CONTACT
	urto (PP_di)	2	UNCONTROLLED MOTION + PHYSICAL CONTACT
	vedere (Obj_of)	1	
	vincolare	1	IMPEDE MOTION
CONTAINER → **50**	(*andare / cercare / essere / entrare / tornare / trascinare*) (PP_in)	29	
	profonda	8	
	tunnel (PP_di)	2	DARKNESS
	uscire / uscita (PP_da)	11	

b. STRUCTURAL METAPHORS (in alphabetical order)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
COMPETITION / GAME → **4**	*effetto domino*	1	
	puzzle (PP_di)	1	crisi = GAME
	sfida	1	
	vincere (Obj_of)	1	crisi = OPPONENT
HEALTH → **47**	*acuta / aspetti acuti* (PP_di)	2	crisi = ILLNESS
	aggravarsi	8	crisi = ILLNESS
	antidoto (PP_a)	2	
	aspirina	2	crisi = ILLNESS
	contagiare / contagio (PP_di)	12	crisi = ILLNESS
	cura (PP_per)	2	crisi = ILLNESS

	fare vittime / vittima (PP_di)	3	crisi = CAUSE OF DEATH
	focolaio (PP_di)	2	crisi = ILLNESS
	immune (PP_a)	2	crisi = ILLNESS
	indenne (PP_da)	1	crisi = ILLNESS
	panico	1	MENTAL HEALTH
	provocare convulsioni	1	crisi = ILLNESS
	risanamento (PP_della)	1	crisi = ILLNESS
	scuotere profondamente	1	MENTAL HEALTH
	soffrire (PP_per / PP_di)	3	crisi = ILLNESS
	stress	1	MENTAL HEALTH
	trasmissione (PP_di)	1	crisi = ILLNESS / VIRUS
	tensione	1	MENTAL HEALTH
	vulnerabile (PP_a)	1	crisi = ILLNESS
MACHINE / VEHICLE → **2** *Entails*: PHYSICAL OBJECT	*cinghia di trasmissione*	1	
	perno (PP_di)	1	
NATURAL FORCE / WEATHER → **46** *Entails*: PHYSICAL OBJECT / SUBSTANCE	*abbattersi*	1	
	al riparo (PP_dalla)	1	
	arginare (Obj_of) / *porre un argine* (PP_a)	2	crisi = RIVER
	barometro (PP_di)	1	
	ciclone	1	NATURAL DISASTER
	devastare	1	NATURAL DISASTER
	epicentro (PP_di)	4	NATURAL DISASTER
	esporre (PP_a)	4	
	gelata (Noun)	1	
	infuriare fuori	1	crisi = STORM
	onda (PP_di)	3	crisi = SEA
	salvataggio	12	EMERGENCY AT SEA
	scuotere	2	NATURAL DISASTER
	sereno all'orizzonte (PP_in)	1	
	tempesta	2	
	terremoto	2	NATURAL DISASTER
	tsunami	1	NATURAL DISASTER

	turbolenza	5	
	vento (PP_di)	1	
SHOW BUSINESS → **4**	*scenario* (PP_di)	1	
	protagonista (PP_di)	1	
	riflettori puntati (PP_su)	1	
	riportare sulla scena	1	
JOURNEY → **16** *Entails*: PHYSICAL OBJECT + MOTION + PATH SCHEMA	*arrivare*	2	crisi = TRAVELLER
	attraversare (Obj_of)	1	crisi = PATH
	avere un percorso lineare	1	crisi = TRAVELLER
	partire	4	crisi = TRAVELLER
	passare	3	crisi = TRAVELLER
	portare (PP_a)	1	crisi = DESTINATION
	procedere in direzione opposta	1	crisi = TRAVELLER
	punto di svolta (PP_in)	1	crisi = PATH
	venire (*da lontano*)	2	crisi = TRAVELLER
WAR / CONFLICT → **48** *Entails*: LIVING BEING	*affrontare* (Obj_of)	6	crisi = ENEMY
	assediare	2	crisi = ENEMY
	colpire / colpi (PP_di)	10	PHYSICAL COMBAT
	combattere (Obj_of)	2	crisi = ENEMY
	contrastare	4	crisi = ENEMY
	contrastare l'avanzata (PP_di)	1	crisi = ENEMY
	far cadere	1	crisi = ENEMY
	fare i conti (PP_con)	1	crisi = ENEMY
	far fronte (PP_a)	5	crisi = ENEMY
	fare quadrato (PP_contro)	1	crisi = ENEMY
	fronte	1	
	fronteggiare (Obj_of)	4	crisi = ENEMY
	mandare al tappeto	1	PHYSICAL COMBAT
	mettere alle corde	1	PHYSICAL COMBAT
	mettere alle strette	1	crisi = ENEMY
	mettere in ginocchio	1	crisi = ENEMY
	mettere sotto pressione	1	crisi = ENEMY

	minacciare	1	crisi = ENEMY
	minare	1	crisi = ENEMY
	Pearl Harbor economica	1	
	prima linea di difesa (PP_contro)	1	crisi = ENEMY
	risparmiare	1	crisi = ENEMY

Table 4.8 Conceptual metaphors and linguistic realisations in the S24O_Prima_pagina sub-corpus

Item: **CRISI**
Sub-corpus: S24O_Editoriali
Total number of metaphors: 314

a. ONTOLOGICAL / ORIENTATIONAL METAPHORS (based on the *Extended Great Chain of Being*)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
SUPERNATURAL ELEMENTS			
RELIGION → **1**	*braccio della croce*	1	
SUPERNATURAL FORCE → **2**	*evocare spettri*	2	
NATURAL / PHYSICAL ELEMENTS			
LIVING BEING (UNSPECIFIED) → **9**	*alimentare* (Obj_of)	1	
	nascere	7	
	trovare alimento	1	
HUMAN BEING → **13**	*chiedere*	1	
	conto (PP_di) [salatissimo conto della crisi]	1	
	dettare direzioni	1	
	disegnare	1	
	lezione (PP_di)	5	
	mettere in dubbio	1	
	ricomporre squilibri	1	
	seminare incertezza	1	
	spargere sfiducia	1	
ANIMAL → **1**	*allungare i tentacoli*	1	
PLANT → **3**	*ramificata*	1	
	seme (PP_di)	1	
	spine (PP_di)	1	PHYSICAL HARM
PHYSICAL OBJECT / SUBSTANCE → **93**	*annacquare* (PP_in)	1	LIQUID SUBSTANCE
	annaspare (PP_in)	1	LIQUID SUBSTANCE
	assorbire (Obj_of)	2	LIQUID SUBSTANCE
	attanagliare	1	IMPEDE MOTION
	avvitarsi	1	CIRCULAR MOTION + SPEED

	banco di prova	1	
	bloccare (Obj_of)	1	IMPEDE MOTION
	capitolo (PP_di)	1	
	china scivolosa (PP_di)	1	NATURAL PHYSICAL OBJ. + DOWNWARD MOTION
	contenimento (PP_di)	1	IMPEDE MOTION
	contraccolpo (PP_di)	1	PHYSICAL CONTACT
	deflagrare (PP_di)	1	EXPLOSIVE SUBSTANCE
	dietro	2	
	diffondere (Obj_of) / *diffondersi*	2	MOTION
	di fronte (PP_a)	5	
	dimensione (PP_di)	3	
	durezza (PP_di)	1	
	entrare	1	MOTION
	esplodere / esplosione (PP_di)	4	EXPLOSIVE SUBSTANCE
	essere alle spalle	2	
	essere sul tavolo	1	
	far rientrare	1	IMPEDE MOTION
	fare rumore	1	
	fermare (Obj_of)	3	IMPEDE MOTION
	forma (PP_di)	2	
	governare (Obj_of)	2	
	impatto (PP_di)	3	UNCONTROLLED MOTION + PHYSICAL CONTACT
	intrecciare / intrecciarsi	2	
	mannaia (PP_di)	1	SHARP OBJECT
	matassa (PP_di)	2	
	mettere alle spalle (Obj_of)	1	
	morsa (PP_di)	2	IMPEDE MOTION
	oggetto misterioso	1	
	osservare (Obj_of)	2	
	pesantezza (PP_di)	1	WEIGHT
	portare (Obj_of)	1	
	precipitare	1	DOWNWARD MOTION + SPEED

	precipitare (Obj_of)	1	DOWNWARD MOTION + SPEED
	propagare (Obj_of) / *propagarsi*	4	MOTION
	rallentamento (PP_di)	1	SLOW MOTION
	scalfire	1	
	scoppiare / *scoppio* (PP_di)	7	EXPLOSIVE SUBSTANCE
	secche (PP_di)	1	LIQUID SUBSTANCE
	sfilacciare	1	
	sovrapporsi	1	
	spingere	1	CAUSE MOTION
	spirale (PP_di)	1	CIRCULAR MOTION + SPEED
	(*essere*) *su*	1	
	superare (Obj_of) / *superamento* (PP_di)	7	
	toccare	1	PHYSICAL CONTACT
	trascinare a fondo	1	CAUSE DOWNWARD MOTION
	urto (PP_di)	2	UNCONTROLLED MOTION + PHYSICAL CONTACT
	vedere (Obj_of)	1	
	vedere la fine (PP_di)	1	
CONTAINER → **54**	*approfondirsi*	1	
	(*entrare* / *essere* / *mettere*) (PP_in)	25	
	emergere (PP_dalla)	1	
	piombare (PP_in)	1	DOWNWARD MOTION + SPEED
	Profonda / *profondità* (PP_di)	7	
	trarre opportunità (PP_da)	1	
	trascinare fuori (PP_da)	1	
	tunnel (PP_di)	4	DARKNESS
	uscire / *uscita* (PP_da)	13	

b. STRUCTURAL METAPHORS (in alphabetical order)			
SOURCE CONCEPT	LEXICAL UNITS	NO. OF OCCURRENCES	FOCUS_ON
COMPETITION / GAME → **4**	*cogliere in contropiede*	1	crisi = OPPONENT
	sfida	1	
	tenere in scacco	1	crisi = OPPONENT
	uscire vincitori (PP_da)	1	crisi = COMPETITION
HEALTH → **44**	*acuto* (*fase / manifestazione / momento*) (PP_di)	3	crisi = ILLNESS
	aggiungere all'elenco delle vittime	1	crisi = CAUSE OF DEATH
	aggravarsi	2	crisi = ILLNESS
	antidoto (PP_a)	1	
	comportare processi dolorosi	1	crisi = ILLNESS
	conclamata	1	crisi = ILLNESS
	contagio	1	crisi = ILLNESS
	curare (Obj_of) / *cura* (PP_di / PP_per)	4	crisi = ILLNESS
	decimare	1	crisi = CAUSE OF DEATH
	diagnosi (PP_di)	1	crisi = ILLNESS
	emorragia	1	
	immune (PP_a)	1	crisi = ILLNESS
	indenne (PP_da)	1	crisi = ILLNESS
	infiacchire	1	crisi = ILLNESS
	lista delle vittime (PP_di)	1	crisi = CAUSE OF DEATH
	male sottile	1	crisi = ILLNESS
	mietere vittime	1	crisi = CAUSE OF DEATH
	panico	2	MENTAL HEALTH
	paralizzare	1	
	prevenire (Obj_of)	1	crisi = ILLNESS
	ricaduta (PP_di)	1	crisi = ILLNESS

	rimedio (PP_a)	3	crisi = ILLNESS
	shock	1	MENTAL HEALTH
	sintomi (PP_di)	2	crisi = ILLNESS
	soffrire (Obj_of / PP_per)	2	crisi = ILLNESS
	tamponare (Obj_of)	1	crisi = WOUND
	trasmettersi	1	crisi = ILLNESS / VIRUS
	tremori	1	crisi = ILLNESS
	tensione	3	MENTAL HEALTH
	virulenza (PP_di)	1	crisi = ILLNESS
	vulnerabile (PP_a)	1	crisi = ILLNESS
MACHINE / VEHICLE → **7** *Entails*: PHYSICAL OBJECT	*meccanismi* (PP_di)	5	
	portata (PP_di)	1	
	stabilizzatore automatico	1	
NATURAL FORCE / WEATHER → **25** *Entails*: PHYSICAL OBJECT / SUBSTANCE	*agitare la spuma*	1	crisi = WIND
	arginare (Obj_of)	1	
	bufera	2	
	cataclisma / cataclismatica	2	NATURAL DISASTER
	ciclone	1	NATURAL DISASTER
	esporre (PP_a)	3	
	far crollare	1	
	focolaio d'incendio	2	crisi = FIRE
	gelo	1	
	marea (PP_di)	1	
	nebbia	2	
	salvataggio	3	EMERGENCY AT SEA
	scuotere	1	NATURAL DISASTER
	spazzare via	1	NATURAL DISASTER
	tempesta	2	
	venti (PP_di)	1	
SHOW BUSINESS → **2**	*palcoscenico*	1	
	sottotrama	1	
JOURNEY → **14** *Entails*:	*arrivare*	4	crisi = TRAVELLER
	arrivare (PP_a)	1	crisi = DESTINATION

PHYSICAL OBJECT + MOTION + PATH SCHEMA	*attraversare* (Obj_of)	1	crisi = PATH
	partire	1	crisi = TRAVELLER
	percorrere	1	crisi = TRAVELLER
	portare (PP_a)	2	crisi = DESTINATION
	sulla strada (PP_di)	1	crisi = DESTINATION
	venire	3	crisi = TRAVELLER
WAR / CONFLICT → **42** *Entails*: LIVING BEING	*affrontare* (Obj_of)	8	crisi = ENEMY
	arma (PP_per)	2	crisi = ENEMY
	bollettino di guerra	1	
	colpire / colpi di	13	PHYSICAL COMBAT
	disarmati (PP_di fronte a)	1	crisi = ENEMY
	far saltare	1	crisi = ENEMY
	ferire	2	
	fronte (PP_di)	1	
	fronteggiare (Obj_of)	5	crisi = ENEMY
	guardia alta	1	PHYSICAL COMBAT
	minacciare	1	crisi = ENEMY
	percuotere	1	PHYSICAL COMBAT
	presidio (PP_in)	1	
	proteggere (PP_da)	1	crisi = ENEMY
	resistenza	1	crisi = ENEMY
	uno-due	2	PHYSICAL COMBAT

Table 4.9 Conceptual metaphors and linguistic realisations in the S24O_Editoriali sub-corpus

I should begin by noting the overall similarity displayed by the four sub-corpora (and by the English and the Italian corpus as a whole) in terms of the conceptual domains selected for the metaphorical representation of the crisis, which can be said to be essentially the same in the two languages. As the tables above show, minor qualitative differences in terms of selected conceptual domains occur solely within the areas of RELIGION, SUPERNATURAL FORCE (grouped under the heading SUPERNATURAL ELEMENTS), ANIMAL and SHOW BUSINESS: these form the conceptual ground of a small set of linguistic metaphors in the Italian corpus (even if they are marginal in relation to other conceptual domains), while they do not appear in the English corpus. We may hypothesise that some of these conceptual domains are more salient in Italian financial reporting for cultural and social reasons: for instance, the presence of religious metaphors may be connected with the high cultural value of religion in Italy; such claim would be consistent with findings from other studies of metaphor in Italian political speech and press reports, such as Semino and Masci (1996), or Fusari (2011). However, the number of linguistic realisations of RELIGION-based metaphors in the corpus from *Il Sole 24 Ore* is too small to make generalisations; further, while one of the two instances clearly draws on the symbols of Christianity (*braccio della croce*), which may be expected to have the strongest link with the Italian context of culture, the other could also be explained in terms of Pagan worship (*sacrificare sull'altare*). The following concordances show the two expressions in their original context:

(1) Prima era una **crisi** finanziaria. Poi una **crisi** finanziaria assortita da tremori reali. Ma ieri si è aggiunto il terzo braccio della croce, la **crisi** politica. [S24O_Editoriali]

(2) E le borse mondiali hanno sacrificato 2.800 miliardi di dollari di capitalizzazione dall'inizio dell'anno sull'altare di **crisi** e di imminenti recessioni. [S24O_Prima_pagina]

Interestingly, in her analysis of the representation of the Alitalia crisis in the Italian, British and American press, Fusari (2011) finds a much higher number of religious metaphors in the Italian data set; her corpus collects a total of 569 articles (322.275 words) from *La Repubblica* and *Il Corriere della Sera*, published in the period from August 2008 to January 2009, and is thus compatible with the one built for the present study in terms of source, number of articles and time of publication. Fusari identifies 49 occurrences of linguistic metaphors related to the conceptual domain of RELIGION in her corpus: all of them involve lexical items that are strongly linked with Catholicism, such as *resurrection*, *baptism* and *ascension*. It would seem

that the source domain of RELIGION (more specifically, CATHOLIC RELIGION) tends to be more readily associated with a 'purely Italian' crisis, such as the one suffered by Alitalia, than with the financial/economic crisis, which is global, and thus perceived as loosely linked with Italy's culture and economy (at least in the period under examination); however, it should be noted that these patterns may also depend on stylistic differences between the newspapers, or between the general and the specialised press[3]. Similar observations can be made for the conceptual domains of SUPERNATURAL FORCE, ANIMAL and SHOW BUSINESS. These certainly reveal a tendency in the Italian corpus to focus on the overwhelming power of the crisis (*La crisi attuale evoca spettri tremendi* in S24O_Editoriali), its fierceness (*tutti i nodi della crisi che sta mordendo il paese fin nelle viscere* in S24O_Prima_pagina), or, on the contrary, to underline its spectacular aspects, in some cases even with positive connotations (*In un'affascinante sottotrama di questa crisi globale* in S24O_Editoriali). But, again, other considerations on cross-linguistic and cross-cultural differences cannot be offered with impunity with such a modest number of occurrences.

The corpora show considerable similarity also in the salience of particular source concepts. As shown by the graphs in the following pages, a small set of conceptual domains accounts for the majority of linguistic metaphors in both languages: these are PHYSICAL OBJECT/SUBSTANCE, CONTAINER, HEALTH, WAR/CONFLICT and NATURAL FORCE/WEATHER. In the following discussion, I shall focus on these metaphorical classes, although it must be noted that in FT_Leaders JOURNEY metaphors cover a greater percentage of the occurrences than WAR/CONFLICT and NATURAL FORCE/WEATHER metaphors.

[3] The religious element and the idea of 'resurrection' were introduced quite early in the discourse on the Alitalia crisis, mainly through the expression *Piano Fenice* (designating the "all-Italian" plan to salvage the company) and through the repeated use of the word *miracle* (Sabrina Fusari, personal communication).

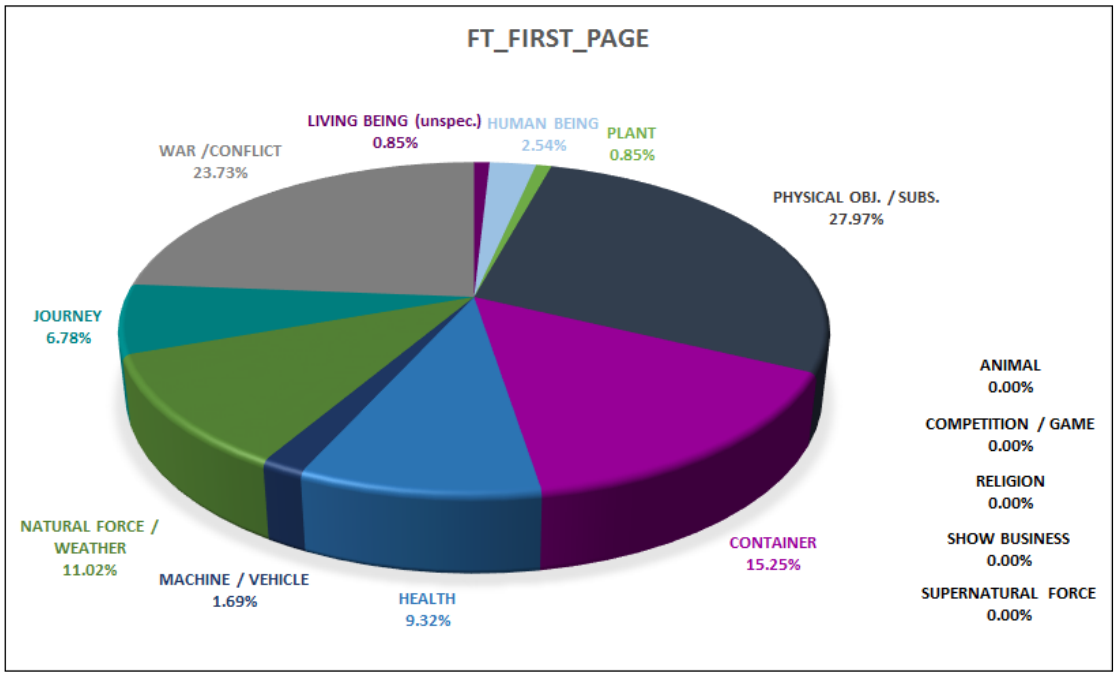

Figure 4.10 Distribution of conceptual metaphors in the FT_First_page sub-corpus

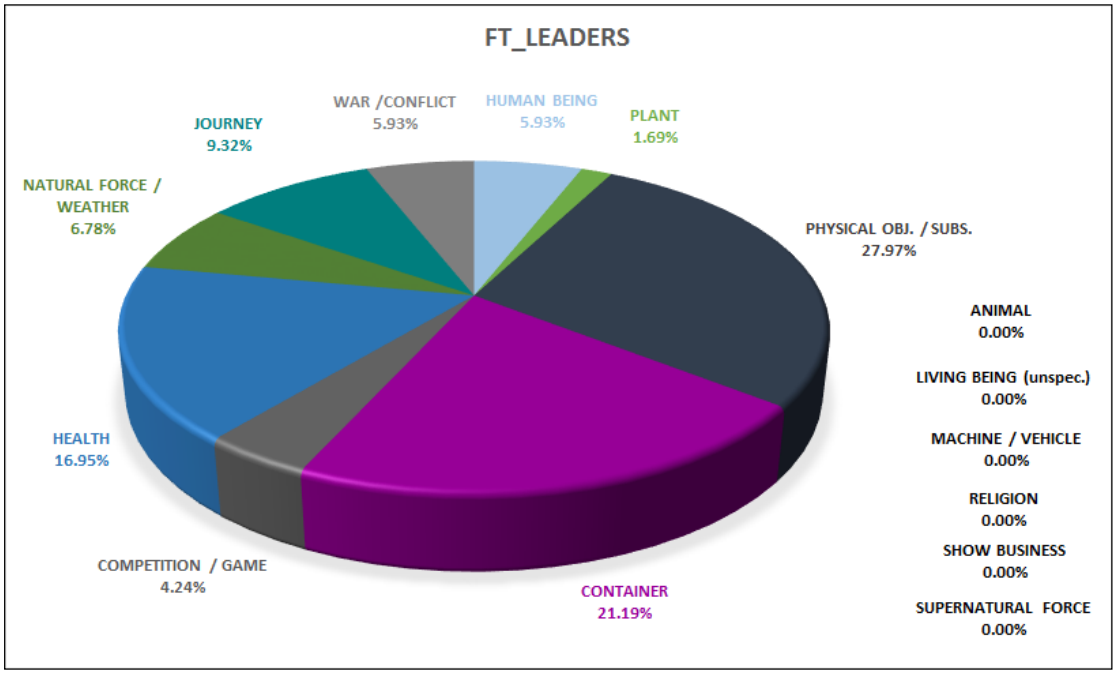

Figure 4.11 Distribution of conceptual metaphors in the FT_Leaders sub-corpus

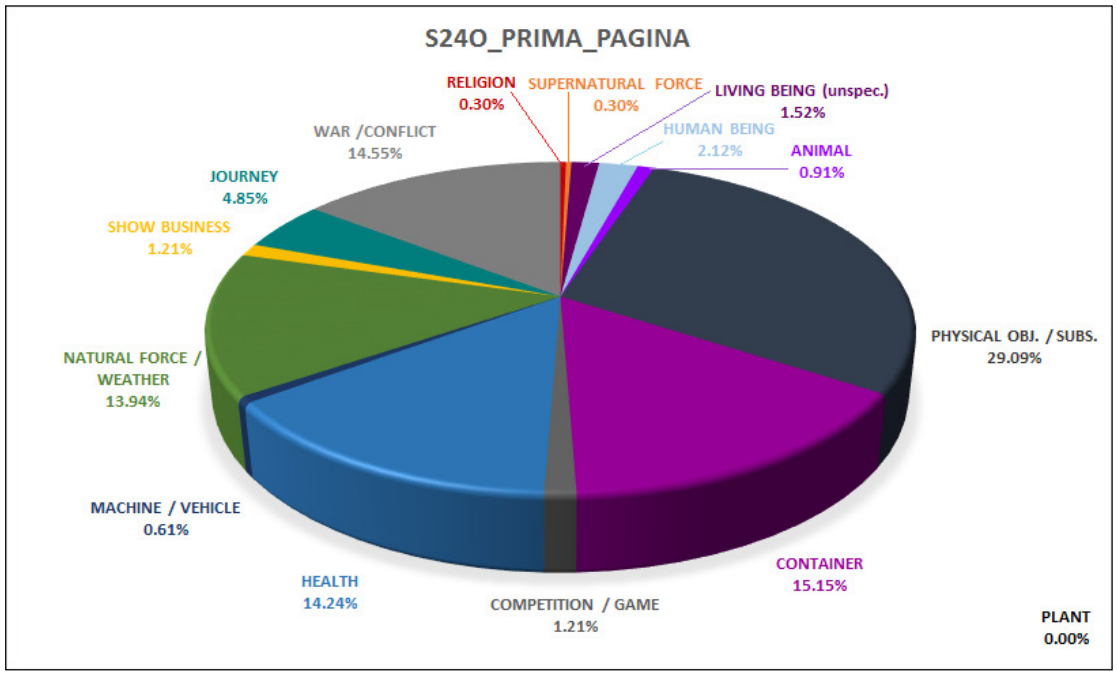

Figure 4.12 Distribution of conceptual metaphors in the S24O_Prima_pagina sub-corpus

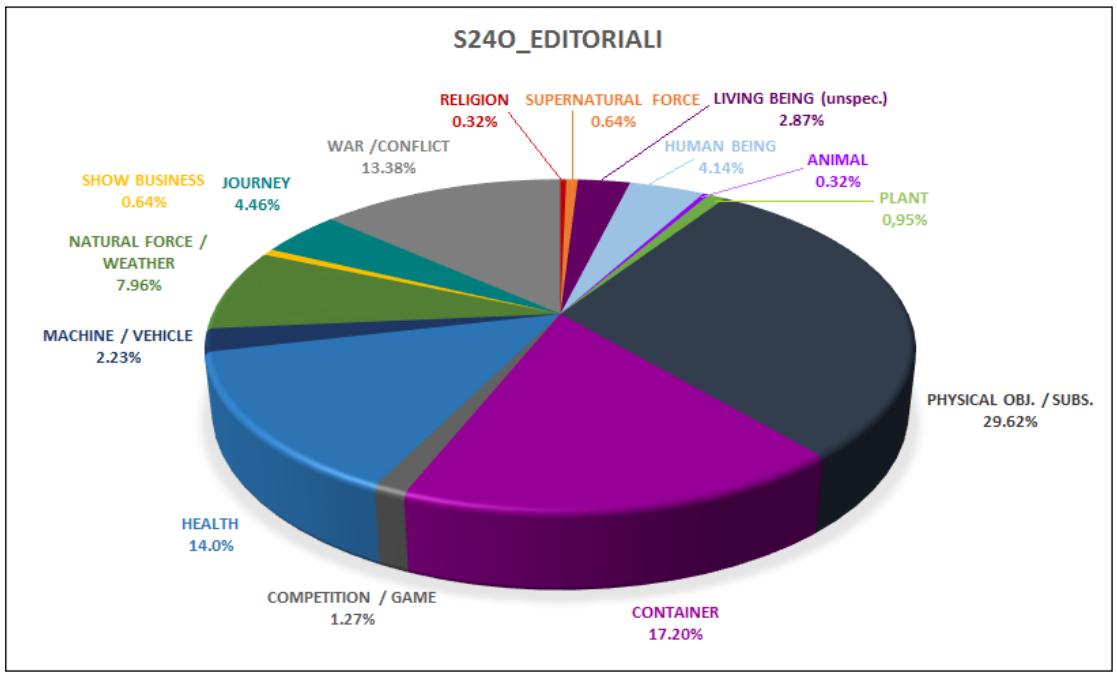

Figure 4.13 Distribution of conceptual metaphors in the S24O_Editoriali sub-corpus

2.1 PHYSICAL OBJECT / SUBSTANCE *metaphors*

The conceptual domain of PHYSICAL OBJECT/SUBSTANCE is the main source of metaphorical expressions in all the sub-corpora: it accounts for 27.97% of the total metaphors in both FT_First_page and FT_Leaders (27.97% in the whole English corpus), and for 29.09% and 29.62% in S24O_Prima_pagina and S24O_Leaders, respectively (29.35% in the whole Italian corpus). This is also the conceptual class with the highest degree of internal complexity, since it includes a wide range of lexical units, which often focus on different specific aspects of the physical domain.

Curiously, the English sub-corpora show not only the same total number of metaphors (118), but also the same number of metaphors based on the source domain under examination (33). The main effect of the metaphorical expressions belonging to this class is clearly that of representing the crisis as a 'thing' that is able to concretely act upon human beings and economic activities in various ways. Several lexical units in both FT_First_page and FT_Leaders focus on the area of MOTION within the source domain, realising the more specific conceptual metaphor THE CRISIS IS A MOVING OBJECT/SUBSTANCE. At this more delicate level, differences begin to emerge between the sub-corpora.

In FT_First_page, the lexical units in this subset (11, including, but not limited to, motion verbs) tend to activate two main kinds of meaning, i.e. 'generic/uncontrolled motion' and 'impeded motion': they thus build a coherent metaphorical framework, in which the crisis is presented as something that is dangerously moving and spreading through the economy, and as such must be stopped. Let us consider the following concordance lines:

(3) The moves come as Dmitry Medvedev, the Russian president, faces pressure from business leaders concerned that the impact of the credit **crisis** is starting to be felt in Russia. [FT_First_page]

(4) It shows how far the policy debate has shifted as the **crisis** has spread to prime mortgage assets in the US and engulfed Bear Sterns, the investment bank. [FT_First_page]

In (3), the metaphor foregrounds the specific features VIOLENCE/DANGER within the concept CRISIS, through the use of the lexical unit *impact* (focus on: UNCONTROLLED MOTION + PHYSICAL CONTACT). This activates a frame of uncontrolled motion, in which an entity moves, possibly at high speed, towards another entity, making a forcible contact with it. The crisis is

explicitly presented as the impactor in the metaphorical structure, although the impactee is not specified, and has to be recovered from the context (in the following sentences, it becomes clear that the author is referring to tight credit conditions, and to the state of the Russian economy in general). In (4), by contrast, the metaphor focuses on the feature EXTENT rather than VIOLENCE. First, the crisis is conceptualised as a moving substance that makes its way quite undisturbed through the markets and the financial institutions (*spread*)[4]; then, its liquid nature is specified through the verb *engulf*, whose basic meaning (according to the *Merriam-Webster Online Dictionary*) is 'to flow over something and enclose it'. The metaphorical structure also highlights the contrast between the active role taken by the crisis in the metaphorical scenario, and the passive, helpless condition of the investment bank Bear Sterns, which was one of the highest-profile victims in the *annus horribilis* 2008[5].

When the focus is on 'impeded motion', on the contrary, it is the crisis that takes on a passive role, functioning as the Object of the metaphorical verb. These cases are less frequent than the ones commented above. There are only two instances in the sub-corpus, in the following concordances:

(5) The sell-off came in spite of a frantic scramble by governments to contain the **crisis** on one of the worst days yet in the 14 months of the credit crunch. [FT_First_page]

(6) Citigroup's shares lost nearly a fifth of their value yesterday as its board met in an attempt to halt a **crisis** of confidence in the troubled financial services group. [FT_First_page]

While motion involving the crisis is generally presented as effective in the 'active' scenarios, as in (3) and (4) above, efforts made by governments or financial institutions to prevent the crisis from moving are inevitably frustrated. In (5), the lexical unit serving as metaphorical vehicle (*contain*) is inserted into an embedded sentence that is directly dependent on the Nominal Group *frantic scramble*, which has a clear negative connotation, as it implies that the government's moves were hasty and not well organised. Further, it is clear from the grammatical structure that such scramble missed the target, since it could not avoid dramatic

[4] Differently from subprime mortgages, prime mortgage loans carry low default risk, since they are made to borrowers with strong credit scores. Thus, the fact that the crisis *spreads* from subprime to prime mortgage assets is here taken as a clear sign of its severity.

[5] After being hit by a crisis of confidence that brought about serious liquidity problems, on March 14th Bear Sterns received an emergency loan from the Federal Reserve in a desperate final attempt to save it from collapse; only a few days later, it was taken over by JPMorgan Chase for dollars 10 a share (after an initial bid to dollars 2 a share), a price that was far below its market value of only a few months before.

falls in markets around the world[6]. The same observations can be made with reference to (6), where the target of the metaphor is not the GLOBAL CRISIS as such, but rather one of its manifestations, a CRISIS OF CONFIDENCE (which is still very dangerous for a financial institution, because it means that investors do not feel confident about its solvency and capacity to absorb losses). This pattern is confirmed by the data in the FT_Leaders sub-corpus, where the focus on 'impeded motion' occurs only once in the verb *halt*, with *crisis* functioning as Object, but the grammatical environment is that of a non-factual clause (*Only if every significant country acts in parallel, with measures that are mutually supportive, will they be able to halt the crisis*).

Turning to the FT_Leaders sub-corpus, this shows 12 occurrences of the specific metaphor THE CRISIS IS A MOVING OBJECT/SUBSTANCE. Here, differently from FT_First_page, a significant portion of the lexical units activates the meaning 'directional motion', including 'upward motion' (3 occurrences), 'downward motion' (1 occurrence) and 'circular motion' (1 occurrence). UPWARD MOTION metaphors are consistent with the basic orientational metaphors MORE IS UP and GAINING CONTROL/FORCE IS UP, as shown by the following examples[7]:

(7) Hungary's forint has lost 17 per cent against the euro since the summer in an escalating **crisis** of confidence, while the Baltic states face bust after boom. [FT_Leaders]

(8) The credit **crisis** emerged as house prices fell and mortgage defaults rose. [FT_Leaders]

As can be noticed, in both (7) and (8) the metaphorical expressions portray the crisis as a sort of 'self-moving' object, thus underlining the conceptual aspects of STRENGTH and ENERGY that characterise it. The use of *emerge* in (8) is particularly interesting, since the verb implies that the crisis was already 'somewhere out there', and that it rose from a lower place where it was hidden, as of its own accord, taking advantage of a set of favourable circumstances. In this case, the metaphor has the visible effect of effacing human involvement.

[6] The original article was published on October 7th: the previous day, stocks in London had suffered their worst losses since 'Black Monday' in 1987, and growing concerns about the global crisis had prompted massive selling around the world, throwing European, American and Asian markets into turmoil.

[7] This is not the only type of metaphor in this class to be compatible with other basic spatialisations: for instance, in both corpora, some metaphorical representations of the crisis as a generic PHYSICAL OBJECT/SUBSTANCE (mainly realised by prepositions) are consistent with the mappings FUTURE IS AHEAD OF US vs. PAST IS BEHIND (e.g. *ahead of the crisis* in FT_First_page and FT_Leaders; *di fronte alla crisi* and La *crisi non è affatto alle nostre spalle* in S24O_Editoriali).

However, contrary to what might be expected, the only instance of DOWNWARD MOTION metaphor is not consistent with the opposite spatialisations LESS IS DOWN and LOSING CONTROL/FORCE IS DOWN: in fact, the lexical unit that instantiates it (the verb *precipitate*, with *crisis* as Object) conveys an important semantic element of 'speed', thanks to which the crisis is conceptualised as something that will rapidly get worse rather than losing strength:

(9) Reckless borrowing could precipitate a sterling **crisis**. [FT_Leaders]

The same element 'speed' can be found in the CIRCULAR MOTION metaphor, where it is realised by the verb *spiral*, with a strongly negative connotation:

(10) Back in March, when Bear Sterns went down, the US was at risk of a spiralling financial **crisis**. [FT_Leaders]

Clearly, the higher the speed the greater the power, but also the higher the risk of impacting violently upon something if motion is out of control (as in this case), thus causing serious damage.

The Italian corpus shows a higher degree of lexical variation than the English corpus as far the conceptual area of PHYSICAL OBJECT/SUBSTANCE is concerned, but this may be in direct connection with its larger size (cf. Chapter Three, Table 3.1). The total number of linguistic metaphors in this class is almost the same in the Italian sub-corpora (96 occurrences in S24O_Prima_pagina *vs.* 93 in S24O_Editoriali). As shown by the 'Focus_on' column in Tables 4.8 and 4.9 above, it is possible to identify several conceptual areas that are more frequently highlighted by the use of particular lexical units in both the Italian sub-corpora (MOTION, PHYSICAL CONTACT, EXPLOSIVE SUBSTANCE, LIQUID SUBSTANCE); some of them (MOTION and PHYSICAL CONTACT) are present in the English data as well, but with differences in the number of occurrences, also due to the smaller size of the English corpus.

The specific metaphor THE CRISIS IS A MOVING OBJECT plays a key role in both corpora, with similar effects on the conceptualisation of the crisis. In addition, there is noticeable similarity between the two corpora as far as its linguistic realisations are concerned, as shown by the presence of several equivalent lexical units (e.g. *avvitarsi ~ spiralling*; *contenimento ~ contain*; *diffondersi ~ spread*; *fermare ~ halt*; *impatto ~ impact*; *precipitare ~ precipitate*). However, the Italian corpus shows evidence of a higher number of lexical units activating a focus on 'impeded motion' within MOTION metaphors (6 occurrences in S24O_Prima_pagina

and 9 occurrences in S24O_Editoriali). The lexical units in this set can be divided into two main groups, depending on the role taken by the crisis: in fact – differently from the English corpus, where *crisis* always functions as the Object of the verbs that trigger this specific focus – in the Italian corpus it also functions as Subject in several instantiations. When this is the case, the crisis is generally represented as a sort of physical constraint on the natural development or evolution of economic activities (*La crisi «vincola» lo shopping*, in S24O_Prima_pagina; *Ma oggi, con l'economia nella morsa dell'infernale terzetto crisi finanziaria, crisi immobiliare e inflazione da prezzi delle materie prime energetiche e alimentari, questo divario si sta restringendo*, in S24O_Editoriali). A different, noteworthy realisation can be found in the following concordance, where the decision if and when to stop moving is, as it were, entirely left to the crisis:

(11) «La **crisi** è opposta a quella del '29: è un momento di bolla speculativa all'incontrario che rientrerà, ma non sappiamo quando». [S24O_Prima_pagina]

When, by contrast, it is the crisis that takes on the passive role, the attempts made by politicians or financial authorities to prevent it from moving are generally (though, it must be said, not always) represented as hypothetical or ineffective.

The data also show evidence of one metaphorical pattern that is specific to the Italian corpus, namely THE CRISIS IS AN EXPLOSIVE SUBSTANCE: this is quite frequent in both S24O_Prima_pagina (13 occurrences: *a catena*; *esplodere/esplosione*; *innescare*; *scoppiare*) and S24O_Editoriali (12 occurrences: *deflagrare*; *esplodere/esplosione*; *scoppiare/scoppio*). Examples of these lexical units in their original context are provided below:

(12) Ancora non sappiamo quando si risolverà la **crisi** finanziaria esplosa giusto un anno fa, con tutte le complicanze che ne sono seguite. [S24O_Editoriali]

(13) La **crisi** innescata dai mutui subprime «non è ancora finita: dobbiamo continuare ad agire». [S24O_Prima_pagina]

(14) Prima del deflagrare di una **crisi** finanziaria e bancaria di tale violenza da costringere i Governi dell'Eurozona a mettere ora sul piatto aiuti pubblici per almeno 2.250 miliardi. [S24O_Editoriali]

(15) Gli ammonimenti al sistema finanziario, infatti, erano stati lanciati, da parte di molti banchieri centrali, per i quali la **crisi** scoppiata nell'agosto dello scorso anno non è certo stata una sorpresa, ha sottolineato il governatore. [S24O_Prima_pagina]

These metaphorical expressions underline not only the harmful effects of the crisis, but also its unpredictability, as human involvement is generally effaced: this is particularly evident in (13), where the Actor of *innescare* is represented by the Prepositional Phrase *dai mutui subprime*. At this stage, the significant presence of the metaphor THE CRISIS IS AN EXPLOSIVE SUBSTANCE seems to suggest a marked tendency to frame the crisis in catastrophic terms in the Italian corpus.

2.2 CONTAINER *metaphors*

The conceptual domain of CONTAINER accounts for 15.25% of the total metaphors in FT_First_page and 21.19% in FT_Leaders (18.22 % in the whole English corpus), and for 15.15% and 17.20% in S24O_Prima_pagina and S24O_Leaders, respectively (16.15% in the whole Italian corpus). The metaphorical expressions in this class have the effect of representing the crisis as a particular type of physical object, i.e. one that has an entry (usually easy to find) and an exit (which, on the contrary, is generally hidden and difficult to reach); in other words, as a sort of huge 'trap' that we find ourselves in, and from which we should try to escape as soon as possible. The linguistic realisations of the metaphor THE CRISIS IS A CONTAINER overlap to a great extent in the two languages, also as a consequence of their low degree of lexico-grammatical complexity and variation with respect to other classes, such as PHYSICAL OBJECT/SUBSTANCE. In all the four sub-corpora, the majority of occurrences can be traced back to a single set of lexical units, involving the use of the preposition *in*.

In the English corpus, *in* always has the meaning 'fixed location or position', and is often used in connection with the stative verb *be*; in the Italian corpus, by contrast, *in* may be used in connection with either a stative verb or a dynamic verb, in which case it expresses the meaning 'entry or introduction':

(16) Mr Greenberg, AIG's single largest shareholder, has repeatedly attacked Mr Sullivan, his one-time protegé, and other members of the management team, saying that AIG is in a serious financial **crisis** and lacks a clear strategy. [FT_First_page]

(17) It is unclear what policymakers hope to achieve when halting equities trading in the current financial **crisis**. [FT_Leaders]

(18) Il distretto delle ceramiche di Sassuolo, uno di quelli con il più alto tasso di esportazioni, è entrato in **crisi**. [S24O_Prima_pagina]

(19) In ogni caso si guadagnerà tempo prezioso che consentirà di capire se istituzioni e autorità centrali sono riuscite a curare i due grandi malati, credito e immobiliare, che ci hanno fatto piombare nella più difficile **crisi** economica dal 1929 a oggi. [S24O_Editoriali]

As can be noticed, in the English corpus, financial and economic activities or institutions are conceptualised as being *already* inside the container through the use of *in*. In (18), instead, the verb *entrare* highlights the contrast between the former and the present situation of the Subject (*il distretto delle ceramiche di Sassuolo*); finally, in (19), the lexical unit *piombare* focuses on motion towards the container (highlighting the feature HIGH SPEED).

The opposite pattern, i.e. exit from the container, emerges less frequently from the data under examination: in this case, the prepositions that mark the presence of a CONTAINER metaphor, since they are not used in their basic physical meaning, are *out of* /*da*, usually in association with motion verbs (as in *he* [referring to Marcel Ospel, UBS' chairman] *needs to stay in place to steer UBS out of the crisis*, taken from FT_First_page, where the verb *steer* in turn suggests the presence of a conceptual mapping between UBS and SHIP). Getting out of the container is generally represented as something that is very difficult to achieve. This is evident in the choice of verbs that show a negative semantic prosody, conveying a general meaning of 'difficulty' or 'effort', as in the following examples:

(20) Last month, Mr Willumstad said Mr Sullivan was the "right guy" to dig AIG out of its **crisis**. [FT_First_page]

(21) Il prossimo premier ha di fronte a sé l'occasione, storica, per modernizzare il Paese trascinandolo fuori dalle secche di una **crisi** profonda. [S24O_Editoriali]

However, even when 'neutral' lexical units are selected (as is the case with *way out of* in FT_Leaders, or *uscire* / *uscita dalla* in the Italian sub-corpora), these are generally inserted into interrogative, negative, or modalised, hypothetical, non-factual clauses, all of which present the prospect of finding a way out from the container as a desideratum, rather than a concrete possibility:

(22) Only by including these countries will it be possible to find a way out of the current **crisis** and agree longer-terms reforms of the global financial architecture. [FT_Leaders]

(23) Molte delle misure avranno tuttavia un impatto solo nel medio periodo e qualche timore è stato espresso da alcune fonti che le misure proposte serviranno senz'altro al rafforzamento del sistema, ma non necessariamente a favorire l'uscita dalla **crisi** in corso. [S24O_Prima_pagina]

The lexical set *deep*/*depth*/*deepen* and its direct Italian equivalent (*profonda*/*profondità*/*approfondirsi*) contribute to this general picture, conceptualising the crisis as a container whose only exit is on the upper side, and from which it is impossible to escape without strenuous efforts, given the distance from the top to the bottom. It must be noted, however, that Conceptual Metaphor Theory does not seem to provide an exhaustive explanation for the cognitive processes lying behind this set of linguistic realisations of the CONTAINER metaphor. In fact, the property DEMANDING TASK they express within the metaphorical scenario is not an inherent part of the concept DEPTH, but rather seems to emerge from a *blended* space in which some features from the source domain (such as SEPARATION BETWEEN SURFACE AND UNDERSIDE) interact with other features from the target domain (such as DIFFICULTY and TRIAL). It could thus be argued that cases like these would be better understood by making reference to the framework of Conceptual Blending (cf. Chapter One, Section 3.2; cf. also Deignan 2005: 164-166). This probably holds true also for several instantiations of the PHYSICAL OBJECT/SUBSTANCE metaphor, in particular those related with MOTION and HIGH SPEED (cf. Section 2.1). Concordance (21) above illustrates the negative connotation acquired by the items belonging to this lexical set within the CONTAINER scenario, while also instantiating a complex metaphorical cluster. In fact, the lexical unit *secche* activates a simultaneous mapping between CRISIS and PHYSICAL OBJECT/SUBSTANCE (more specifically, LIQUID SUBSTANCE), entailing the negative feature ABSENCE OF MOTION, so that Italy (*il Paese*) is represented as a ship that cannot move, having gone aground in shallow water.

Finally, one particular instantiation of the metaphor THE CRISIS IS A CONTAINER in the Italian corpus is worth considering: this involves the lexical unit *tunnel* (2 hits in S24O_Prima_pagina and 4 in S24O_Editoriali). Interestingly, although it is an Anglicism, *tunnel* is not used in the conceptualisation of the crisis as a container in the English data. The *Merriam-Webster Online Dictionary* lists two basic senses of the word: these are 'hollow conduit or recess' and 'covered passageway, or subterranean gallery'. According to the *Vocabolario Treccani Online*, the same primary senses are preserved in Italian, where the word is also widely used in a number of figurative contexts. *Tunnel* focuses on the feature

DARKNESS within the generic concept CONTAINER, adding to the negative representation of the crisis: in fact, DARKNESS entails physical DIFFICULTY TO SEE, and the two concepts, in turn, are metaphorically associated with DIFFICULTY TO UNDERSTAND (cf. the Italian expression *avere i pensieri annebbiati*); this is confirmed by the contrast with conceptual mappings such as UNDERSTANDING IS SEEING and IDEAS ARE LIGHT-SOURCES, which are central to our conceptual system (cf. Lakoff and Johnson 1980).

2.3 HEALTH and WAR/CONFLICT *metaphors*

HEALTH metaphors account for 9.32% of the total metaphorical occurrences in FT_First_page and 16.95% in FT_Leaders (13.13 % in the whole English corpus), and for 14.24% in S24O_Prima_pagina and 14.0% in S24O_Editoriali (14.13% in the whole Italian corpus). As for WAR/CONFLICT metaphors, these cover 23.73% of the total occurrences in FT_First_page, but only 5.93% in FT_Leaders (14.83% in the whole English corpus), and 14.55% in S24O_Prima_pagina plus 13.38% in S24O_Editoriali (13.97% in the whole Italian corpus). These two metaphorical classes are discussed in the same section because they share an important conceptual implication: in fact, within both the HEALTH and the WAR/CONFLICT domains, the crisis is conceptualised as something that can cause physical harm, mental or emotional distress, and, in the worst scenarios, can even kill. The close connection between these two domains is shown by the fact that metaphors based on the source domain of WAR (in which, for instance, a disease or epidemics is conceptualised as an enemy) are frequently employed in health discourse, including that found in the media, and doctor-patient interactions (cf. Sontag 1991).

The first thing to notice is that there are visible differences between the two English sub-corpora in the frequency of occurrence of metaphorical expressions based on these two domains. While leading articles resort to the domain of HEALTH much more frequently than first-page articles (as shown by the percentage of HEALTH metaphors in FT_Leaders, which is almost two times that of FT_First_page), first-page articles show a strong preference for WAR/CONFLICT-based metaphors (here the percentage is almost four times that of FT_Leaders). This pattern could be motivated by a tendency towards 'effectiveness' in hard news reports.

The lexical units realising HEALTH metaphors in FT_First_page conceptualise the crisis either as a generic cause of death, or as a disease, while the role of victim can be taken: a. by

people working at financial institutions; b. metonymically, by the institutions themselves; c. by the economy in general. One of the most visible effects of the lexical units realising this metaphorical class is that of foregrounding the feature INEVITABILITY within the concept CRISIS, thus portraying it as part of a fate that we are forced to accept. However, it must be noted that, depending on the semantics of the lexical unit chosen for the role of patient/victim, different cognitive processes are activated. Let us consider the following concordances:

(24) He is the latest high-profile casualty of the credit **crisis**, which has claimed Chuck Prince, Citigroup's chairman and chief executive. [FT_First_page]

(25) Alan Schwarz, Bear's chief executive, said the investment bank had fallen victim of a **crisis** of confidence [FT_First_page]

(26) The latest downward lurch for the pound came as advanced economies around the world received a wake-up call that none was immune to the effects of the credit **crisis**. [FT_First_page]

In (24), there is no evident contrast, in semantic terms, between the verb *claim* in its 'cause death' sense and its Object, *Chuck Prince*, which denotes a living being. At this stage, a literal and a non-literal interpretation of Prince's end are still possible: the crisis might be said to have literally caused Chuck Prince's death if he had decided, for example, to commit suicide as a consequence of it. However, we know from the context that this not the case: thus, a non-literal interpretation is activated, in which the concept of LOSING ONE'S JOB (a prestigious one, too) is associated with that of DYING. In (25) and (26), on the contrary, the semantics of the lexical units *victim* and *immune* (both entailing 'living being') clashes with that of *investment bank* (still a physical entity, but inanimate) and *economy* (an abstract entity). As a consequence, it could be argued that CLAIM in (24) would be more properly defined as a hyperbolically interpreted concept, in Relevance Theoretic terms (cf. Chapter One, Section 3.3), differently from VICTIM and IMMUNE, in (25) and (26), which are clearly metaphorical.

In FT_Leaders, where the number of occurrences of HEALTH metaphors is higher, the related lexical units are more varied, but the conceptualisation of the crisis as a disease or a generic cause of death is still predominant. Since leading articles in *The Financial Times* are not limited to business, but focus on a wide range of related topics, it is possible to find items such as *environment* in the role of victim within a metaphorical scenario (April 19th, 2008: *Climate policy must be credible. The credit crisis claims another victim: the environment*). However, financial institutions such as *banks* or *markets* (again with metonymy) remain the

main targets of the crisis. Differently from FT_First_page, there are no metaphorical expressions involving human beings as victims: this is possibly a consequence of the broader perspective usually adopted in leaders, which offer general commentaries on issues that are considered as relevant by the editorial board, rather than focusing on a particular item of news. However, as shown by the 'Focus_on' column in Table 4.7 above, there is also evidence in the corpus of metaphorical expressions that represent the crisis as the result of mental illness affecting shareholders and management (1 occurrence), or as a state of bad health following excessive alcohol or food consumption (2 occurrences). In the latter case, the metaphors have an ironic 'taste' that is in line with the style of the leading articles published by *The Financial Times*:

(27) The subprime **crisis** is Alan Greenspan's fault, or so we are increasingly told: he offered bankers too much monetary candy and should have put them on a monetary diet instead. [FT_Leaders]

Surprisingly, in one case the crisis is conceptualised as a cure rather than as a disease, in the following concordance:

(28) But no speech is going to restore Mr Brown in the affections of the voters - many of whom have stopped listening. Yet, the financial **crisis** might just win him a new lease of life. [FT_Leaders]

This is the only instance of a HEALTH metaphor framing the crisis in positive terms in the English and the Italian corpus. However, in this case the metaphor is clearly used to convey bitter criticism against Gordon Brown, the Prime Minister and leader of the Labour Party, who may take advantage of the fact that the crisis is deflecting blame for many of his errors towards the bankers.

As far as the Italian corpus is concerned, there are no significant differences in the number of occurrences of HEALTH metaphors between the sub-corpora. As already noticed for PHYSICAL OBJECT/SUBSTANCE metaphors, the Italian data show a higher degree of lexical variation than the English, even though several equivalent expressions can be identified in the two languages (e.g. *immune*; *weaken/infiacchire*; *paralyze/paralizzare*; *symptom/sintomi*; *soffrire/suffer*; *victim/vittima*; *vulnerabile/vulnerable*). As in the English corpus, the crisis in Italian is most frequently conceptualised as a generic cause of death, or a disease, that mainly

hits (again with metonymy) financial firms, markets, the economy, or the country as a whole; however, in some cases, it may also extend to bank managers and senior executives. Some of these expressions are particularly connotative, since they focus on particular aspects of the state of being ill, or on specific remedies, thus activating clearly delineated mental images:

(29) Due nuove banche americane sono fallite, chiuse dal Tesoro e affidate alla gestione della Federal Deposit Insurance Corp, rivelando una **crisi** che continua a provocare convulsioni nel settore finanziario. [S24O_Prima_pagina]

(30) Tremonti: più decisi contro la **crisi** dei mercati «La ricetta del Financial Stability Forum è un'aspirina». [S24O_Prima_pagina]

In (30), the metaphorical expression can be found in the actual words pronounced by the Italian Minister of Economy and Finance, Giulio Tremonti, while commenting on the measures taken by the Financial Stability Forum to combat the crisis, which were presented by Mario Draghi at the G7 in Tokio in February 2008. Tremonti here uses the term *aspirina* in a clearly negative sense, implicitly suggesting that the famous salicylic acid-based drug (generally used in the case of minor illnesses) will not be enough to cure the financial crisis, and thus at the same time underlining its severity.

The Italian corpus also shows more evidence of MENTAL HEALTH metaphors than the English one (4 occurrences in S24O_Prima_pagina plus 6 in S24O_Editoriali *vs.* only 1 occurrence in FT_Leaders). This may be a consequence of the different usage of the words *crisis* and *crisi* in English and Italian generally: in fact, according to corpus data, *crisi* seems to be more frequently associated with the semantic field of mental health than its direct English equivalent (cf. Section 1 above). Within the MENTAL HEALTH scenarios, the role of the 'patient' (in the medical sense of the term) is almost always taken on by markets, which are represented as nervous or fickle beings[8]:

(31) La **crisi** immobiliare dei mutui ha scosso profondamente il mercato del credito. [S24O_Prima_pagina]

[8] In (31), the expression *scuotere profondamente* has been considered as an instance of HEALTH metaphor on the basis of corpus evidence: according to CORIS and itWaC, the collocation *scuotere* + *profondamente* is more frequently used in connection with the domains of MENTAL HEALTH or MENTAL STATE than in its physical (literal) sense (for example, with *earthquake* as Subject).

(32) La prima [la volatilità delle performance azionarie] è difficile da prevedere perché parte da lontano ed è legata alle tensioni che la **crisi** di liquidità e di fiducia nata in America proietta sui mercati finanziari internazionali. [S24O_Editoriali]

In all these cases, as clearly emerges from the examples above, metaphor and metonymy are deeply entangled: on the one hand, the market is personified via metaphor; on the other, the markets are clearly taken as representatives of the people, thus instantiating a metonym of the type THE INSTITUTION FOR THE PEOPLE RESPONSIBLE. Cases like (31) and (32) can be explained in terms of what Goossens, in his work on the different types of interaction between metaphor and metonymy, calls "metonymy within metaphor", i.e., a pattern in which "[…] a metonymically used entity is embedded within a (complex) metaphorical expression" (1995: 172). In addition, however, in both (31) and (32) the metonym actually *licenses* the activation of the metaphorical scenario in which it is embedded. In fact, without the metonym instantiated by the word *mercato*, the sentences would be interpreted as literal: obviously, people working and trading in the market can literally worry or be nervous about the consequences of the crisis[9].

As far as WAR/CONFLICT metaphors are concerned, it was already pointed out at the beginning of this section that their frequency is noticeably higher in FT_First_page than in FT_Leaders and in both S24O_Prima_pagina and S24O_Editoriali. As shown by the right-hand column in Table 4.6 above, almost all of the 28 occurrences of this metaphorical class in the sub-corpus either evoke scenarios in which the crisis is explicitly conceptualised as an enemy that is attacking us, and against whom we must fight, or activate the specific meaning 'physical combat', with a focus on the physical contact involved in the struggle between the

[9] At the theoretical level, the difference between metaphor and metonymy lies in the fact that, while the former implies a cross-domain conceptual mapping, the latter activates a mapping within a single domain. However, several scholars maintain that the line is not so easy to draw, especially when working with linguistic evidence, and that metaphor and metonymy overlap much more frequently than is usually recognised. Indeed, the connection between these two phenomena was already highlighted by Jakobson (1956/2002), who spoke of the metaphoric and the metonymic processes (based on *similarity* and *contiguity* between topics, respectively) as the basic semantic lines followed in the development of discourse. Thirty years later, on the basis of extensive work on the metaphors used to describe emotions (e.g. ANGER IS BODY HEAT, realised linguistically by expressions like *to get hot under the collar*), Lakoff and Kövecses suggested that all EMOTION metaphors are regulated by a general metonymic principle, "THE PHYSIOLOGICAL EFFECTS OF AN EMOTION STAND FOR THE EMOTION" (1987: 196). More recently, Barcelona (2000) and Ruiz de Mendoza Ibáñez and Díez Velasco (2002) have gone so far as to state that most – if not all – conceptual metaphors can be said to be based on a metonymic component. Deignan (2005: 63), in the wake of Jakobson, puts forward the hypothesis of a cline from metonymy to metaphor, re-interpreting Goossens' (1995) cases of *metaphtonymy* on the basis of corpus investigations (cf. also the cross-linguistic study of metaphor and metonymy in English and Italian presented in Deignan and Potter 2004).

crisis, on the one hand, and the economy or the financial authorities/institutions, on the other[10]. The most frequent lexical unit activating a specific focus on the crisis as 'enemy' is the verb *face*, which is here always used in the active voice, and is thus different from the expression *faced with the crisis*, which was considered as a linguistic realisation of the metaphor THE CRISIS IS A PHYSICAL OBJECT/SUBSTANCE (cf. Table 4.6 above). In 3 of the 6 occurrences of *face*, *crisis* functions as both the grammatical Subject and the Actor of the material Process represented by the verb, thus playing an active part in the WAR/CONFLICT scenario: the lexico-grammatical structure of the sentence underlines the conceptual components of INTENTIONALITY and AGGRESSIVENESS. This is evident in the concordance below, where the crisis is portrayed as unmercifully contrasting John Tain's attempts to solve the financial problems that are putting the bank he manages (Merrill Lynch) at risk:

(33) Yesterday's moves also underscore the **crisis** facing John Tain, chief executive, as he tries to nurse Merrill back to health. [FT_First_page]

In the remaining 3 occurrences of *face*, the role of grammatical Subject and Actor is taken on by other elements (*lenders*, *the G20* and, metonymically, *Britain*), with *crisis* as Object/Goal. Here, the focus on INTENTIONALITY and AGGRESSIVENESS disappears; indeed, the Actors are portrayed as almost inadvertently facing the crisis, as in the following example:

(34) Later it [the Council of Mortgage Lenders] warned lenders *might* face a funding **crisis**, and it now says this *is happening*. [FT_First_page]

The other lexical units in this subset suggest the same tendency to represent the crisis as a conscious and resolute enemy, in marked contrast to the moves of governments and authorities, which either come in response to a former attack, or are mere attempts to go against the crisis. This is evident in the lexico-grammatical environment of *combat*. The verb occurs twice in the analysed concordances, always with *crisis* as Object, and in both cases collocates with the lexical unit *plan*, which locates the action on an abstract and almost theoretical plane:

[10] This metaphorical class clearly illustrates the higher degree of complexity inherent in structural metaphors in comparison with ontological and orientational ones: in fact, WAR/CONFLICT metaphors are higher-order mappings, whose internal coherence depends on a more basic (ontological) mapping between the inanimate elements taking part in the metaphorical scenario and the conceptual domain LIVING BEING. This holds true also for HEALTH metaphors, although in this case the metaphorical process entails a preliminary mapping with LIVING BEING only when inanimate elements are assigned the role of patient or victim within the metaphorical scenario.

(35) Under the *plan*, the latest dramatic intervention by the US government to combat the global credit **crisis**, the authorities will receive equity giving them a 79.9 per cent stake in AIG. [FT_First_page]

(36) The turmoil prompted a pledge from global policymakers to implement an aggressive but broad-brush *plan* to combat the financial **crisis**. [FT_First_page]

The overall picture that emerges from the data is one in which the crisis seriously harms the economy, while financial and political authorities spend their time discussing and elaborating strategies, rather than entering the battlefield to stop it:

(37) Leaders present united front at **crisis** *summit*. [FT_First_page]

Turning now to the Italian corpus, there are no marked differences between the sub-corpora in the percentage of WAR/CONFLICT metaphors. The Italian data highlight the same two-fold pattern already observed in the English corpus, activating specific foci on 'enemy' and 'physical combat' within the metaphorical scenario. I shall here comment on two sets of lexical units, which – as Tables 4.8 and 4.9 above show – recur with a higher frequency in both the sub-corpora. These are the verbs *affrontare*, *far fronte* and *fronteggiare*, which are also direct equivalents of the English verb *face* (15 occurrences in total in S24O_Prima_pagina and 13 occurrences in total in S24O_Editoriali), and the verb *colpire* with its agnate nominal form *colpi* (10 occurrences in S24O_Prima_pagina and 13 occurrences in S24O_Editoriali).

Differently from what we noticed with reference to *face* in FT_First_page, the node word *crisi* does not function as the grammatical Subject (and Actor of the material Process) in any of the occurrences of *affrontare*, *far fronte* and *fronteggiare*. However, even if the crisis is always construed as the target of the actions, the attempts made by politicians and financial authorities to deal with it are, once more, generally portrayed as non-factual, vague, or even doomed to failure, as a consequence of the lexico-grammatical structures in which the verbs occur. Thus, when considered against their original textual environment, these linguistic realisations of the WAR/CONFLICT metaphor confirm the tendency to frame those in charge of protecting the economy against the attacks of the crisis in negative or, at best, pessimistic terms. Examples are provided below:

(38) In aggiunta, all'Ecofin di Nizza, si è discusso anche di *possibili interventi aggiuntivi* a favore delle Pmi per far fronte agli effetti della **crisi** e del credit crunch. [S24O_Prima_pagina]

(39) Tanto più le autorità monetarie europee saranno lente a fare la loro parte, tanto più dovremo fare affidamento sulla politica fiscale per fronteggiare la **crisi** economica, e *tanto più grande sarà il rischio di errori*. [S24O_Editoriali]

(40) È interesse dell'Italia difendere la sua industria e, perché no, rappresentare anche gli altri paesi europei (almeno una decina su 27) che a vario titolo temono, a motivo di una cattiva applicazione della direttiva "20-20-20", delocalizzazioni e perdite di posti di lavoro proprio nel momento in cui *si cerca di* fronteggiare *con ogni mezzo* una **crisi** senza precedenti. [S24O_Editoriali]

A contrasting pattern emerges from the analysis of *colpire* and *colpi*, which specifically point to the crisis as an antagonist willing to engage in physical combat, foregrounding the same conceptual features already noted while discussing results from FT_First_page: VIOLENCE and AGGRESSIVENESS, but also INTENTIONALITY. In fact, on the one hand, the crisis is always assigned an active role within the metaphorical scenario triggered by these lexical units: at the language level, the node word *crisi* functions as the grammatical or logical Subject of the verb *colpire*, or as the Head of the Prepositional Phrase introduced by *di* that is directly dependent on the noun *colpi*. On the other hand, the action is generally construed as being effective and target-oriented, as in the following examples:

(41) Bernanke destinerà le risorse aggiuntive anche al sostegno delle piccole e medie imprese colpite dalla **crisi**. [S24O_Prima_pagina]

(42) La **crisi** finanziaria che da 14 mesi colpisce tutto il mondo ha messo in dubbio quella stabilità (la cosiddetta "grande moderazione") che si dava per acquisita nel terzo millennio e che era sostanzialmente attribuita alle buone regole di gestione delle aspettative. [S24O_Editoriali]

On the whole, the main effect of the linguistic realisations of this metaphorical class seems to be that of foregrounding the 'physical' violence and the destructive potential of the crisis, which is portrayed as a fierce enemy that forces us to physical combat, while politicians and financial authorities are frequently represented as weak or passive opponents.

2.4 NATURAL FORCE/WEATHER *metaphors*

NATURAL FORCE and WEATHER metaphors account for 11.02% of the total occurrences in FT_First_page and 6.78% in FT_Leaders (8.9% in the whole English corpus), and for 13.94% in S24O_Prima_pagina and 7.96% in S24O_Editoriali (11.02% in the whole Italian corpus).

Although the two corpora do not show marked differences in terms of the percentage of occurrence of this metaphorical class, the Italian data highlight a tendency to conceptualise the crisis in 'catastrophic' terms, through lexical units that focus on the semantic field of 'natural disasters' (cf. Tables 4.6 to 4.9 above). In the Italian corpus, approximately 1 every 4 lexical units activates this specific meaning, whereas in the English corpus the ratio is 1:7, with no instances in FT_Leaders. It is worth noting that 'natural disaster' is, in turn, closely connected in both the English and the Italian corpus with the focus on 'emergency at sea', evoked by lexical units like *lifeline*/*salvataggio*: these are consistent with the conceptual metaphors WEAK ECONOMY IS A SINKING SHIP and MARKET MOVEMENTS ARE NAUTICAL MOVEMENTS/WAYS OF MOVING IN THE WATER, which are also very frequent in the discourse of economics (cf. Charteris-Black and Ennis 2001).

Lexical units from this sub-set in Italian include clear examples like the nouns *cataclisma*, *epicentro* and *tsunami*, but also other less evident cases like the verbs *abbattersi* and *scuotere*, whose connection with the conceptual area of NATURAL DISASTER was, again, checked using corpus methodologies. The following citations illustrate some of these metaphorical occurrences in their original context:

(43) Ora occorre affrontare con strumenti adeguati la **crisi** che si sta abbattendo sull'economia reale. [S24O_Prima_pagina]

(44) Alla base della **crisi** ci sono state le tre tsunami che hanno investito i mercati monetari a settembre e dicembre 2007 e ancora a marzo scorso. [S24O_Prima_pagina]

(45) probabilmente la parte europea di questa **crisi** cataclismatica si risolverà come un puro riflesso della sfiducia il cui contagio ha attraversato l'Atlantico. [S24O_Editoriali]

(46) la debolezza della strategia di affrontare una **crisi** sistemica con singoli interventi sulla banca in quel momento nell'occhio del ciclone. [S24O_Editoriali]

In (43), the metaphorical conceptualisation of the crisis as a hurricane or a violent storm, signalled at the linguistic level by the presence of the Verbal Group *si sta abbattendo*, has effects on the second element of the metaphorical scenario, the real economy, which is

explicitly, if metaphorically, presented as helplessly undergoing the devastation caused by the crisis itself. A similar metaphorical representation is given in (46). In the leading article from which the concordance was extracted – dated November 26th, 2008 – the crisis is unhesitatingly defined as systemic, i.e. spreading across important financial institutions and economic sectors in several countries, with similar manifestations. According to the journalist, such a crisis cannot be faced by trying to save single banks on an *ad hoc* basis, and a coordinated and wide-ranging response is needed in order to solve it. On the one hand, the conventional metaphorical phrase *nell'occhio del ciclone* is less explicit than its literal counterpart (i.e. 'banks that risk failing'); on the other, it highlights some specific features within the concept CRISIS, i.e. VIOLENCE and INEVITABILITY. At the same time, potential responsibilities on the part of banks are concealed by the metaphor, and thus underestimated. The same type of metaphorical foregrounding is at work in (45), where the presence of the post-modifier *cataclismatica* portrays the crisis as a sudden disaster, leading to serious economic and financial disruption; this, however, contrasts with the rest of the sentence, which seems to minimise the effects of the downturn on the European area (it is perhaps worth noting that the leading article in this case is dated October 8th 2008, i.e. a week before Lehman Brothers' bankruptcy). A slightly different perspective is taken in (44), where the word evoking the specifying meaning 'natural disaster' does not refer directly to the global crisis, but rather to a different set of elements, identified by the author as its causes. The three *tsunami* referred to in the article stand for three moments of great distress experienced by the money markets at different times during the years 2007 and 2008, when the indexes that measure monetary risk rose to alarming levels: in this case, the metaphorical construction foregrounds the feature INEVITABILITY within CRISIS, while somehow displacing the feature VIOLENCE to its root causes.

The English corpus (more specifically, FT_First_page) presents only three lexical units with the same focus, two of which trigger an association between the crisis and movements of the earth's crust (*epicentre* and *upheaval*), while the third is a generic verb, *devastate*[11]. However, the English corpus shows evidence of a metaphorical mapping that does not emerge from the Italian data, namely THE CRISIS IS A NUCLEAR DISASTER, which is realised by the lexical units *fallout* (defined in the *Merriam-Webster Online Dictionary* as 'radioactive

[11] The link between the verb *devastate* and the conceptual area of NATURAL DISASTER was checked against corpus evidence: a list of collocates for the verb in the BNC (in the range from 3 words to the left to 3 words to the right of the node word, sorted by logDice) retrieves *earthquake* and *hurricane* as the first and the third result, respectively (though it must be said that *devastate* is a very flexible verb, which can be used in a wide range of contexts having to do with DISASTER in general, as shown by other relevant collocates such as *bomb*, *fire* and *explosion*).

particles stirred up by or resulting from a nuclear explosion and descending through the atmosphere') and *meltdown* ('accidental melting of the core of a nuclear reactor', according to the same dictionary). Like a natural disaster, a nuclear disaster has tremendous consequences on the environment (which is the reason why it was here grouped under the general heading NATURAL FORCE/WEATHER), but, differently from it, it is caused by human agency, either deliberate or accidental. As a consequence, the conceptual metaphor THE CRISIS IS A NUCLEAR DISASTER can be said to have a weaker connection with INEVITABILITY than THE CRISIS IS A NATURAL DISASTER. As I said, mappings between CRISIS and NUCLEAR DISASTER do not emerge from the Italian corpus: such discrepancy may be explained in terms of the absence of nuclear power stations from the Italian territory, and may signal that nuclear disasters are not perceived as prototypical dangers in the Italian culture (even though research on a wider range of sources would be needed to confirm this hypothesis).

Several other metaphorical occurrences represent the crisis in terms of BAD and VERY BAD WEATHER in both corpora, with a slightly higher degree of lexical variation (as usual) in the Italian corpus. Let us consider the following examples from *The Financial Times*:

(47) Although the financial **crisis** is global, sterling was <u>at the centre of the storm</u> yesterday as its economy is perceived as more vulnerable than most advanced economies. [FT_First_page]

(48) That is the risk facing Europe's banks as the financial **crisis** that has engulfed Wall Street <u>sweeps</u> across the Atlantic. [FT_Leaders]

Both (47) and (48) instantiate the conceptual metaphor THE CRISIS IS VERY BAD WEATHER, and more specifically, THE CRISIS IS A STORM: in (47), the conventional expression *at the centre of the storm* logically refers to the financial crisis mentioned at the beginning of the sentence, which is hitting the British currency, while, in (48), the metaphor is realised by the verb *sweep*, whose collocates in the BNC include lemmas like *wind*, *rain* and *storm*.

The only expression with a positive connotation can be found in S24O_Prima_pagina: it is *sereno all'orizzonte*. However, if we look at the phrase in its original context, we find that it is inserted into a negative polarity structure, which confirms the overall negative representation of the economic situation:

(49) Giulio Tremonti, ministro dell'Economia in pectore, si schiera fra quanti nella **crisi** finanziaria non vedono ancora profilarsi <u>il sereno all'orizzonte</u> [S24O_Prima_pagina]

As emerged from the examples presented in this section, metaphors like THE CRISIS IS (VERY) BAD WEATHER and THE CRISIS IS A NATURAL DISASTER have as their main effect that of conceptualising economic and financial processes as natural phenomena, following their own rules, and ultimately beyond human control.

3. Grammatical metaphors

The same concordances for *crisis* and *crisi* (i.e. with irrelevant occurrences excluded) were subsequently analysed for grammatical metaphors, adopting the corpus-assisted procedure that was described in Chapter Three (Section 3). In this case, too, the number of metaphorical concordances (showing evidence of at least one grammatical metaphor in the clause or clause complex containing the word *crisis*/*crisi*) was markedly high across the corpora, especially in the English corpus, where it exceeds 50% of the total. The results are summarised in the table below:

Sub-corpus	Analysed concordances	Metaphorical concordances	%	Total % in corpus
FT_First_page	180	94	52.2 %	51 %
FT_Leaders	177	88	49.7 %	
S24O_Prima_pagina	514	204	39.7 %	40.5 %
S24O_Editoriali	485	201	41.4 %	

Table 4.14 Percentage of metaphorical concordances (grammatical metaphor) in *The Financial Times* corpus and *Il Sole 24 Ore* corpus

However, the lower number of metaphorical concordances in the Italian corpus is balanced by a tendency to group several grammatical metaphors in clusters into a single clause or clause complex, so that the figures for single metaphorical realisations are comparable in the two corpora (with a ratio of approximately 2 grammatical metaphors per concordance). An example of a complex metaphorical cluster is provided by the following citation:

(50) Le aree di intervento delle raccomandazioni di aprile riguardano quindi anzi tutto il quadro della supervisione e vigilanza (dai requisiti di capitale, con la spinta a mettere in atto rapidamente le nuove regole di Basilea 2, alla creazione di "cuscinetti" di liquidità, al miglioramento delle pratiche di gestione del rischio), ma anche con maggior coordinamento fra le autorità e il rafforzamento della loro capacità di rispondere alle **crisi** (con un'efficiente fornitura di liquidità, ma anche con procedure adatte a trattare i casi di banche in difficoltà, Northern Rock docet). [S24O_Prima_pagina]

A single, very long sentence shows evidence of 11 different ideational metaphors, through which a figure is non-congruently realised as either a downranked group/phrase (*intervento*, *spinta*, *creazione*, *miglioramento*, *coordinamento*, *rafforzamento*, *fornitura*), or even as a modifier within another, already metaphorical, group/phrase (*raccomandazioni*, *supervisione* e *vigilanza*, *gestione*). Moreover, *capacità* is a nominalization of what would be a more congruent modulated clause expressing capacity/ability (cf. Thompson 2004: 234; on the category of capacity/ability, and its peripheral position in the sub-system of modulation within MODALITY TYPE, cf. Chapter Two, Section 1.2). Although patterns of 'metaphors within metaphors' emerged from the English data as well, the results of the analysis show that in the Italian corpus they tend to be used more frequently and, even more interestingly, they tend to reach higher levels of complexity. In Chapter Two, while commenting on another citation taken from the S24O_Prima_pagina sub-corpus, I defined similar clusters of metaphors as a 'Chinese puzzle', noting that they limit reader accessibility to a text, in that they require solid background knowledge to 'fill in' the informative and logical 'gaps' produced by the process of metaphorical meaning condensation (cf. Chapter Two, Section 2.2, example 12). The same observations can be made with reference to (50) above, where the metaphors are so numerous and deeply entangled that it is very difficult to get back to a more congruent version, and the 'doers' of the nominalised Processes are totally effaced. Example (50) also illustrates a structure that recurs several times in both the Italian sub-corpora: nominalised Processes or Qualities are construed as circumstantial elements introduced by the prepositions *dal/dalla… al/alla* (expressing abstract space) or *con* (expressing Manner: means, Cause: reason, or even abstract Accompaniment), thus realising lists of 'condensed' figures. Further examples can be found in the following concordances:

(51) Bear Sterns era già stata tra le prime a soffrire per la **crisi** dei mutui e del credito, dalla chiusura di tre hedge fund all'estromissione dell'amministratore delegato James Cayne. [S24O_Prima_pagina]

(52) Nascono anche da qui le recenti tensioni che hanno caratterizzato il mercato finanziario nel corso del 2007, con le insolvenze di molte famiglie, le **crisi** delle cartolarizzazioni dei mutui, le svalutazioni di capitale di importanti banche mondiali, i salvataggi di banche e con i recenti allarmi circa le capacità di rimborso delle carte di credito e il settore delle assicurazioni. [S24O_Editoriali]

Similar structures, which are frequently used in the Italian corpus as a strategy to compact information when several interrelated complex events are involved, can be explained in terms of the *register-idiosyncratic* features of the language of journalism in Italian, though they are probably shared by other formal registers as well (e.g. academic writing). The term 'register-idiosyncratic' refers to the constraints naturally imposed by certain contexts on the semantic and linguistic choices made by the speaker/writer within the overall meaning potential of the language; it is here adopted in place of the more common epithet 'specific' in consideration of the typical overlap there is of linguistic mechanisms among diverse registers (Miller 2007b; Miller and Johnson 2009 and *to appear*, 2013).

The tables in the following pages show the number and the types of grammatical metaphors that were identified in each sub-corpus, together with examples. During this phase of analysis, each instance of grammatical metaphor was assigned to one of the two main categories described in Chapter Three, Section 3 (a. metaphors of modality or b. ideational metaphors) and, within these, to a specific class, depending on the type and orientation of modality expressed, or on the type of lexico-grammatical downgrading brought about by the metaphor (following the general typology proposed by Halliday and Matthiessen 2004: 646-652; cf. again Chapter Three, Section 3). The category of metaphors of modality includes two classes:

1. Modalization: probability, sub-divided into subjective: explicit and objective: explicit orientation.
2. Modulation: obligation, subdivided into subjective: explicit and objective: explicit orientation.

Since neither the Italian nor the English corpus showed evidence of metaphors involving modalization: usuality and modulation: inclination, these two classes were not included in the final classification. The category of ideational metaphors also includes two classes:

1. Metaphorical realisations of a sequence of figures as a simple clause, subdivided into expansion and projection, according to the nature of the logical relation expressed by the sequence.
2. Metaphorical realisations of a figure as a group/phrase, subdivided into Process re-construed as Process + Range; time-phased Process re-construed as Thing + separate Process; Process re-construed as Thing + new Process meaning 'happen' or 'exist'; figure realised as group and inserted into a totally different clause (in which it may function as participant, circumstance, or even as modifier within another group/phrase).

Item: **CRISIS** Sub-corpus: FT_First_page Total number of metaphors: 134			
a. METAPHORS OF MODALITY			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
MODALIZATION: PROBABILITY	tot. **6**		
ORIENTATION: SUBJECTIVE: EXPLICIT		5	"I don't think we would get rid of the crisis with just monetary tools"
ORIENTATION: OBJECTIVE: EXPLICIT		1	The move to extend the credit facility is likely to soothe Wall Street
MODULATION: OBLIGATION	tot. **2**		
ORIENTATION: SUBJECTIVE: EXPLICIT		2	"I intend the bank to contribute to the design of regulatory and incentive structures [...]"
ORIENTATION: OBJECTIVE: EXPLICIT		--	--

b. IDEATIONAL METAPHORS			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
SEQUENCE OF FIGURES (Congruent realisation: CLAUSE COMPLEX)	tot. **72**		
EXPANSION NEXUS → SIMPLE CLAUSE		52	[...] the draft report was written a month ago, before the global financial crisis deepened after the collapse of Lehman Brothers
PROJECTION NEXUS → SIMPLE CLAUSE		20	Mr Darling also used the crisis to stage a series of tactical retreats from earlier decisions, announcing a rethink of his plans to reform air passenger taxes

FIGURE (Congruent realisation: CLAUSE)	tot. **54**		
I. PART OF FIGURE → GROUP: Process as Range → CLAUSE retained as domain of realisation through creation of new Process (meaning 'perform')		11	"Congress will respond to the financial markets crisis by taking action this week in a bipartisan manner"
II. PART OF FIGURE → GROUP: Time-phased Process reconstrued as Thing + separate Process → CLAUSE retained as domain of realisation through 'split' Process		--	--
III. FIGURE → GROUP: Process as participant → CLAUSE retained as domain of realisation through creation of new Process (meaning 'happen')		4	Britain will escape a repeat of the negative equity crisis of the 1990s unless there is an unprecedented fall in house prices
IV. FIGURE → GROUP: Process as participant, circumstance or Qualifier (by further downgrading), or Quality as Thing → Domain of realisation downgraded from CLAUSE to GROUP		39	- The participation of Mr Buffett's Berkshire Hathaway group […] underlines the instrumental role of cash-rich investors during the crisis - Investors fretted about the pace of negotiations

Table 4.15 Grammatical metaphors in the FT_First_page sub-corpus

Item: **CRISIS** Sub-corpus: FT_Leaders Total number of metaphors: 110

a. METAPHORS OF MODALITY			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
MODALIZATION: PROBABILITY	tot. **1**		
ORIENTATION: SUBJECTIVE: EXPLICIT		--	--
ORIENTATION: OBJECTIVE: EXPLICIT		1	He - and it appears most likely it will be a he - will need to take the lead in fighting the most serious financial crisis since the 1930s
MODULATION: OBLIGATION	tot. **0**		
ORIENTATION: SUBJECTIVE: EXPLICIT		--	--
ORIENTATION: OBJECTIVE: EXPLICIT		--	--

b. IDEATIONAL METAPHORS			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
SEQUENCE OF FIGURES (Congruent realisation: CLAUSE COMPLEX)	tot. **50**		
EXPANSION NEXUS → SIMPLE CLAUSE		40	After a clumsy start, the ECB has effectively responded to the credit crisis too
PROJECTION NEXUS → SIMPLE CLAUSE		10	If the Treasury were able to declare a crisis and order injections of cash it would violate the independence of monetary policy
FIGURE (Congruent realisation: CLAUSE)	tot. **59**		
I. PART OF FIGURE → GROUP: Process as Range → CLAUSE retained as domain of realisation through creation of new Process (meaning 'perform')		5	This rapid shift in focus highlights the impact the credit crisis has had on the real economy

II. PART OF FIGURE → GROUP: Time-phased Process reconstrued as Thing + separate Process → CLAUSE retained as domain of realisation through 'split' Process	--	--
III. FIGURE → GROUP: Process as participant → CLAUSE retained as domain of realisation through creation of new Process (meaning 'happen')	1	It is a pity there was not much more intrusion in the run-up to the crisis
IV. FIGURE → GROUP: Process as participant, circumstance or Qualifier (by further downgrading), or Quality as Thing → Domain of realisation downgraded from CLAUSE to GROUP	53	Central banks have co-ordinated their supply of liquidity remarkably well since the credit crisis began in August 2007

Table 4.16 Grammatical metaphors in the FT_Leaders sub-corpus

Item: **CRISI** Sub-corpus: S24O_Prima_Pagina Total number of metaphors: 310			
a. METAPHORS OF MODALITY			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
MODALIZATION: PROBABILITY	tot. **3**		
ORIENTATION: SUBJECTIVE: EXPLICIT		2	Kissinger ha anche detto di non aver dubbi «che l'Italia ce la farà (a superare la crisi ndr) perché in passato è sopravvissuta a grandi cambiamenti e anche disastri»
ORIENTATION: OBJECTIVE: EXPLICIT		1	Il sistema finanziario internazionale sta facendo passi avanti nel rafforzarsi dopo la crisi […] e oggi «è improbabile» che ne possa venire travolto
MODULATION: OBLIGATION	tot. **9**		
ORIENTATION: SUBJECTIVE: EXPLICIT		1	Il Fondo invita a evitare «una corsa alla regolamentazione» sull'onda della crisi
ORIENTATION: OBJECTIVE: EXPLICIT		8	Per Draghi «la crisi dei mutui non è finita, bisogna agire»

b. IDEATIONAL METAPHORS			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
SEQUENCE OF FIGURES (Congruent realisation: CLAUSE COMPLEX)	tot. **124**		
EXPANSION NEXUS → SIMPLE CLAUSE		105	[…] nonostante i ripetuti tagli ai tassi interbancari, infatti, i tassi sui mutui immobiliari trentennali sono addirittura saliti
PROJECTION NEXUS → SIMPLE CLAUSE		19	Sul fronte del credito si aggrava la crisi di Merrill Lynch […] che ha annunciato perdite per 16,7 miliardi di dollari

FIGURE (Congruent realisation: CLAUSE)	tot. **174**		
I. PART OF FIGURE → GROUP: Process as Range → CLAUSE retained as domain of realisation through creation of new Process (meaning 'perform')		13	La crisi attuale dei prezzi farà aumentare sempre di più le strategie di consumi per non dover <u>fare troppe rinunce</u>
II. PART OF FIGURE → GROUP: Time-phased Process reconstrued as Thing + separate Process → CLAUSE retained as domain of realisation through 'split' Process		1	Anche banche e società finanziarie ben più grandi fanno tuttavia i conti con la crisi: <u>le svalutazioni</u> per istituti quali Wachovia o Citigroup <u>sono proseguite</u> nell'ultimo trimestre
III. FIGURE → GROUP: Process as participant → CLAUSE retained as domain of realisation through creation of new Process (meaning 'happen')		7	<u>C'è stato un trasferimento dell'onere della crisi</u> dal settore privato a quello pubblico
IV. FIGURE → GROUP: Process as participant, circumstance or Qualifier (by further downgrading), or Quality as Thing → Domain of realisation downgraded from CLAUSE to GROUP		153	- La crisi dei mercati internazionali, spiega Draghi, si combina <u>con il rallentamento dell'economia</u> e con un'inflazione che è <u>in salita</u> - Anche perché, in momenti di crisi dei mercati, una delle strategie per sostenere i corsi azionari […] è proprio garantire il dividendo, magari unito a un bel piano <u>di buy-back</u>

Table 4.17 Grammatical metaphors in the S24O_Prima_pagina sub-corpus

Item: **CRISI** Sub-corpus: S24O_Editoriali Total number of metaphors: 327			
a. METAPHORS OF MODALITY			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
MODALIZATION: PROBABILITY	tot. **5**		
ORIENTATION: SUBJECTIVE: EXPLICIT		1	Sono ben chiare allora le difficoltà dell'opposizione: ridotta a sperare che la crisi economica si aggravi per fermare l'azione riformatrice del Governo – credo sia questa la ragione dei titoloni di Repubblica che quasi invocano ogni giorno la Grande Depressione
ORIENTATION: OBJECTIVE: EXPLICIT		4	È molto probabile che questa cura riuscirà a evitare che gli effetti della crisi della finanza vadano oltre il rallentamento già in atto
MODULATION: OBLIGATION	tot. **11**		
ORIENTATION: SUBJECTIVE: EXPLICIT		--	--
ORIENTATION: OBJECTIVE: EXPLICIT		11	Eppure è da lì che bisogna partire se vogliamo che questa crisi serva davvero a disegnare per il futuro regole più efficaci

b. IDEATIONAL METAPHORS			
TYPE OF METAPHORICAL SHIFT		NO. OF OCCURRENCES	CORPUS EXAMPLES
SEQUENCE OF FIGURES (Congruent realisation: CLAUSE COMPLEX)	tot. **122**		
EXPANSION NEXUS → SIMPLE CLAUSE		107	Di fronte alla eccezionalità della crisi, la bandiera inglese del liberismo finanziario è stata alla fine ammainata, dopo una resistenza prolungata, ma non certo eroica
PROJECTION NEXUS → SIMPLE CLAUSE		15	L'analisi delle cause della crisi è precisa e convincente, a cominciare dall'osservazione [[che i compensi dei manager delle banche li incoraggiano ad assumere rischi eccessivi]]

FIGURE (Congruent realisation: CLAUSE)	tot. **189**		
I. PART OF FIGURE → GROUP: Process as Range → CLAUSE retained as domain of realisation through creation of new Process (meaning 'perform')		10	Di fronte alla crisi dei mercati finanziari internazionali, che rischia di avere ripercussioni forti su un'economia reale europea che invece è strutturalmente solida, sarebbe necessaria una risposta coraggiosa e fuori dagli schemi
II. PART OF FIGURE → GROUP: Time-phased Process reconstrued as Thing + separate Process → CLAUSE retained as domain of realisation through 'split' Process		--	--
III. FIGURE → GROUP: Process as participant → CLAUSE retained as domain of realisation through creation of new Process (meaning 'happen')		1	In assenza di un sistema di responsabilità, il contenimento della crisi avviene lasciando che il costo del salvataggio delle istituzioni finanziarie si scarichi [...] sulle spalle del contribuente
IV. FIGURE → GROUP: Process as participant, circumstance or Qualifier (by further downgrading), or Quality as Thing → Domain of realisation downgraded from CLAUSE to GROUP		178	- Le reazioni dei vari paesi europei sono molto diverse, pur in presenza degli stessi shock - Fiducia è la parola chiave della gestione politica della crisi

Table 4.18 Grammatical metaphors in the S24O_Editoriali sub-corpus

As the tables above show, ideational metaphors account for the vast majority of occurrences in all the sub-corpora: within this category, the most frequent metaphorical shifts are those that involve a sequence of figures linked by a logical relation of expansion, which is realised as a simple clause rather than as a clause complex, and those that involve an entire figure, whose domain of realisation is downgraded from the level of clause to that of group/phrase. As we shall see below, these patterns can again be explained by making reference to some central register-idiosyncratic features of the language of journalism, more specifically of financial journalism.

The following graphs give a snapshot of the distribution of these and the other, less frequent types of grammatical metaphor which emerged from analysis of the four sub-corpora (cases I, II and III within the class of metaphors involving figures are here grouped together under the label FIGURE → GROUP, with the clause retained as domain of realisation).

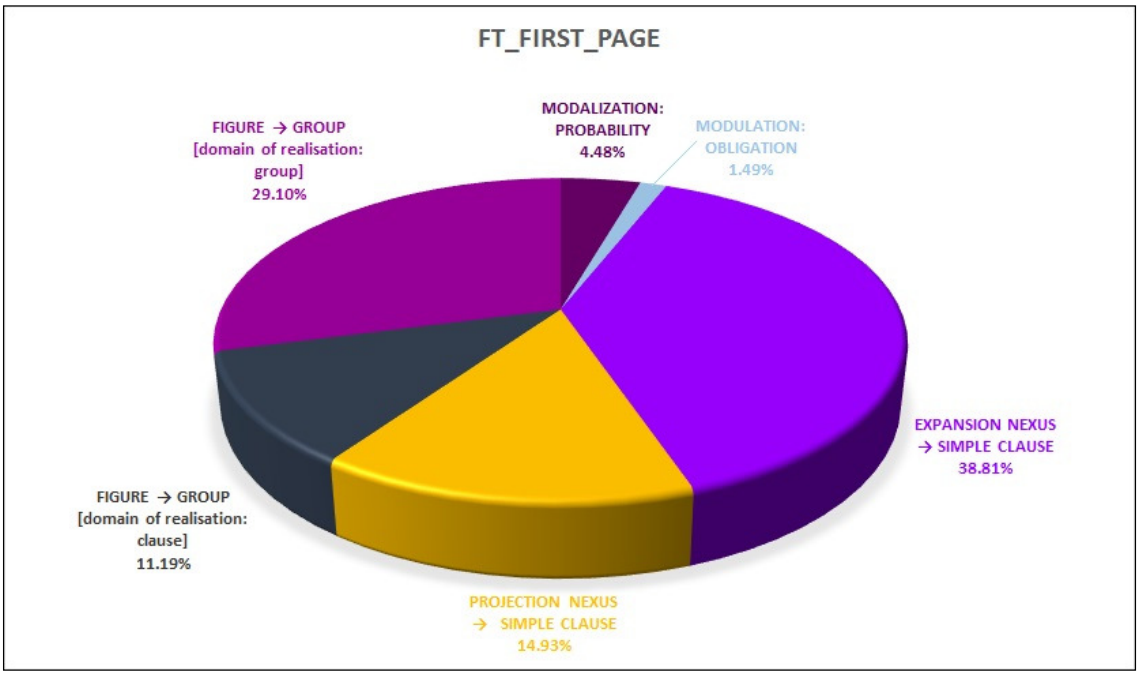

Figure 4.19 Distribution of grammatical metaphors in the FT_First_page sub-corpus

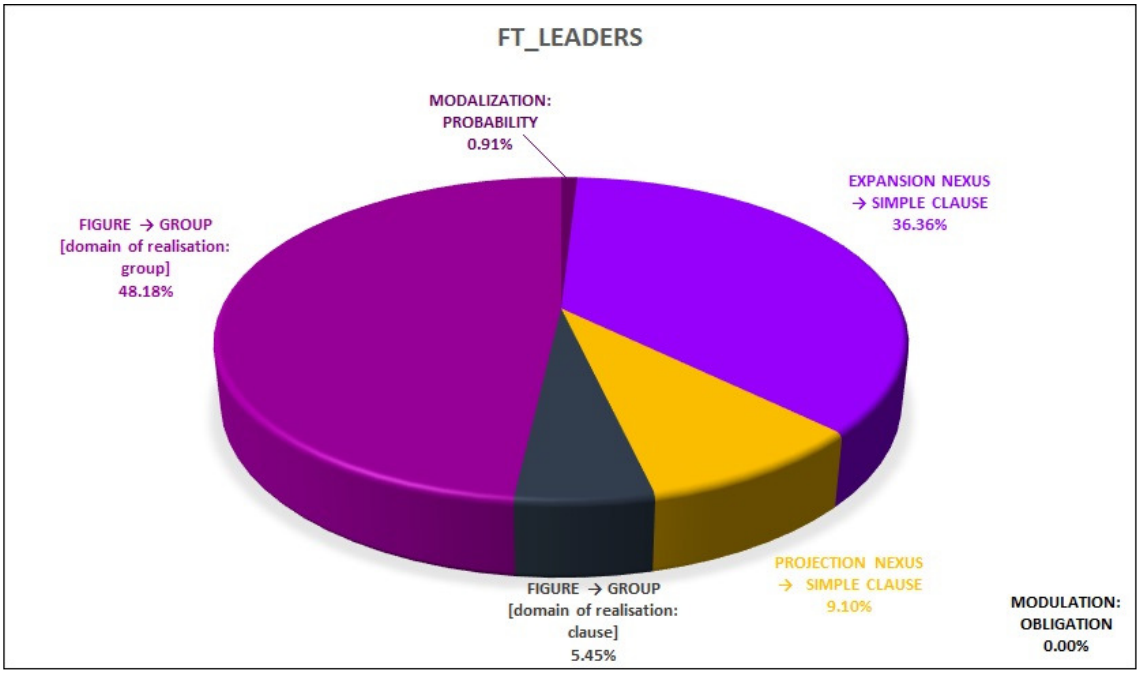

Figure 4.20 Distribution of grammatical metaphors in the FT_Leaders sub-corpus

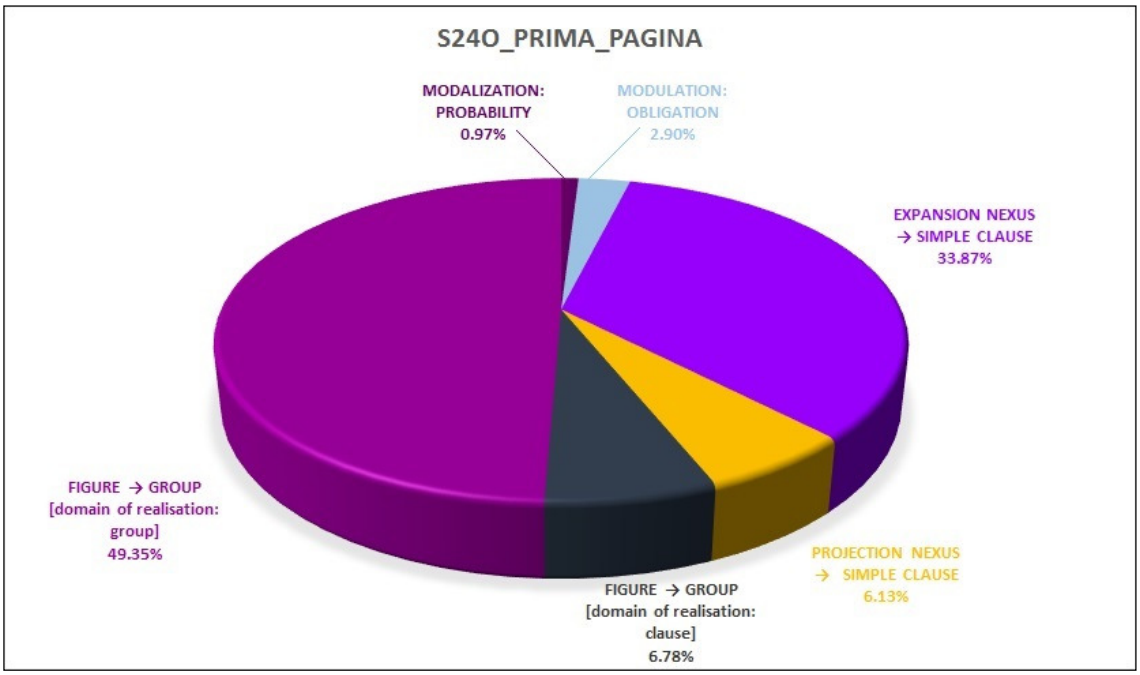

Figure 4.21 Distribution of grammatical metaphors in the S24O_Prima_pagina sub-corpus

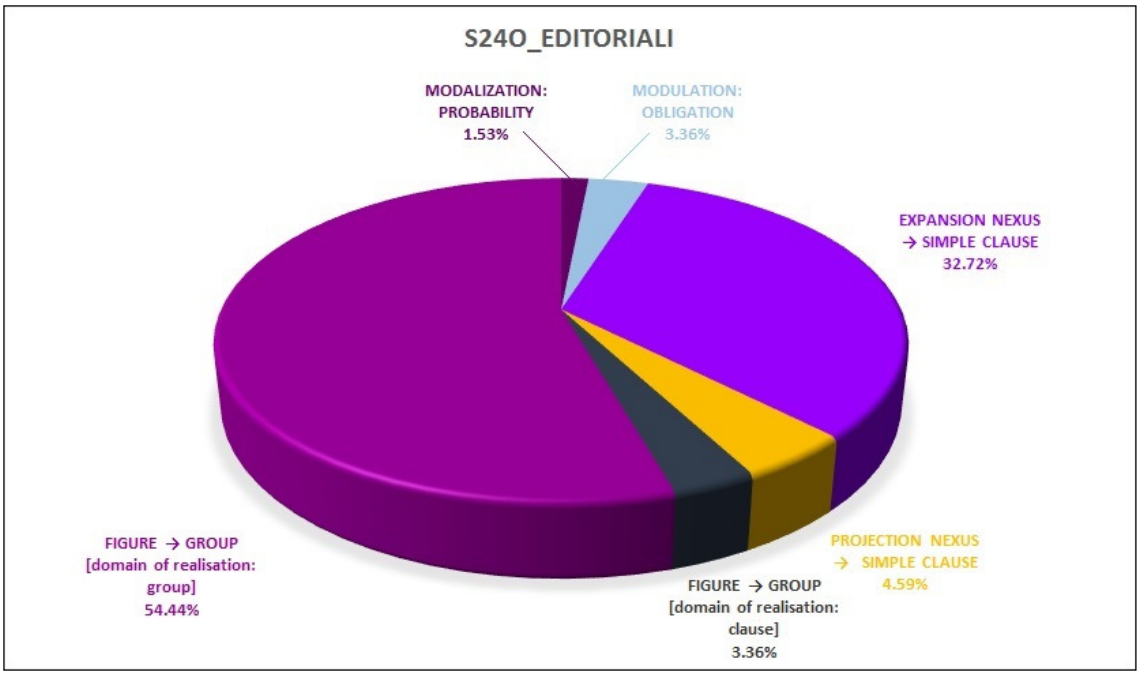

Figure 4.22 Distribution of grammatical metaphors in the S24O_Editoriali sub-corpus

As evident, metaphors of modality and ideational metaphors in which the clause is retained as domain of realisation represent a much smaller percentage of the total occurrences of grammatical metaphor in all the sub-corpora. Similarities and differences in the realisation of the various types of grammatical metaphor are discussed more in depth in the following sections.

3.1 Ideational metaphors

3.1.1 Non-congruent realisations of sequences of figures

Within the class of metaphors that start with sequences of figures, downgrading their realisation to the level of simple clauses, the graphs highlight a gap between those that involve sequences linked by a logical relation of expansion and those that involve sequences linked by a logical relation of projection. In FT_First_page, metaphorical realisations of expansion nexuses account for 38.81% of the total occurrences of grammatical metaphor, as opposed to only 14.93% in the case of projection nexuses; in FT_Leaders, the percentage for metaphorical expansion is almost four times higher than that for metaphorical projection (36.36% *vs.* 9.10% respectively). The difference is even more noticeable in the case of the Italian sub-corpora: in S24O_Prima_pagina, metaphorical realisations of expansion nexuses cover 33.87% of the total, as opposed to metaphorical realisations of projection nexuses, which account for only 6.13%; the data from S24O_Editoriali offer a similar picture (32.72% *vs*. 4.59% respectively). As already noted in the previous section, such discrepancies can be explained in terms of register-idiosyncrasy (Miller 2007b; Miller and Johnson 2009 and *to appear*, 2013).

Grammatical metaphors involving the packaging of what more congruently would be expansion nexuses are a very 'economical' way of expressing logical relations, since they enable the writer to condense the meaning of a longer string of text into a simple clause: as such, they fulfil the newspaper's requirements of conciseness, and the space constraints that are generally imposed to journalists by the page make-up. This is particularly evident in titles, where it is extremely important to convey meanings in a condensed but attractive form. Examples from the English corpus are provided below:

(53) Banks face closer scrutiny. Rule changes seek to prevent repeat of **crisis**. [FT_First_page]

(54) Beating the **crisis** needs co-operation; National policymakers must not try to do too much alone [FT_Leaders]

A more congruent version of the second clause in (53), such as 'Banking regulators change rules to try to prevent the crisis from repeating' would be an *unconventional* choice for a title: in fact, being longer and rather clumsy, it would surely be less 'eye-catching'. The same search for effectiveness can be hypothesised as lying behind the lexico-grammatical choices made by the writer in the first clause, which activate a metaphorical WAR/CONFLICT scenario, realising the specific conceptual metaphor SCRUTINY IS AN ENEMY, and would be more congruently re-worded as 'Banks are/will be more closely controlled'. Similar observations can be made with reference to the first clause in example (54), whose congruent realisation would involve a nexus of two clauses linked by a logical relation of enhancement expressing cause: purpose: '*National policymakers* must co-operate *in order to* beat the crisis'. In this case, missing information concerning the Subject of the main clause (and Actor of the material Process represented by *co-operate*), which is left implicit in the metaphorical realisation, can be inferred from the second clause of the title, while the Complement of the secondary clause (and Goal of the material Process represented by *beat*) corresponds to the Complement of the metaphorical mode[12]. However, as a comparison between examples (53) and (54) and the proposed congruent re-wordings clearly shows, besides 'saving space', grammatical metaphors of this type have an important textual function: they enable the writer to introduce the nominalised Process as the unmarked Theme, signalling explicitly that this is the natural point of departure for, and the concern of, his/her message, and thus drawing the reader's attention to it (cf. Chapter Two, Section 1.4).

Although they come in especially 'handy' in the case of headlines, metaphorical realisations of expansion nexuses are frequently used for the same reasons within the body of the article: particularly – as often happens with ideational metaphors in general (cf. examples (50) - (52) in Section 3 above) – when the purpose is that of making a quick reference to

[12] Considerations about the number of words and length of the linguistic structures seem to play a particularly important role in the case of leading articles in *The Financial Times*, not only because here authors are confronted with more rigid space limits than in first-page articles (leaders occupy a column at one side of the page that is approximately 3 inches wide), but also because there are specific editorial rules for titles. These are always composed of two distinct clauses, the first of which is short and to the point, while the second is a little longer and expands on the topic. Such structure makes leaders in *The Financial Times* recognisable at a glance, besides giving their titles a characteristic rhythmic pattern.

information that the author chooses not to express in a congruent, and thus more explicit, form (for instance, because the reader is supposed to know the details already, or because it is not central to the topics discussed). The following example is taken from the Italian corpus:

(55) Per il Fondo monetario internazionale la **crisi** nata dai mutui subprime americani potrebbe arrivare a costare in tutto il mondo quasi mille miliardi di dollari: 945, per la precisione, di cui 565 solo per il calo dei prezzi delle case e l'aumento delle insolvenze dei mutui. [S24O_Prima pagina]

Concordance (55) shows another strategy through which a clause nexus representing a sequence of figures can be metaphorically realised by a simple clause, in both English and Italian: one of the figures is instantiated by a metaphorical Prepositional Phrase, with the preposition matching the meaning of what would be the logical relator in the congruent mode, in terms of subtype of expansion. In the example at hand, the causal preposition *per* corresponds to a conjunction like *perché*, which would congruently introduce a hypotactic enhancing clause expressing cause: reason: 'Per il Fondo monetario internazionale la crisi nata dai mutui subprime americani potrebbe arrivare a costare in tutto il mondo quasi mille miliardi di dollari […] di cui 565 solo *perché* i prezzi delle case sono calati e le insolvenze dei mutui sono aumentate'[13]. At the same time, the nominalization of the Processes (*calare* → *calo*, *aumentare* → *aumento*) has the effect of portraying them as concrete causes of the losses, and thus as more objective data.

In other cases, the logical relation is metaphorically construed not as a circumstance, but as a relational Process with related participant roles:

(56) La consapevolezza della **crisi** è testimoniata dalla mobilitazione pubblica dei Governi della Ue. [S24O_Editoriali]

This citation illustrates what Halliday and Matthiessen define as the metaphorical representation of a relation of internal cause, i.e. "[…] cause in the sense of 'x so I think/say

[13] An even more congruent reading of (55) would also 'unpack' the meaning of *insolvenze*, which is an instance of an ideational metaphor involving the downgrading of a figure to the level of Qualifier (case IV under the FIGURE heading in Tables 4.15 to 4.18 above): '[…] perché i prezzi delle case sono calati e (perché) *un numero sempre maggiore di famiglie che hanno contratto un mutuo risulta insolvente*' (that is, not able to repay their mortgage). Thus, concordance (55) is a further example of the tendency shown by the Italian data to group several grammatical metaphors, even of different types, within the same clause/clause complex (cf. Section 3 above).

y' […] construed metaphorically by verbs of proving such as *prove*, *show*, *demonstrate*, *argue*, *suggest*, *indicate*, *imply*" (2004: 648; original emphasis). If we expand the structure in (56) – 'Se i Governi della Ue si sono pubblicamente mobilitati è perché sono consapevoli della crisi' – we notice that the Attribute of what would be a congruent intensive *attributive* relational clause (*consapevoli*) has been turned into a Thing (*consapevolezza*), which takes on the role of Identified within a metaphorical intensive *identifying* relational clause (cf. Chapter Two, Section 1.3): hence, it is not only made thematic, but also 'thingified', presented as an entity that can be recognised and classified[14]. In other words, the 'quality' of being aware of the crisis, shown by national governments, is as it were put before our eyes by the lexico-grammar of the clause: its existence becomes a fact, like that of 'congruently' concrete entities.

The lower frequency of grammatical metaphors involving the packaging of what more congruently would be projection nexuses can be explained by making reference to the tendency to quote or report locutions/ideas from public speeches and interviews in newspaper articles, especially in news reports (as will emerge also from the discussion of metaphors of modality in Section 3.2 below): this may again be hypothesised as being a register-idiosyncratic feature of the language of journalism.

Most of the occurrences of this metaphorical type in the corpora instantiate two of the three basic strategies made available by the lexico-grammatical systems of English and Italian to downgrade the realisation of a projection nexus (cf. Halliday and Matthiessen 2004: 647-650; Chapter Two, Section 2.2; Chapter Three, Section 3). In some cases, the projected figure is non-congruently realised as the Range (i.e. either Phenomenon or Verbiage) of the Process through a nominalization, as in the following example:

(57) But while the bank's Financial Stability Report may be right not to expect further spectacular crashes and liquidity **crises** – in that sense the worst may be over – it does not follow that markets will soon return to normal. [FT_Leaders]

Here, the 'doer' of the material Process congruently represented by the verb *crash* is left implicit, and the resulting informative 'gap' has to be filled in through the congruent reading, by resorting to co-textual and contextual information ('the bank's Financial Stability Report

[14] With reference to this point, Halliday and Matthiessen observe that: "[…] figures construed as participants are realized by nominal groups, so the potential for construing participants embodied in the nominal group systems of classification and characterization become available. For example, when 'somebody remembering something' is reconstrued as 'memory', it can be classified and characterized just like other entities" (2004: 641).

may be right not to expect that further *banks/financial firms* will crash in a spectacular way and (experience) liquidity crises')[15].

In other cases, it is the mental/verbal Process that is nominalised; the projected figure is consequently embedded as the Qualifier within the metaphorical Nominal Group:

(58) Mr Darling is to underwrite new loans to small firms as part of a package of measures to help the sector, amid Tory claims that the credit **crisis** is "strangling" companies. [FT_First_page]

(59) Una scelta cruciale, se i negoziatori del Congresso e dell'amministrazione Bush rispetteranno la promessa di limare le divergenze, per risparmiare lunedì a Wall Street e ai mercati globali un brusco risveglio, con rischi di **crisi** epocali e ondate di panico. [S24O_Prima_pagina]

Concordance (58) is a noteworthy illustration of complementarity between metaphorical realisations of projection and expansion. On the one hand, the Nominal Group *Tory claims [[that the credit crisis is "strangling" companies]]* functions as a metaphorical expression of what would be a congruent projection nexus, with the Sayer of the congruent projecting clause being realised as a downranked Classifier ('Tories claim that the credit crisis is "strangling" companies'). On the other hand, the same Nominal Group is inserted within a Prepositional Phrase expressing abstract Location: space: this may correspond to a temporal enhancing clause in the congruent reading ('Mr Darling is to underwrite new loans to small firms as part of a package of measures to help the sector, *while* Tories claim that the credit crisis is "strangling" companies'). However, it must be noted that, since the preposition *amid* in (58) also functions as a realisation of a conceptual metaphor of the type TORY CLAIMS ARE A PHYSICAL OBJECT/SUBSTANCE, the sense of 'being surrounded by something' that is conveyed by the metaphorical realisation gets lost in the proposed re-wording.

[15] It is worth noting that the entity that takes on the role of Senser within a mental clause is always construed as being human, or at least human-like: "[…] the significant feature of the Senser is that of being 'endowed with consciousness'. Expressed in grammatical terms, the participant that is engaged in the mental process is one that is referred to pronominally as *he* or *she*, not as *it*" (Halliday and Matthiessen 2004: 201; original emphasis). This implies that, when an inanimate entity is selected for the role of Senser, it is always metaphorically represented as a conscious being. This is the case with the Nominal Group functioning as Senser of the mental process *expect* in (57), *the bank's Financial Stability Report*, which is in turn based on an underlying metonym (the report stands for the people who wrote it; on the connections between metaphor and metonymy cf. also Note 9 in Section 2.3 above).

3.1.2 Non-congruent realisations of figures with clause retained as realisational domain

Within this group, the metaphor downgrades a figure, or part of a figure, as a metaphorical Nominal Group, while retaining the clause as the domain of realisation: for this to be possible, either a new Process must be created, or the congruent Process must be split into two in the lexico-grammar (cf. Halliday and Matthiessen 2004: 650-651; Chapter Two, Section 2.2; Chapter Three, Section 3). As already observed while commenting on the overall results of the analysis in Section 3 above, all these cases taken together cover only a small percentage of the total occurrences of grammatical metaphor in the four sub-corpora: more specifically, they account for 11.19% in FT_First_page and 5.45% in FT_Leaders (8.61% in the whole English corpus); 6.78% in S24O_Prima_pagina and 3.36% in S24O_Editoriali (5.02% in the whole Italian corpus). Nonetheless they are worth mentioning.

When a new Process is created, this may be a material (or occasionally relational) one, having the general sense of 'happen', or an existential one; the whole congruent figure is nominalised and takes on the role of Actor (occasionally Token) or Existent, respectively:

(60) In assenza di un sistema di responsabilità, il contenimento della **crisi** avviene lasciando che il costo del salvataggio delle istituzioni finanziarie si scarichi diluito nel tempo sulle spalle del contribuente e del risparmiatore. [S24O_Editoriali]

(61) British Treasury insiders say there was plenty of co-operation between London and Washington in the run-up to the **crisis** facing Bear Sterns, the US investment bank. [FT_First_page]

As noted by Halliday and Matthiessen (2004: 650-651), the two alternatives have different effects in terms of Textual meanings. In the former case, the metaphorical nominal group serving as Actor (or Token) generally functions as Theme and as *Given* information, unless it is preceded by a marked Topical Theme expressing a circumstance, as in example (60) above: here, the point of departure chosen by the author is the negative circumstance of Accompaniment *in assenza di un sistema di responsabilità*, with the remainder of the clause functioning as New information[16]. In the latter case, by contrast, it is the metaphorical

[16] Concordance (60) also shows the knock-on effect that ideational metaphor tends to have on the Experiential semantics of the clause, which has already been highlighted with reference to some examples in Section 3.1.1 above. In fact, in terms of Experiential meanings, the Actor of the congruent figure is effaced by the nominalization *contenimento*, and since the metaphor is followed by a non-finite enhancing clause, there is no

Nominal Group serving as Existent which generally functions as Theme and as *New* information within the clause, as in example (61). Indeed, existential clauses with the nominalised figure as Existent were more commonly found in the analysed concordances, probably because they better suit the informative progression of news articles.

When the congruent Process is split into two, it is non-congruently realised in the lexico-grammar as a Process + Thing structure rather than as a single Verbal Group or Verbal Group complex. In some cases, a time-phased Process is nominalised and combined with a new Process, whose function is that of realising the original phasal meaning. The analysis of the data at hand retrieved only one occurrence of this metaphorical type, in the S24O_Prima_pagina sub-corpus:

(62) Anche banche e società finanziarie ben più grandi fanno tuttavia i conti con la **crisi**: le svalutazioni per istituti quali Wachovia o Citigroup sono proseguite nell'ultimo trimestre. [S24O_Prima_pagina]

A more congruent re-wording of (62) would be '(I titoli di) Istituti quali Wachovia o Citigroup hanno continuato a svalutarsi nell'ultimo trimestre'[17]. In other cases, the Process is re-construed as Process + Range: this type of ideational metaphor recurs several times in the concordances under examination, with 16 occurrences in the English corpus (11 in FT_First_page and 5 in FT_Leaders), and 23 occurrences in the Italian corpus (13 in S24O_Prima_pagina and 10 in S24O_Editoriali). Examples are provided below:

(63) The G7 last night said it would take "urgent and exceptional action" to stem the financial **crisis**, although it stopped short of adopting a specific and uniform set of policies that would individually bind all its member countries. [FT_First_page]

(64) KIA, which is known as a conservative investor, is taking a portfolio approach to the US financial **crisis**, looking to acquire small stakes in many troubled financial firms rather than putting a large chunk of money in one bank. [FT_First_page]

(65) Perché «le **crisi** globali hanno un impatto locale e sociale ed è ormai tempo di abituarsi a considerare il deficit sociale e non solo quello fiscale». [S24O_Prima_pagina]

---

explicit mention in the clause complex of *who* exactly is trying to curb the crisis through taxpayer-funded bail-outs.

[17] The proposed re-wording deliberately leaves human agency implicit, not only because the original sentence would have to be modified to a great extent otherwise, but also because it is difficult to say with certainty who the actual 'doers' are in this case.

A visible advantage of the metaphorical Process + Range structure is that the nominalised Process (i.e. the metaphorical Range) can be pre-modified just like any other Nominal Group, and can thus be assigned (often emphatic) subjective or objective qualities. This may be a key reason why the authors of the analysed texts, but also spokespersons or authorities in public speeches (as in the quotations in examples (63) and (65) above) choose to avail themselves of this pattern[18].

3.1.3 Non-congruent realisations of figures with clause → group downgrading

Ideational metaphors that imply a downgrading of the domain of realisation of the figure from the level of clause to that of group/phrase are by far the most important metaphorical class in the data under examination, especially in the Italian corpus: they account for 29.10% of the total occurrences of grammatical metaphor in FT_First_page and 48.18% in FT_Leaders (37.70% in the whole English corpus), and for 49.35% in S24O_Prima_pagina and 54.44% in S24O_Editoriali (51.96% in the whole Italian corpus).

This type of ideational metaphor is frequently used to *encapsulate* complex meanings that have already been expressed in the form of clauses, though not necessarily in the same article. As already noted in Chapter Two (Section 2.2), encapsulation is a fundamental logogenetic and argumentative strategy: in fact, on the one hand, an encapsulated proposition is available to function as Theme, and can be used anaphorically to refer to previously introduced meanings, thus enhancing cohesion as the text unfolds; on the other, as noted by Thompson (2004: 228), "By 'nouning' a process, writers can reflect the fact that they have negotiated and established the meaning of the clause centred on the process – in other words, that meaning can now be treated as *having existence*" (emphasis added). The following is an interesting example taken from the S24O_Editoriali sub-corpus:

(66) Ma se soffre [l'economia reale] è per colpa delle altre due **crisi**: l'aggiustamento americano e l'impennata delle materie prime. [S24O_Editoriali]

The concordance is taken from the leader published in *Il Sole 24 Ore* on May 1st 2008; the same author (Fabrizio Galimberti), had written in a previous leader (dated April 6th 2008):

[18] Concordance (65) is a quotation from the words pronounced by Giulio Tremonti after a meeting of the Ministers of Economy and Finance of the European Union member countries, held in Luxembourg on June 3rd, 2008.

> […] bisogna guardare a come le cose vanno evolvendo in queste tre crisi intrecciate: una crisi finanziaria, una crisi reale da aggiustamento dell'economia Usa, e una crisi internazionale da aumenti strutturali nei prezzi energetici e alimentari. […] Sul secondo punto - l'aggiustamento di un'economia Usa afflitta da troppi debiti e troppo poco risparmio - le notizie sono finora buone. Il rallentamento in corso – un rallentamento che sfiora la recessione – si accompagna a una tenuta della crescita nel resto del mondo. […] Sul terzo punto, la prima cosa da osservare è che non si tratta di inflazione: la fame di risorse dei Paesi emergenti (anche in senso letterale, ché sono cambiati i modelli nutrizionali in Asia) ha portato a un aumento dei prezzi relativi di energia e alimentari. L'inflazione però non decolla, come successe ai tempi dei primi due shock petroliferi. Allora i prezzi aumentarono rapidamente anche fuori dal comparto energia.

Thanks to the nominal groups *l'aggiustamento americano* (whose more congruent realisation would be 'l'economia americana si sta aggiustando')[19] and *l'impennata delle materie prime* ('i prezzi delle materie prime si sono impennati / sono saliti vertiginosamente'), the author makes a quick intertextual reference to a topic that he had extensively discussed, in the same newspaper, almost one month before (although, in that case too, with a wide use of nominalizations)[20]. It can thus be seen how encapsulation is also a means for creating a continuity between different texts, even when this can be properly appreciated only by the newspaper's regular readers[21].

Another important function of metaphorical shifts from clause to group/phrase is the creation of technical terms. A clear illustration of this phenomenon is provided by the word *recession* and its Italian equivalent *recessione*, condensing the meaning of a figure that would be more congruently expressed in the form of a clause: 'economic activities are receding'/'le

[19] It is worth noting that *l'economia* is still not the deepest meaning of the Actor: an even more congruent re-wording would have to unpack its meaning, explicitly assigning 'doer-hood' to the people responsible for economic activities.

[20] Indeed, the use of grammatical metaphor, nominalization in particular, can also be seen as a mark of authorial style, with some writers being more 'metaphorical' than others: as another possible development of this work, it would be interesting to analyse the texts in the corpora (especially those in the sub-corpora collecting leaders) adopting this specific research focus.

[21] According to a statistical survey carried out by Audipress in the last trimester of the year 2012 (September 17 - December 16), *Il Sole 24 Ore* can count on an average number of 1.034.000 daily readers, while the online edition is consulted by an average of 320.000 visitors (source: www.audipress.it).

attività economiche stanno recedendo', in the sense that they are becoming less profitable[22]. Of course, ideational metaphor always comes at a price, and its use in the development of technical vocabulary makes no exception: technical terms can be created from congruent realisations of figures only at the expense of clarity and explicit information (cf. Halliday and Martin 1993). As Thompson rightly remarks, "Nominalized technical terms are clearly very economical; but equally clearly the reader needs to be able to identify the uncondensed wording that the nominalization refers to" (2004: 229). This may not always be easy: in the case of *recession*/*recessione*, the Actor of the material Process congruently represented by *recede*/*recedere* can be readily retrieved by resorting to common sense knowledge, also thanks to the fact that the term has by now entered non-specialised language through repeated use by the media; however, more specific knowledge of the financial field is probably needed in order to 'unpack' the meaning of other nominalized technical terms, such as *securitization*/*cartolarizzazione*, which refer to the practice of *securitising* (It. *cartolarizzare*) illiquid financial assets (i.e. gathering them in pools and selling them to investors on the market in the form of securities), enacted by the managers of a company or a financial services firm in order to increase liquidity. Once the underlying figure has been 'condensed' and 'crystallised' in the lexico-grammar through nominalization, the technical term is itself available for further metaphorical conceptualisation. In the following examples, retrieved by generating concordance lists for *recession* and *recessione* in *The Financial Times* and *Il Sole 24 Ore* corpus, the two words are inserted into Prepositional Phrases that instantiate a circumstance of Location: place, thus realising the conceptual metaphor RECESSION IS A CONTAINER (cf. also Section 2.2 above):

(67) Meanwhile, Boston Consulting Group released a survey that showed more than half of US executives believe the country is either in **recession** or will be within six months. [FT_First_page]

(68) La Goldman Sachs ha messo in evidenza inoltre che ogni qualvolta la media trimestrale del tasso di disoccupazione sale di oltre lo 0,3% – ed è questo il caso attualmente – l'economia entra, o sta per entrare, in **recessione**. [S24O_Prima_pagina]

[22] According to the definition provided by the *Online Etymology Dictionary*, the noun *recession* is metaphorical in origin. In fact, it is first recorded in English in 1929 as a derivational form of *recess*, which in turn derives from the Latin verb *recedere*, whose basic sense was physical.

This leads us to consider a fundamental aspect of the metaphorical shifts from figure to group/phrase that has emerged from the analysis here presented, that is, their contribution – together with other types of ideational metaphor – to the creation and the linguistic realisation of coherent conceptual metaphorical scenarios.

3.1.4 Ideational metaphor and conceptual metaphor

One of the basic tenets of Conceptual Metaphor Theory is that language is the main source of evidence for the existence of metaphorical processes that structure our conceptual system, establishing connections between different domains of experience (Lakoff and Johnson 1980; cf. also Chapter One, Section 3.1): this implies that the semantics of a metaphorical scenario – that is, the role played by the entities that take part to it, the Processes they enact and the relations among them – is preserved and reflected by the lexico-grammatical structures at the language level. Patterns emerged from the analysis of the concordances for *crisis* and *crisi* in the corpora suggest that ideational metaphors, particularly those downgrading the realisation of figures to groups/phrases, are a key resource made available to speakers by the lexico-grammatical system of the language to provide coherent linguistic representations of underlying conceptual metaphors; this, indeed, is one of the directions in which ideational metaphor expands the meaning potential of a language, opening up sets of choices that are not accessible in the congruent mode (cf. Halliday and Matthiessen 2004: 641). It was already noted with reference to (67) and (68) above that the nominalised Process *recession*/*recessione*, having being reified, can function within a Prepositional Phrase to express a metaphorical circumstance of Location, thus realising an ontological conceptual metaphor of the CONTAINMENT type. Let us now go back to our research focus, i.e. the words *crisis* and *crisi*, and consider the following concordance:

(69) "But we have to be realistic that there is a high execution risk with ABN Amro and we are <u>in the depths</u> of the world's credit **crisis** and today is not the time to change the CEO". [FT_First_page]

As a comparison between (69) and a more congruent reading clearly shows ('But we have to be realistic that there is a high execution risk with ABN Amro and *the credit crisis is (very) deep* and today is not the time to change the CEO'), here what would be the Attribute of an

intensive attributive relational clause has undergone a Quality → Thing metaphorical shift. Having being nominalised, it can enter a Prepositional Phrase introduced by *in*, expressing a circumstance of Location: space and realising the metaphor THE CRISIS IS A CONTAINER. The re-wording proposed above would of course still point to the same conceptual metaphor, due to the presence of the lexical unit *deep*. However, the re-mapping between lexico-grammar and Ideational semantics is necessary in order to construe the quality of being deep as a 'thing', functioning as metaphorical location, with the crisis as Qualifier: a choice that may also be motivated by rhetorical reasons.

CONTAINER metaphors are not the only type of ontological conceptual metaphor involving the non-congruent expression of Ideational meanings; according to the data, PHYSICAL OBJECT/SUBSTANCE metaphors can also be realised through the contribution of ideational metaphor on the linguistic plane:

(70) Earlier, Stock markets in Europe and the US fell below their lows set in March, when worries about a systemic financial **crisis** peaked. [FT_First_page]
(71) There is no small irony in the fact that hedge funds, long feared to be a source of financial instability, are not the root cause of the current **crisis**. [FT_Leaders]
(72) I timori per l'impatto della **crisi** finanziaria sull'economia pesano sempre di più sulle borse. [S24O_Prima_pagina]
(73) Il dollaro, schiacciato dalle paure sulla **crisi** americana, è arretrato fino ad un nuovo minimo storico con l'euro: ieri ha toccato quota 1,5303. [S24O_Prima_pagina]

Let us consider example (70) first and begin, as usual, by identifying the uncondensed wording that lies behind the metaphorical structure. The dependent clause in (70) could be more congruently paraphrased as 'when *people most worried* about a systemic financial crisis': the Process in the congruent mental clause has been reified through nominalization, hence it can function as the grammatical Subject and Actor of the new material Process represented by *peak*, instantiating the conceptual metaphor WORRIES ABOUT THE CRISIS ARE PHYSICAL OBJECTS. This, in turn, is consistent with the basic orientational metaphor MORE IS UP, while the independent clause shows evidence of a BAD IS DOWN metaphor in the use of the verb *fall*, followed by a circumstance of Location: space introduced by *below*[23]. In

[23] Since markets do not 'fall' of their own accord, a causative re-wording of the independent clause would more closely reflect the actual state of affairs: '*Traders made* Stock markets in Europe and the US *fall* below their lows set in March'.

concordance (71), the meanings of what would be an embedded attributive relational clause, with the Nominal Group *hedge funds* functioning as Attributor (cf. Chapter Two, Section 1.3, Figure 2.6), have been condensed within the metaphorical Nominal Group *a source of financial instability*: the structure chosen by the author in the original text corresponds to 'There is no small irony in the fact that hedge funds, long feared [[*to make finance unstable*]], are not the root cause of the current crisis'. Thus, what we have here is a combination of lexical and grammatical metaphor, where the lexical metaphor is a marker of the underlying conceptual mapping: the concept SOURCE is mapped onto that of HEDGE FUND; the Quality *unstable* and the Carrier *finance* are nominalised, and function as the Qualifier of the lexical unit *source*; the two metaphorical processes work together to realise linguistically the conceptual metaphor FINANCIAL INSTABILITY IS A SUBSTANCE. In example (72), a figure of sensing is again dressed up as a metaphorical Nominal Group, inserted in a material clause; once this has been 'unpacked', it becomes necessary to include an expansion nexus in the congruent reading, in order to account for the relation between *timori* and *borse* that is expressed by the verb *pesare* in the metaphorical version: 'Le persone temono l'impatto della crisi sull'economia *e* (*così*) le borse ne risentono'[24]. As in (70), the nominalised Process can take on the role of grammatical Subject and Actor of the material Process represented by *pesare*, providing the linguistic environment for the conceptual metaphor FEAR OF THE CRISIS IS A PHYSICAL OBJECT. Finally, in (73), the move towards the concrete brought about by the nominalization of the mental Process (*paure*) again reinforces and substantiates the conceptual metaphor FEAR OF THE CRISIS IS A PHYSICAL OBJECT. In other words, the mental Process of fearing is construed as a 'thing' by the lexico-grammar of the clause, and as such it 'fits' perfectly the metaphorical scenario activated by the material Process (*schiacciare*); at the same time, some lexical units in the text (the verb *schiacciare* itself, and the circumstance of Location: space *fino ad un nuovo minimo storico*) point to the complementary orientational metaphors BAD IS DOWN/LESS IS DOWN.

But ideational metaphors can function within the linguistic realisation of more complex metaphors as well, i.e. structural ones. The following examples illustrate the complementarity between the conceptual mapping and the re-alignment of Ideational semantics in the lexico-grammatical instantiation of a HEALTH and a WAR/CONFLICT metaphor:

[24] The noun *impatto* in Italian can be considered as a 'historical' grammatical metaphor: it comes from Latin *impactus*, which – according to the *Vocabolario Treccani Online* – was originally a nominalised form of the verb *impingĕre*, meaning 'to hit'; the verb *impattare* is a more recent form, derived from *impatto* through suffixation. Still, it would be possible to convert the circumstance of Cause: reason *per l'impatto* into a clause in the congruent reading: 'Le persone temono che la crisi colpisca l'economia'. Here, 'che la crisi colpisca l'economia' is a projected idea clause.

(74) The Peloton ABS fund, named best new fixed income hedge fund last month, is the latest victim of the spread of the subprime **crisis** into high-quality mortgage securities, which hit new lows this week. [FT_First_page]

(75) Una delle lezioni che arriva dalla **crisi** in corso avverte però che l'arma più adatta per governare l'emergenza è il pragmatismo piuttosto che il ricorso ai vecchi paradigmi ideologici. [S24O_Editoriali]

In (74), where the lexical unit *victim* activates a mapping between CRISIS and CAUSE OF DEATH (cf. Section 2.3 above), the fact that the material Process represented by the verb *spread* has been reified through nominalization is necessary for the linguistic realisation of the conceptual metaphor to work properly: the Nominal Group *the spread*, representing an entity, can take on an agentive role in the metaphorical scenario, and thus be coherently conceptualised as the concrete element that claimed the Peloton ABS fund. A congruent reading of (75) would be 'Una delle lezioni che arriva dalla crisi in corso avverte però che per governare l'emergenza è meglio [[*essere pragmatici* piuttosto che *ricorrere a vecchi paradigmi ideologici*]]'. Once the Quality *pragmatic* and the following Process *ricorrere* have been 'thingified' via ideational metaphor, they can be coherently construed as WEAPONS within the metaphorical WAR scenario activated by the lexical unit *arma*.

Several examples that were commented in the sections on conceptual metaphor can also be re-interpreted in the light of the previous discussion, as shown by the table below.

Concordance	Conceptual metaphor	Function of ideational metaphor in text
(a) E le borse mondiali hanno sacrificato 2.800 miliardi di dollari di capitalizzazione dall'inizio dell'anno sull'altare di **crisi** e di imminenti recessioni. [S24O_Prima_pagina]	THE CRISIS IS A SUPERNATURAL ELEMENT: RELIGION	Nominalised technical term *recessione* takes on the role of DEITY within the metaphorical scenario (together with *crisi*).
(b) the impact of the credit **crisis** is starting to be felt in Russia. [FT_First_page]	THE CRISIS IS A PHYSICAL OBJECT/SUBSTANCE	Nominalised Process *impact* can function as Phenomenon of *feel* and be itself conceptualised as PHYSICAL OBJECT.

[continues on the next page]

(c)	Citigroup's shares lost nearly a fifth of their value yesterday as its board met in an attempt to halt a **crisis** of confidence in the troubled financial services group. [FT_First_page]	THE CRISIS IS A PHYSICAL OBJECT/SUBSTANCE	Nominalised technical term *crisis of confidence* (i.e. crisis in which *investors are not confident about an institution's solvency*) conceptualised as PHYSICAL OBJECT/SUBSTANCE.
(d)	Hungary's forint has lost 17 per cent against the euro since the summer in an escalating **crisis** of confidence, while the Baltic states face bust after boom. [FT_Leaders]	THE CRISIS IS A PHYSICAL OBJECT/SUBSTANCE; MORE IS UP; GAINING CONTROL/ FORCE IS UP	Nominalised technical term *crisis of confidence* conceptualised as MOVING OBJECT/SUBSTANCE; nominalised Processes *bust* and *boom* take on the role of ENEMY within the WAR/CONFLICT scenario activated by the verb *face*.
(e)	Reckless borrowing could precipitate a sterling **crisis**. [FT_Leaders]	THE CRISIS IS A PHYSICAL OBJECT/SUBSTANCE	Nominalised Process *borrowing* can take on the role of Actor of the material Process represented by *precipitate*; *sterling crisis* is conceptualised as MOVING OBJECT and coherently functions as Goal.
(f)	La prima [la volatilità delle performance azionarie] è difficile da prevedere perché parte da lontano ed è legata alle tensioni che la **crisi** di liquidità e di fiducia nata in America proietta sui mercati finanziari internazionali. [S24O_Editoriali]	THE CRISIS IS A DISEASE: MENTAL HEALTH	Nominalised technical term *crisi di liquidità e di fiducia* conceptualised as DISEASE (i.e. cause of mental distress); nominalised Quality *la volatilità delle performance azionarie* can take on the role of TRAVELLER in the secondary metaphorical JOURNEY scenario activated by the expression *partire da lontano*.
(g)	Under the plan, the latest dramatic intervention by the US government to combat the global credit **crisis**, the authorities will receive equity giving them a 79.9 per cent stake in AIG. [FT_First_page]	THE CRISIS IS AN ENEMY: WAR/CONFLICT	Nominalised Process *intervention* brings about a 'shift towards the concrete' that is compatible with the WAR/CONFLICT scenario activated by the verb *combat*.

Table 4.23 Compatibility between conceptual and grammatical (ideational) metaphor in corpus examples

The findings suggest that lexical metaphor and grammatical metaphor of the ideational type play complementary roles, and are both central to the linguistic realisation of conceptual metaphor. On the one hand, lexical metaphors activate specific conceptual metaphors (e.g. the lexical unit *arma* in concordance (75) above, or the lexical unit *combat* in example (g) in Table 4.23); on the other, ideational metaphors provide the resources for construing the various aspects of the metaphorical scenarios in a way that is consistent with the internal logic of the metaphor. This is achieved by condensing the meaning of figures and by 'objectifying' abstract elements, such as Qualities and Processes (in the sense of 'making them like objects',

cf. Halliday and Matthiessen 1999: 233)[25]. This is in line with Halliday and Matthiessen's assertion (same page) that "Lexical and grammatical metaphor are not two different phenomena; they are both aspects of the same general metaphorical strategy by which we expand our semantic resources for construing experience". It could thus be argued that ideational metaphor plays a key role in preserving at the language level the internal systematicity and coherence of metaphorical concepts, which, according to Lakoff and Johnson (1980), are vital properties of conceptual metaphor. This is a very important point, and one which may also indicate a challenging direction for future research into the relationship between the two metaphorical mechanisms. In particular, it could be hypothesised that ideational metaphor is a predictor of conceptual metaphor in certain environments, and the converse may be true as well: such a hypothesis could be tested by carrying out specific analyses on a larger amount of corpus data.

3.2 Metaphors of modality

3.2.1 Metaphors of modalization

Metaphors of modalization (probability) account for 4.48% of the total occurrences of grammatical metaphor in FT_First_page and 0.91% in FT_Leaders (2.87% in the whole English corpus), and for 0.97% in S24O_Prima_pagina and 1.53% in S24O_Editoriali (1.25% in the whole Italian corpus). Recalling that modalization is directly linked with the realm of propositions (i.e. giving or demanding information: cf. Chapter Two, Section 1.2), the analysed concordances show an overall preference for the congruent realisation of the speaker's or writer's assessment of probability (through a modal verb or a Modal Adjunct), in both English and Italian.

The higher number of grammatical metaphors of this type (though it must be kept in mind that we are speaking of only 6 occurrences) was found in the FT_First_page sub-corpus, where almost all the instantiations (5 out of 6) are located on the subjective: explicit end of the modal responsibility cline. Let us consider the following examples:

[25] It is worth recalling that the "move in the direction of "objectifying", as the authors define it on the same page, characterises conceptual metaphors as well, since these tend to map concrete domains of experience onto abstract and thus less readily accessible ones: as Lakoff and Johnson observe, with reference to the grounding of our conceptual system, "[…] we typically conceptualize the nonphysical *in terms of* the physical – that is, we conceptualize the less clearly delineated in terms of the more clearly delineated" (1980: 59; original emphasis). On the experiential basis of conceptual metaphors, cf. also Chapter One, Section 3.1.

(76) "I don't think we would get rid of the **crisis** with just monetary tools", he said at the World Economic Forum in Davos, Switzerland, adding "a new fiscal policy is probably today an accurate way to answer the crisis". [FT_First_page]

(77) The correction in the credit markets has gone too far, the bank of England says today, in a signal that it believes the worst of the global **crisis** could be over. [FT_First_page]

In (76) and (77) above, the modalized proposition is, as it were, 'broken it two' at the level of lexico-grammar: it is realised as nexus of projection, with the assessment of probability being explicitly expressed by the projecting mental clause. In (76), where the negative polarity is transferred from the projected to the projecting clause, the re-mapping between semantics and lexico-grammar is taken a step further: semantically, what is negated here is not the fact that the Subject / Senser thinks, but rather the likelihood of the proposition, as proved by the tag question ('would we?' and not 'don't I?'). However, the transfer of the negative in this case does not affect the value of the modal judgment, which remains Median, i.e. intermediate between 'certain' and 'possible' (High and Low values, respectively; cf. Halliday and Matthiessen 2004: 620-621). Interestingly, metaphorical realisations of probability on the subjective: explicit end of the cline are never used to express the author's stance in the data under examination: in the above examples, as in the other 3 instances, subjective explicit judgments of probability are entrusted to external sources, usually well-known financial authorities or institutions, and frequently in the environment of a quoted locution from a public speech. This is the case in (76), where the grammatical Subject and Senser of the projecting clause is the then head of the International Monetary Fund, Dominique Strauss-Kahn. In (77), by contrast, the environment is that of a reported locution, and subjective: explicit orientation is necessary for the authors (Chris Giles and Gillian Tett) to signal that the following proposition is *not* to be interpreted as their own judgment on the state of the crisis[26]. These patterns are in line with the impersonal, objective style that characterises hard news reporting, especially in English, but also in other languages (cf. Martin and White 2005; Thomson, White and Kitley 2008; Pounds 2010).

The only instance of modality with objective: explicit orientation in FT_First_page was found in the following concordance:

[26] It must be noted, though, that the presence of the lexical unit *the bank of England* in the role of Senser realises the metonym THE INSTITUTION FOR THE PEOPLE RESPONSIBLE, which has the effect of impersonalising the subjective: explicit judgment. Metonyms of this type are quite common in news discourse (cf. also Chapter Two, Section 2.2, Note 35).

(78) The move to extend the credit facility is likely to soothe Wall Street, by confirming Fed support for investment banks through the credit **crisis**. [FT_First_page]

Unsurprisingly, this type of metaphor of modality is inserted into the journalists' comment on the main event of the day[27] (the Federal Reserve's decision to extend emergency financing for troubled banks until the end of the crisis), as part of an overall strategy to distance authorial voice from the opinion being expressed, or, as Halliday and Matthiessen would put it (2004: 616), to dissimulate the fact that an opinion is being expressed altogether. Thus, what emerges from the patterns highlighted so far is a different distribution of subjective: explicit and objective: explicit variants which, far from being random, seems to be motivated by co-text- and context-sensitive authorial choices. Such results suggest that, as with ideational metaphors, the choice of particular metaphors of modalization may be at least in part a question of register-idiosyncrasy (cf. Miller 2007b; Miller and Johnson 2009 and to appear, 2013; cf. also Sections 3 and 3.1.1 above).

The concordances extracted from FT_Leaders show only one instance of a metaphor of modalization, again expressing objective: explicit orientation, and again with the effect of objectifying (in the sense of 'making objective') the author's attitude towards the probability of the proposition. In this case, the topic is the appointment of the Treasury secretary in Barack Obama's administration: the article is dated November 19th 2008, and the newly-elected President has not yet officially communicated his decision:

(79) He – and it appears most likely it will be a he – will need to take the lead in fighting the most serious financial **crisis** since the 1930s at the same time as managing an economy in recession saddled with a vast budget deficit. [FT_Leaders]

Similar observations can be made for the S24O_Prima_pagina sub-corpus, although in this case both subjective: explicit and objective: explicit variants appear in the context of a quoted or a reported comment, the author's attitude (when present) always being instantiated congruently:

[27] The original article is jointly written by James Politi and Chris Giles.

(80) Kissinger ha anche detto di non aver dubbi che «l'Italia ce la farà (a superare la **crisi** ndr) perché in passato è sopravvissuta a grandi cambiamenti e anche disastri». [S24O_Prima_pagina]

(81) Il sistema finanziario internazionale sta facendo passi avanti nel rafforzarsi dopo la **crisi** che lo ha investito a partire dall'estate scorsa e oggi «è improbabile» che ne possa venire travolto [S24O_Prima_pagina]

(82) Quest'anno la **crisi** nel settore potrebbe proseguire e il contagio allargarsi, con milioni di abitazioni a rischio di pignoramento. [S24O_Prima_pagina]

In (80), the modalized proposition is realised by a nexus of projection, in which the metaphor of modalization is introduced by the writer as a reported locution, which immediately becomes a quoted one, i.e., the projected clause presented as a quotation of Kissinger's actual words. The situation is reversed in Concordance (81), which refers to a speech delivered by Mario Draghi (at that time governor of Italy's Central Bank) to the G-8 in Osaka. Here, the structure that signals the presence of a metaphorical modalization (the relational Process *è* followed by an Attribute expressing probability) corresponds to the governor's actual words; an embedded fact clause follows, completing the meaning of the modalized proposition, and summarising the rest of Draghi's intervention on the topic. Finally, in (82), the author's personal comment on the possible future developments of the crisis contains a congruent expression of modalization, with subjective: implicit orientation, as shown by the modal operator *potrebbe*.

The only instance of a metaphor of modalization used by the writer to state explicitly that the probability is subjective can be found in the S24O_Editoriali sub-corpus, in the following sentence:

(83) Sono ben chiare allora le difficoltà dell'opposizione: ridotta a sperare che la **crisi** economica si aggravi per fermare l'azione riformatrice del Governo – credo sia questa la ragione dei titoloni di Repubblica che quasi invocano ogni giorno la Grande Depressione – e sempre tentata dai richiami girotondini e giustizialisti contro Berlusconi. [S24O_Editoriali].

Obviously, subjective explicit modalization is compatible with the rhetorical aim of leaders, which – in contrast to that of hard news – is more conative, and in some cases even emotive, than referential (cf. Jakobson 1960; Miller 2004). Still, there are visible differences in the

stylistic features of leaders between *The Financial Times* and *Il Sole 24 Ore*. In *The Financial Times*, leading articles are genuine expressions of the collective view of the editorial board: they are not signed, and their position on the page (which also makes them identifiable at a glance) is immediately below the newspaper's logo, with its famous motto "Without Fear and Without Favour". In *Il Sole 24 Ore* (as in the Italian press in general), on the contrary, the leading article is the expression of a single, authoritative voice, usually that of an expert on the subject, an academic, or a policymaker (as is the case with renowned commentators such as Alberto Alesina, Luigi Zingales and Giuliano Amato in *Il Sole 24 Ore*). For this reason, it would be impossible to find a first person expression of belief like the one in (83) in the English corpus; this also shows the importance of always taking into account the context of culture while evaluating register-idiosyncratic features in a text (cf. Miller and Johnson, *to appear*, 2013).

3.2.2 Metaphors of modulation

Metaphors of modulation (obligation), account for 1.49% of the total occurrences of grammatical metaphor in the English corpus (only 2 instances in FT_First_page), and for 2.90% in S24O_Prima_pagina and 3.36 % in S24O_Editoriali (3.14% in the whole Italian corpus). Thus, while metaphors of modalization are more 'frequent' than metaphors of modulation in the English corpus (even though, admittedly, it is inappropriate to speak of 'frequency' with such small numbers), the tendency is the opposite in the Italian corpus, where metaphors of modulation prevail. Thus, recalling that modalization is directly linked with the exchange of goods and services (cf. Chapter Two, Section 1.2), the concordances for *crisis* and *crisi* show an overall preference for the congruent realisation of proposals, as already observed in the previous discussion with reference to propositions.

As might have been expected, subjective: explicit expressions of modulation are almost totally absent from the data at hand: the analysis retrieved only three occurrences, two in FT_First_page and one in S24O_Prima_pagina. In FT_First_page, one of the occurrences emerges from a quotation from a speech given by Mervyn King, governor of the Bank of England, to the Members of Parliament (concordance (84) below), while the other is part of a reported locution made by José Manuel Barroso, European Commission President:

(84) "I intend the bank to contribute to the design of regulatory and incentive structures… to try to curb the excessive build-up of risk-taking and credit creation which was seen ahead of the recent **crisis** ," Mr King said. [FT_First_page]

(85) In Europe, José Manuel Barroso, European Commission president, said the **crisis** made it imperative to strengthen banking supervision and develop "a truly European response". [FT_First_page]

(86) Il Fondo invita a evitare «una corsa alla regolamentazione» sull'onda della **crisi**, ma sostiene che l'obiettivo dev'essere quello di ristabilire la solidità finanziaria. [S24O_Prima_pagina]

In (84), the mental clause introduced by *intend* is a metaphorical realisation of obligation, whose congruent version would be 'the bank must / will have to contribute to the design'; the modulated proposal is thus realised as a non-finite reported clause[28]. In (85), a modal clause is 'experientialised' through a metaphorical attributive relational clause, in which the source of the judgment of obligation is indicated as the Attributor (i.e. *the crisis*: cf. Chapter Two, Section 1.3, Figure 2.6). Still, we are not told *who* will actually be in charge of strengthening banking supervision and developing a common response to the crisis: a piece of information is missing, and this is reflected in the more congruent wording ('In Europe, José Manuel Barroso, European Commission president, said that, due to the crisis, regulators (?) / governments (?) must strengthen banking supervision and develop "a truly European response"; the choice of the Subject will here also depend on norms for regulating banks specific to each country). Similar observations can be made with reference to (86), where the modulated proposal is projected by a verbal clause introduced by *invitare*, but the Subject is not expressed, nor can it be recovered from the wider co-text: as a consequence, the indeterminacy is again retained in the congruent version ('Le autorità finanziarie (?) / Le banche centrali (?) devono evitare «una corsa alla regolamentazione» sull'onda della crisi')[29]. Such opaqueness is a defining characteristic of lexico-grammatical structures like those we find in (85) and (86): in fact, while being apparently more 'informative' than their congruent

[28] According to Halliday and Matthiessen, "Whereas propositions, which are exhanges of information, are projected mentally by processes of cognition […] proposals, which are exhanges of goods-&-services, are projected mentally by processes of desire […]. Thus while propositions are thought, proposals are hoped" (2004: 461).

[29] Interestingly, in (84) and (86) the metaphor of modulation is followed by a nominalised Process (*contribute to the design* / *evitare* «*una corsa alla regolamentazione*»), which has the effect of making the proposal appear 'more concrete' (cf. Section 3.1 above).

counterparts – in that the assessment of modulation is explicitly entrusted to someone or something – they leave the actual 'doers' of the modulated Processes implicit.

Objective: explicit expressions of modulation are, on the contrary, relatively numerous in the Italian sub-corpora; let us look at the following examples:

(87) Ora occorre affrontare con strumenti adeguati la **crisi** che si sta abbattendo sull'economia reale. [S24O_Prima_pagina]

(88) Davanti a un disastro come quello che abbiamo di fronte non è possibile aderire al lieto fatalismo di chi ci ricorda che le **crisi** finanziarie sono sempre avvenute e che sono il prezzo da pagare per l'esuberanza della crescita economica [S24O_Editoriali]

(89) Eppure è da lì che bisogna partire se vogliamo che questa **crisi** serva davvero a disegnare per il futuro regole più efficaci. [S24O_Editoriali]

(90) Il Governatore sa che è necessario tamponare in fretta questa profonda **crisi** di fiducia per evitare conseguenze peggiori [S24O_Editoriali]

Concordances (87) – (90) show a set of lexico-grammatical choices thanks to which the speaker or writer "[…] disclaims responsibility for making the rules" (Halliday and Matthiessen 2004: 480). This is achieved through monoglossic assertions that do not leave room for the introduction of other voices into the discourse (cf. Martin and White 2003; Miller and Johnson 2009). In all the above examples, the modulation is expressed through impersonal wordings that objectify it and make it 'factual' (*occorre*, *è necessario*, *bisogna*) while the proposal is separately 'packaged' as an embedded fact clause. The shift towards objectivity is particularly evident in (90), where the impersonal expression of modulation (*è necessario tamponare*) comes as part of a metaphenomenal clause that is construed as the Phenomenon of a mental Process of cognition (*il Governatore sa*). This seems to be a recurring strategy in news discourse, also because it enables the writer to make reference to an external source, in the role of Senser of the dominant clause, while keeping the modulation impersonal. Indeed, phraseologies like the ones presented above, and their English counterparts (e.g. *it is expected that*, *it is demanded that*, *it is asked that*) are extremely common not only in news discourse, but also in another functional variety that is closely related to it, i.e. political discourse, and may again be interpreted as being the product of register-idiosyncratic choices. In addition, they owe much of their metaphorical status to the fuzzy line that, according to Halliday and Matthiessen (2004: 629) separates the two systems of MODALITY and SPEECH FUNCTION at this – metaphorical – stage.

Conclusions

This study has investigated the use of conceptual and grammatical metaphors in the representation of the financial and economic crisis, as it emerges from two specially built corpora, collecting first page and leading articles from all the 2008 issues of *The Financial Times* (London edition) and *Il Sole 24 Ore* (approximately 307.000 and 556.000 words). The two newspapers were selected in view of their wide circulation and prestige; the year 2008 was chosen for its significance in the run-up to what is by now commonly referred to as the *global* crisis.

The corpora (each divided into two sub-corpora, one for first page articles and one for leaders) were uploaded to the online Corpus Query System *Sketch Engine* and automatically tree-tagged using the available templates for English and Italian. The first step of analysis involved a query for all the occurrences of the word *crisis* and its direct Italian equivalent *crisi* in their original textual environment, performed using the *Concord* function. In order to improve accuracy in the analysis of the results, a wide concordance window was selected, corresponding to the entire sentence in which the search word occurred. In the preliminary phase of the work, the Sketch Engine's function *Word Sketch*, which provides an overview of a word's behaviour by integrating collocational and colligational information, proved to be particularly useful in identifying potential metaphor candidates and discarding irrelevant results. However, the enquiry also demonstrated some limits of present possibilities for corpus-based research into metaphor, such as the need to perform in-depth analysis manually, in order to avoid overlooking meaningful patterns. Thus, having filtered out the initial data set, the relevant concordances (357 in the English corpus and 999 in the Italian corpus) were manually scanned for instantiations of conceptual and grammatical metaphor.

My first research question concerned similarities and differences between the corpora in terms of the types of conceptual metaphor used to frame the crisis, and their related linguistic realisations.

A first relevant finding, from a purely quantitative point of view, concerned the frequency of use of linguistic metaphors in relation to *crisis* and *crisi*, which was found to be significantly high in the English and the Italian corpus. In both cases, more than 50% of the analysed concordances was marked as metaphorical (i.e., containing at least one metaphor involving the node word).

Secondly, the analysis revealed that the domains selected as source for the metaphorical conceptualisation of the crisis are essentially the same in the two corpora. Even more interestingly, the most frequent source domains of metaphor were found to be common to the English and the Italian corpus: these are PHYSICAL OBJECT/SUBSTANCE, CONTAINER, PHYSICAL/MENTAL HEALTH, WAR/CONFLICT and NATURAL FORCE/WEATHER.

Differences between the two corpora emerged at a deeper level, i.e. when specific metaphorical patterns within these general domains were considered. An examination of the lexical units realising the metaphors highlighted a tendency in the Italian corpus to represent the crisis in 'catastrophic' terms, in particular in the domains of PHYSICAL OBJECT/SUBSTANCE (through the specific metaphor THE CRISIS IS AN EXPLOSIVE SUBSTANCE) and NATURAL FORCE/WEATHER (through the specific metaphor THE CRISIS IS A NATURAL DISASTER). The Italian data also showed a higher degree of lexical variation. Although the results in this case may be influenced by the greater size of the corpus, they could also be interpreted as indicators of the wider use of metaphor for rhetorical and stylistic purposes in the Italian press.

Within the English corpus, the sub-corpus collecting first page articles displayed a wide use of WAR/CONFLICT-based metaphors, which tend to foreground features like VIOLENCE and AGGRESSIVENESS in the target concept CRISIS, and may be a consequence of a choice for 'effectiveness' in hard news reports. The leaders sub-corpus, by contrast, showed a preference for HEALTH-based metaphors, which project features like INEVITABILITY and PHYSICAL/MENTAL DISTRESS onto the target concept. No significant differences emerged between the Italian sub-corpora, except for the greater salience of the category of NATURAL FORCE/WEATHER- metaphors in the first-page sub-corpus (where the percentage value almost doubles that of the leaders sub-corpus).

The second research question concerned the similarities and the differences between the corpora in terms of grammatical metaphor and its lexico-grammatical instantiations.

In this case, too, the number of metaphorical concordances was found to be significantly high, exceeding 50% of the total in *The Financial Times* corpus, and 40% in *Il Sole 24 Ore* corpus. The analysis focused on two types of grammatical metaphor, namely, metaphors of modality (probability and obligation) and ideational metaphors.

Ideational metaphors account for the vast majority of occurrences of grammatical metaphor in both the English and the Italian data, but, in addition, the concordances taken from *Il Sole 24 Ore* highlight a marked tendency to cluster several instantiations of this metaphorical type within a single clause or clause complex. Besides being more frequent, these patterns of

'metaphors within metaphors' tend to reach much higher levels of complexity in the Italian corpus than in the English one. A clear example was provided in Chapter Four, Section 3, where a single and very long clause was shown to contain not less than eleven nominalizations. Such findings were interpreted in the light of the *register-idiosyncratic* features of the language of journalism in Italian (cf. Miller 2007b; Miller and Johnson 2009 and *to appear*, 2013): this seems to incline towards the choice of convoluted lexico-grammatical structures, which have among their main effects that of limiting reader accessibility to the text (cf. also Fusari 2011).

Within the category of ideational metaphors, the main sub-types (as identified by Halliday and Matthiessen 2004: 646-652) are common to the corpora: the most frequent metaphorical shifts involve either a sequence of figures linked by a logical relation of expansion, downgrading its domain of realisation from clause nexus to clause, or a whole figure, downgrading its domain of realisation from clause to group/phrase. The same holds true also for the less frequent subtypes: metaphorical realisations of sequences of figures linked by projection, as indeed other types of ideational metaphor, involving a single figure, account for a lower percentage of the total occurrences of grammatical metaphor in both corpora.

The different distribution of 'metaphors of expansion' and 'metaphors of projection' was explained by making reference to register-idiosyncratic features of the language of journalism. In fact, metaphorical realisations of what would congruently be expansion nexuses are 'economical' ways of reporting events; as such, they are in line with the requirements of conciseness of a newspaper article, and with the conventional choice of 'eye-catching' wordings. Metaphorical realisations of what would congruently be projection nexuses, by contrast, are at odds with the tendency shown by the newspapers to congruently quote or report statements from public speeches or interviews.

The analysis of ideational metaphors downgrading the realisation of entire figures to the level of groups/phrases suggested that they are widely used in the corpora to *encapsulate* complex meanings that have already been congruently expressed (cf. Thompson 2004), as well as to develop technical terminology. Yet, the main insight offered by this part of the investigation concerned their contribution to the coherent linguistic realisation of conceptual metaphorical scenarios. I shall come back on this point below, while discussing possible integrations between the framework of Conceptual Metaphor Theory and that of Systemic Functional Linguistics.

As regards metaphors of modality (modalization and modulation), these cover only a small percentage of the total occurrences of grammatical metaphor in the data at hand: overall, the analysed concordances showed a preference for the congruent realisation of the speaker's or

writer's assessment of probability and obligation. However, contrasting distributional patterns emerged from the two corpora with reference to this metaphorical domain. While in the English corpus the number of instantiations of metaphors of modalization: probability is higher than that of metaphors of modulation: obligation, findings are reversed in the Italian corpus. Although metaphors of modalization in the English corpus are almost invariably located on the subjective: explicit end of the orientational cline, they frequently appear within quoted or reported locutions from external sources. Hence, differently from what might have been expected, they do not function as explicit markers of the writer's attitude towards the proposition, in line with the objective style that characterises hard news reportings and editorial comments in English. Metaphors of modulation in the Italian corpus are, conversely, almost invariably located on the objective: explicit end of the orientational cline. Their main effect is, again, that of 'objectifying' (i.e. making objective) the modulated proposal expressed by the writer (or speaker, when their co-textual environment is that of a reported/quoted locution): this is frequently achieved through impersonal wordings that may take the form of monoglossic, fact-like assertions, as is the case with the Italian constructions *bisogna*/*occorre*/*è necessario* + infinitive form.

Shifting the focus from the textual to the contextual dimension, the third research question addressed the role that conceptual and grammatical metaphors can be hypothesised as playing in the representation of the crisis at the socio-cultural level.

The analysis of the conceptual metaphors instantiated in the corpora revealed that the financial and economic situation was already being framed in negative or very negative terms in 2008. Indeed, the main metaphorical patterns represent the crisis as:

a. an often dangerous 'thing' that can concretely act upon human beings and economic activities in several ways, or as something that is insidiously moving within the economy and the society, through PHYSICAL OBJECT/SUBSTANCE metaphors;
b. a sort of gigantic trap we have easily entered (or fallen into), but from which it is now very hard to escape, through CONTAINER metaphors;
c. a cause of death, a disease, or a source of psychological problems for markets and financial institutions (with metonymy), through HEALTH metaphors;
d. a fierce enemy, who goads us to physical combat (while politicians and financial authorities are frequently presented as weak or passive opponents), through WAR/CONFLICT metaphors;

e. something that is possible to forecast but not to prevent, such as bad weather, or that cannot even be foreseen, such as a natural disaster, through NATURAL FORCE/WEATHER metaphors.

On the whole, the main implications of these metaphorical patterns seem to be the following:

a. to highlight, and amplify, the presence of the crisis at all levels within society, as well as its 'tangible' effects and its violence and aggressiveness (PHYSICAL OBJECT/SUBSTANCE and WAR/CONFLICT metaphors), thus contributing to the diffusion of a general sense of uncertainty, fear and anxiety;
b. to highlight, and amplify, the negative and destructive potential of the crisis, which is portrayed as threatening not only people's social status or wealth, but also their life, the two things being frequently – and, again, metaphorically – equated (HEALTH, WAR/CONFLICT and NATURAL FORCE/WEATHER metaphors);
c. to understate, or efface altogether, possible responsibilities on the part of governments and financial actors: by presenting the crisis as an object that collides with us (specific UNCONTROLLED MOTION metaphors within PHYSICAL OBJECT/SUBSTANCE), a dangerous place we have inadvertently headed into (CONTAINER metaphors), or something that is beyond our control, and that we are forced to accept (HEALTH and NATURAL FORCE/WEATHER metaphors).

These metaphorical patterns may again be defined as register-idiosyncratic ways of representing negative events in the financial press, a finding confirmed by the fact that many of them emerge from other studies of financial reports, even prior to the outbreak of the current crisis (cf. Introduction, Section 2). Thus, already in 2008, they were probably perceived by most English and Italian speakers as typical (we may even say 'literal', in the wake of Lakoff and Johnson 1980) ways of *talking about* the crisis. From the perspective of Conceptual Metaphor Theory, this entails that the same patterns have also become normal ways of *conceiving of* the crisis, and can influence people's reactions to it. In the words of Lakoff and Johnson: "In most cases, what is at issue is not the truth or falsity of a metaphor but the perceptions and inferences that follow from it and the actions that are sanctioned by it" (1980: 158). Furthermore, the results of the investigation suggest that, in times of globalisation, metaphors are likely to cross national borders, recurring with similar structures, and in some cases even with similar frequency, in different cultures.

The analysis in terms of grammatical metaphor unveiled register-idiosyncratic features of the language of journalism that can also be hypothesised as playing a central role in the representation of the crisis provided by the British and the Italian press. The wide use of ideational metaphors, in particular, signals a tendency to convey information about the crisis in lexico-grammatical structures that are semantically dense, and often require extensive background knowledge to be 'unpacked'. This pattern of choices, which is particularly evident in the case of the Italian data, may indicate that articles about the crisis are not always (or not conventionally?) structured in ways that favour understanding on the part of the uninitiated reader of the matters discussed and the mechanisms involved. However, research on larger corpora, and on full-text articles rather than concordances, would be needed to substantiate this claim. It would also be interesting to check whether this feature is prominent in business newspapers – also as a consequence of their target readership, which is supposed to include experts on the subject – or whether it can be found with comparable frequency and degrees of complexity in the general press.

Numerical results are surely too small to make meaningful generalisations in the case of metaphors of modality. Still, an intriguing pattern, which would be worth further investigation, began to emerge from the analysed concordances in the use of objective: explicit metaphorical modulation. It seems that the metaphorical resources provided by the system of MODALITY – which are, in turn, closely connected with those of the system of MOOD, as the data from the corpora also suggest – play a key role in news discourse (especially in Italian, and especially in the realm of modulation) in distancing authorial voice from (and disclaiming responsibility for) the proposal or the proposition encoded in the sentence. This is in line with Halliday's insightful observation that objectifying metaphors "[…] are different ways of claiming objective certainty or necessity for something that is in fact a matter of opinion" (1994: 363). As was noted above, in the case of modulation, this may be achieved by making the modulated judgment impersonal (through structures like *occorre*, *è necessario*, *bisogna* + embedded fact clause), but also by entrusting it to an abstract Attributor within a relational clause (as in a sentence taken from *The Financial Times* corpus, analysed in Chapter Four: *the crisis made it imperative to strengthen banking supervision and develop a "truly European response"*). Objective: explicit metaphorical modulation frequently emerged in the corpora under examination as part of quoted or reported locutions made by politicians or financial authorities. In fact, impersonal phraseologies expressing degrees of obligation have also been shown to be frequently used in the functional variety of political speech, which is closely related to the journalistic register (Miller and Johnson 2009).

Finally, the fourth research question concerned the compatibility between the two theoretical frameworks of Conceptual Metaphor Theory and grammatical metaphor within Systemic Functional Linguistics. From this viewpoint, the study has on the whole confirmed the initial assumption that, taken together, these would lead to a more comprehensive analysis of the metaphorical processes involved in the representation of the crisis. On the one hand, Conceptual Metaphor Theory provided the theoretical tools to trace back the numerous, and varied, instances of lexical metaphor to a neatly defined set of conceptual metaphors. This offered a clear view of the conceptualisation of the crisis, which – as we have seen – has several important cultural, and we may even say ideological, implications. On the other hand, the Systemic Functional approach made it possible to shift the focus from individual lexical items to the entire lexico-grammatical structure of the sentence. In so doing, metaphorical mechanisms that would not have emerged from a purely lexical analysis were revealed.

Furthermore, the two perspectives converged in the part of research involving ideational metaphors. Evidence from the corpora suggests that lexical and ideational metaphor can frequently play complementary functions, construing lexico-grammatical representations that are consistent with the internal logic of underlying conceptual metaphors. One way in which this is achieved is by 'objectifying' abstract elements, such as Qualities and Processes, which can thus function as participants in the metaphorical scenario. A clear example is provided by a sentence like *The Peloton ABS fund, named best new fixed income hedge fund last month, is the latest victim of the spread of the subprime crisis into high-quality mortgage securities, which hit new lows this week* (taken from *The Financial Times* corpus, and already commented in Chapter Four). This is a challenging line of research to pursue, also because it could offer insights into the grammatical properties of linguistic metaphors, which could be fruitfully integrated into the study of conceptual metaphors in a way that has not yet been attempted.

This page is intentionally left blank

References

Aristotle. *Poetics*. Italian edition *Dell'Arte Poetica*. Edited by Carlo Gallavotti (1974/1997). Milan: Fondazione Lorenzo Valla – Mondadori.

Aristotle. *Rhetoric*. Italian edition *Retorica*. Edited by M. Dorati, with an introduction by F. Montanari (1996). Milan: Mondadori.

Austin, John L. (1975). *How To Do Things With Words*. Second Edition. Edited by J.O. Urmson and Marina Sbisà. Cambridge (MA): Harvard University Press.

Baker, Paul, Hardie, Andrew and McEnery, Tony (2006). *A Glossary of Corpus Linguistics*. Edinburgh: Edinburgh University Press.

Banks, David (2003). "The evolution of grammatical metaphors in scientific writing", in A.M. Simon-Vandenbergen, M. Taverniers and L. Ravelli (Eds), *Grammatical Metaphor: Views from Systemic Functional Linguistics*. Amsterdam and Philadelphia: John Benjamins, 127 – 148.

Barcelona, Antonio (2000). "On the plausibility of claiming a metonymic motivation for conceptual metaphor", in A. Barcelona (Ed.), *Metaphor and Metonymy at the Crossroads: A Cognitive Perspective*. Berlin: Mouton de Gruyter, 31 – 58.

Baroni, Marco and Ueyama, Motoko (2006). "Building general- and special-purpose corpora by Web crawling", in *Proceedings of the 13th NIJL International Symposium. Language Corpora: Their Compilation and Application*, Tokio, 31 – 40.
[Available at http://clic.cimec.unitn.it/marco/publications/bu_wac_kokken_formatted.pdf].

Bayley, Paul (Ed., 2004). *Cross-Cultural Perspectives on Parliamentary Discourse*. Amsterdam and Philadelphia: John Benjamins.

Berber Sardinha, Tony (2010). "A Program for Finding Metaphor Candidates in Corpora", in *The ESPecialist*, 31 (1), 46 – 67.

Berry, Margaret (1996). "What is Theme? – A(nother) Personal View", in M. Berry, C. Butler, R. Fawcett and H. Huang (Eds), *Meaning and Form: Systemic Functional Interpretations (Meaning and Choice in Language: Studies for Michael Halliday)*. Norwood (NJ): Ablex, 4 – 64.

Bertuccelli Papi, Marcella and Lenci, Alessandro (2007). "Lexical Complexity and the Texture of Meaning", in M. Bertuccelli Papi, G. Cappelli and S. Masi (Eds), *Lexical Complexity: Theoretical assessment and translational perspectives*. Pisa: Plus, 15 – 33.

Black, Max (1955). "Metaphor", in *Proceedings of the Aristotelian Society* 55 (1954 – 1955), 273 – 294.

Black, Max (1962). *Models and Metaphors. Studies in Language and Philosophy*. Ithaca (NY): Cornell University Press.

Black, Max (1979). "More about metaphor", in A. Ortony (Ed.), *Metaphor and Thought.* Cambridge: Cambridge University Press, 19 – 41.

Boers, Frank (2000). "Metaphor Awareness and Vocabulary Retention", in *Applied Linguistics* 21 (4), 553 – 571.

Câmara Pereira, Francisco (2007). *Creativity and Artificial Intelligence*. *A Conceptual Blending Approach*. Berlin: Mouton de Gruyter.

Cameron, Lynne (2003). *Metaphor in Educational Discourse*. London and New York (NY): Continuum.

Cameron, Lynne and Maslen, Robert (2010). "Identifying metaphors in discourse data", in L. Cameron and R. Maslen (Eds), *Metaphor Analysis*. London: Equinox, 97 – 115.

Carston, Robyn (1998). "The semantics/pragmatics distinction: a view from relevance theory" in *UCL Working Papers in Linguistics* 10, 303 – 329.
[Available at http://www.phon.ucl.ac.uk/home/PUB/WPL/98papers/carston.pdf].

Carston, Robyn (2010). "Metaphor: ad hoc concepts, literal meaning and mental images", in *Proceedings of the Aristotelian Society* 110 (3), 295 – 321.

Charteris-Black, Jonathan (2004). *Corpus Approaches to Critical Metaphor Analysis*. Basingstoke: Palgrave Macmillan.

Charteris-Black, Jonathan and Ennis, Timothy (2001). "A comparative study of metaphor in Spanish and English financial reporting", in *English for Specific Purposes* (20), 249 – 266.

Charteris-Black, Jonathan and Musolff, Andreas (2003). "'Battered hero' or 'innocent victim'? A comparative study of metaphors for euro trading in British and German financial reporting", in *English for Specific Purposes* 22, 153 – 176.

Cicero. *De oratore: In three books, With English notes* (1823). Boston: Wells and Lilly. [E-book available in Google Books: books.google.com, search words *Cicero*, *De Oratore*, *Wells and Lilly*].

Croft, William and Cruse, D. Alan (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.

Davidson, Donald (1978). "What Metaphors Mean", in *Critical Enquiry* 5 (1), 31 – 47.

Deignan, Alice (2005). *Metaphor and Corpus Linguistics*. Amsterdam and Philadelphia: John Benjamins.

Deignan, Alice and Potter, Liz (2004). "A corpus study of metaphors and metonyms in English and Italian", in *Journal of Pragmatics* 36, 1231 – 1252.

Derewianka, Beverly (2003). "Grammatical metaphor in the transition to adolescence", in A.M. Simon-Vandenbergen, M. Taverniers and L. Ravelli (Eds), *Grammatical Metaphor:* Views *from Systemic Functional Linguistics*. Amsterdam and Philadelphia: John Benjamins, 185 – 220.

Eco, Umberto (2004). "Aspetti conoscitivi della metafora in Aristotele", in *Doctor Virtualis. Rivista online di storia della filosofia medievale* 3, 5 – 7. [Available at http://riviste.unimi.it/index.php/DoctorVirtualis/article/view/46/71].

Eco, Umberto (2005). "La metafora nel Medioevo latino", in A.M. Lorusso (Ed.), *Metafora e conoscenza*. Milan: Bompiani.

Eggins, Suzanne (2004). *Introduction to Systemic Functional Linguistics.* Second Edition. London and New York: Continuum.

Evans, Vyvyan and Green, Melanie (2006). *Cognitive Linguistics. An Introduction*. Edinburgh: Edinburgh University Press.

Fauconnier, Gilles (1985/1994). *Mental Spaces*. Cambridge: Cambridge University Press.

Fauconnier, Gilles (1997). *Mappings in Thought and Language*. Cambridge: Cambridge University Press.

Fauconnier, Gilles and Turner, Mark (1998). "Principles of Conceptual Integration", in J. P. Koenig (Ed.), *Discourse and Cognition*. Stanford (CA): CSLI Publications, 269 – 283.

Fauconnier, Gilles and Turner, Mark (2002). *The Way We Think. Conceptual Blending and the Mind's Hidden Complexities*. New York (NY): Basic Books.

Fawcett, Robin P. (2008). *Invitation to Systemic Functional Linguistics through the Cardiff Grammar. An Extension and Simplification of Halliday's Systemic Functional Grammar.* London: Equinox.

Ferraresi, Adriano, Zanchetta, Eros, Baroni, Marco and Bernardini, Silvia (2008). "Introducing and evaluating ukWaC, a very large web-derived corpus of English", in *Proceedings of the 4th Web as Corpus Workshop – LREC 2008*, Marrakech, 47 – 54. [Available at: http://clic.cimec.unitn.it/marco/publications/lrec2008/lrec08-ukwac.pdf]

Fillmore, Charles J. (1968/2003). "The Case for Case", in *Form and Meaning in Language. Papers on Semantic Roles. Volume 1.* Stanford (CA): CSLI Publications, 23 – 122.

Fillmore, Charles J. (1977). "Scenes-and-frames semantics", in A. Zampolli (Ed.), *Linguistic Structures Processing. Fundamental Studies in Computer Science. Volume 5*. Amsterdam: North-Holland, 55 – 88.

Fillmore, Charles J. (1982). "Frame semantics", in The Linguistic Society of Korea (Ed.), *Linguistics in the Morning Calm*. *Selected Papers from SICOL 1981*. Seoul: Hanshin, 111 – 137.

Fillmore, Charles J., Baker, Collin F. and Sato, Hiroaki (2002). "The FrameNet Database and Software Tools", in LREC (Ed.), *Proceedings of the Third International Conference on Language Resources and Evaluation, Las Palmas (Spain)*. Paris: ELRA (European Language Resources Association), 1157 – 1160.

Fillmore, Charles J., Wooters, Charles and Baker, Collin F. (2001). "Building a Large Lexical Databank Which Provides Deep Semantics", in B. Tsou and O. Kwong (Eds.), *Proceedings of the 15th Pacific Asia Conference on Language, Information and Computation, Hong Kong (PRC)*, 1 – 24.
[Available at http://aclweb.org/anthology-new/Y/Y01/Y01-1001.pdf].

Firth, John R. (1935). "The Technique of Semantics", in *Transactions of the Philological Society* 34 (1), 36 – 72.

Firth, John R. (1957). *Papers in Linguistics 1934-1951*. Oxford: Oxford University Press.

Fusari, Sabrina (2011). *«Flying into uncharted territory»: Alitalia's crisis and privatization in the Italian, British and American press. (Labirinti 136)*. Trento: Università degli Studi di Trento, Dipartimento di Studi Letterari, Linguistici e Filologici.

Gibbs, Raymond W. (1994). *The Poetics of Mind: Figurative Thought, Language and Understanding*. Cambridge: Cambridge University Press.

Gibbs, Raymond W. (2008, Ed.). *The Cambridge Handbook of Metaphor and Thought*. Cambridge: Cambridge University Press.

Gibbs, Raymond W. and Wilson, Nicole (2002). "Bodily action and metaphorical meaning", in *Style* 36 (3), 524 – 541.

Goatly, Andrew (1997). *The Language of Metaphors*. London: Routledge.

Goatly, Andrew (2007). *Washing the brain. Metaphor and hidden ideology*. Amsterdam and Philadelphia: John Benjamins.

Goddard, John, Molyneux, Phil and Wilson, John O.S. (2009). "The financial crisis in Europe: evolution, policy responses and lessons for the future", in *Journal of Financial Regulation and Compliance*, 17 (4), 362 – 380.

Goossens, Luis (1995). "Metaphtonymy: The Interaction of Metaphor and Metonymy in Figurative Expressions for Linguistic Action", in L. Goossens, P. Pauwels, B. Rudzka-Ostyn, A. Simon-Vanderbergen and J. Vanparys (Eds), *By Word of Mouth: Metaphor, Metonymy and Linguistic Action in a Cognitive Perspective*. Amsterdam: John Benjamins, 159 – 174.

Grady, Joseph (1997). *Foundations of meaning: Primary metaphors and primary scenes*. Unpublished Doctoral Dissertation. University of California, Berkeley.

Grady, Joseph, Oakley, Todd and Coulson, Seana (1999). "Blending and Metaphor", in R.W Gibbs and G. Steen (Eds), *Metaphor in Cognitive Linguistics*. Amsterdam and Philadelphia: John Benjamins, 145 – 166.

Grice, H.P. (1975). "Logic and Conversation", in P. Cole and J.L. Morgan, *Syntax and Semantics, Volume 3: Speech Acts*. New York (NY): Academic Press, 41 – 58.

Guastini, Daniele (2005). "Aristotele e la metafora: ovvero un elogio dell'approssimazione". [Available at http://www.uniurb.it/Filosofia/isonomia/guastini/guastini2004.pdf].

Halliday, Michael A.K. (1961/2002). "Categories of the theory of grammar", in M.A.K. Halliday, *On Grammar (Volume 1 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum, 37 – 94.

Halliday, Michael A.K. (1967). "Notes on Transitivity and Theme in English. Part 1", in *Journal of Linguistics* 3 (1), 37 – 81.

Halliday, Michael A.K. (1967/2005). "Notes on Transitivity and Theme in English. Part 2", in M.A.K. Halliday, *Studies in English Language (Volume 7 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum, 55 – 109.

Halliday, Michael A.K. (1968/2005). "Notes on Transitivity and Theme in English. Part 3", in M.A.K. Halliday, *Studies in English Language (Volume 7 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum, 110 – 153.

Halliday, Michael A.K. (1969/1976). "Types of process", in G.R. Kress (Ed.), *Halliday: System and Function in Language. Selected Papers*. Oxford: Oxford University Press, 159 – 173.

Halliday, Michael A.K. (1971/2002). "Linguistic Function and Literary Style: An Inquiry into the Language of William Golding's *The Inheritors*", in M.A.K. Halliday, *Linguistic Studies of Text and Discourse (Volume 2 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum, 88 – 125.

Halliday, Michael A.K. (1978). *Language as social semiotic: The social interpretation of language and meaning*. London: Arnold.

Halliday, Michael A.K. (1984). "Language as code and language as behaviour: a systemic – functional interpretation of the nature and ontogenesis of dialogue", in M.A.K. Halliday, R.P. Fawcett, S. Lamb and A. Makkai (Eds), *The semiotics of language and culture. Volume One*. London: Frances Pinter, 3 – 35.

Halliday, Michael A.K. (1985). *An Introduction to Functional Grammar.* First Edition. London: Arnold.

Halliday, Michael A.K. (1988). "On the Language of Physical Science", in M. Ghadessy (Ed.) *Registers of Written English: Situational Factors and Linguistic Features.* London: Pinter, 162 –178.

Halliday, Michael A.K. (1994). *An Introduction to Functional Grammar.* Second Edition. London: Arnold.

Halliday, Michael A.K. (1997). "Language in a Social Perspective", in N. Coupland and A. Jaworsky (Eds), *Sociolinguistics: A Reader and Course-book*. London and New York: Continuum, 31 – 39.

Halliday, Michael A.K. (1998/2004). "Language and Knowledge: The 'Unpacking' of Text", in M.A.K. Halliday, *The Language of Science (Volume 5 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum, 24 – 48.

Halliday, Michael A.K. (1999/2004). "The Grammatical Construction of Scientific Knowledge: the Framing of the English Clause", in M.A.K. Halliday, *The Language of Science (Volume 5 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum, 102 – 134.

Halliday, Michael A.K. (2004). *The Language of Science (Volume 5 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum.

Halliday, Michael A.K. (2007). *Language and Education (Volume 9 in the Collected Works of M.A.K. Halliday.* Edited by Jonathan J. Webster*)*. London and New York: Continuum.

Halliday, Michael A.K. and Hasan, Ruqaiya (1976). *Cohesion in English*. London: Longman.

Halliday, Michael A.K. and Hasan, Ruqaiya (1985). *Language, context and text: aspects of language in a social semiotic perspective*. Geelong, Vic.: Deakin University Press.

Halliday, Michael A.K. and Martin, James R. (1993). *Writing Science. Literacy and Discursive Power*. London: Falmer.

Halliday, Michael A.K. and Matthiessen, Christian M.I.M. (1999). *Construing experience through meaning. A language-based approach to cognition.* London: Cassell.

Halliday, Michael A.K. and Matthiessen, Christian M.I.M. (2004). *An Introduction to Functional Grammar.* Third Edition. London: Arnold.

Halliday, Michael A.K., McIntosh, Angus and Strevens, Peter (1964). *The Linguistic Sciences and Language Teaching*. London: Longmans.

Hasan, Ruqaiya (1995). "The conception of context in text", in P.H. Fries and M. Gregory (Eds), *Discourse in Society: Systemic Functional Perspectives (Meaning and Choice in Language: Studies for Michael Halliday. Volume L)*. Norwood, NJ: Ablex Publishing, 183 – 296.

Hasan, Ruqaiya (2000). "The uses of talk". In S. Sarangi and M. Coulthard (Eds), *Discourse and Social Life*. London: Longman, 28 – 47.

Hasan, Ruqaiya (2005a). "Introduction: a working model of language", in R. Hasan, C.M.I.M. Matthiessen and J.J. Webster (Eds), *Continuing Discourse on Language. A Functional Perspective. Volume One*. London: Equinox, 37 – 52.

Hasan, Ruqaiya (2005b). "Language and society in a systemic functional perspective", in R. Hasan, C.M.I.M. Matthiessen and J.J. Webster (Eds), *Continuing Discourse on Language. A Functional Perspective*. *Volume One*. London: Equinox, 55 – 80.

Hasan, Ruqaiya and Fries, Peter H. (1995, Eds). *On Subject and Theme: A Discourse Functional Perspective*. Amsterdam and Philadelphia: John Benjamins.

Henderson, Willie (1994). "Metaphor and Economics", in R.E. Backhouse (Ed.), *New directions in economic methodology*. London: Routledge, 343 – 367.

Hinman, Lawrence M. (1982). "Nietzsche, Metaphor and Truth", in *Philosophy and Phenomenological Research* XLIII (2), 179 – 199.

Hoey, Michael (1991). *Patterns of Lexis in Text*. Oxford: Oxford University Press.

Jakobson, Roman (1956/2002). "The metaphoric and metonymic poles", in R. Dirven and R. Pörings (Eds), *Metaphor and Metonymy in Comparison and Contrast*. Berlin: Mouton de Gruyter, 41 – 48.

Jakobson, Roman (1960). "Closing statement: Linguistics and poetics", in T.A. Sebeok (Ed.), *Style in language*. Cambridge (MA): MIT Press, 350 – 377.

Johnson, Christopher (1999). *Constructional grounding: The role of interpretational overlap in lexical and constructional acquisition*. Unpublished Doctoral Dissertation. University of California, Berkeley.

Johnson, Mark (Ed., 1981). *Philosophical Perspectives on Metaphor.* Minneapolis: University of Minnesota Press.

Kilgarriff, Adam and Kosem, Iztok (2012). "Corpus tools for lexicographers", in S. Granger and M. Paquot (Eds), *Electronic Lexicography*, Oxford: Oxford University Press, 31 – 56.

Kilgarriff, Adam, Rychlý, Pavel, Smrz, Pavel and Tugwell, David (2004). "The Sketch Engine", in *Proceedings of Euralex, Lorient (France)*, 105 – 116. [Available at http://www.euralex.org/elx_proceedings/Euralex2004/].

Kittay, Eva F. (1987). *Metaphor: Its Cognitive Force and Linguistic Structure*. Oxford: Clarendon Press – Oxford University Press.

Kövecses, Zoltán (2000). "The scope of metaphor". In A. Barcelona (Ed.), *Metaphor and Metonymy at the Crossroads*. Berlin: Mouton de Gruyter, 79 – 92.

Kövecses, Zoltán (2002/2010). *Metaphor. A practical Introduction*. Oxford: Oxford University Press.

Kövecses, Zoltán (2011). "Recent developments in metaphor theory. Are the new views rival ones?", in *Review of Cognitive Linguistics* 9 (1), 11 – 25.

Krennmayr, Tina (2011). *Metaphor in newspapers (LOT Dissertation series 276)*. Utrecht: LOT.

Lakoff, George (1990). "The Invariance Hypothesis: Is abstract reasoning based on image-schemas?", in *Cognitive Linguistics* 1 (1), 39 – 74.

Lakoff, George (1991). "Metaphor and War: The Metaphor System Used to Justify War in the Gulf", in *Viet Nam Generation Journal and Newsletter* 3 (3), online.
[Available at http://www2.iath.virginia.edu/sixties/HTML_docs/Texts/Scholarly/Lakoff_Gulf_Metaphor_1.html (Part One) and http://www2.iath.virginia.edu/sixties/HTML_docs/Texts/Scholarly/Lakoff_Gulf_Metaphor_2.html (Part Two)].

Lakoff, George (1993). "The contemporary theory of metaphor", in A. Ortony (Ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press, 202 – 251.

Lakoff, George (2003). "Metaphor and War, Again". Published in the *L.I.E.S.* (*Language in Extreme Situations*) website.
[Available at http://www.ugr.es/~jsantana/lies/metaphor_and_war_again.htm].

Lakoff, George (2008). "The Neural Theory of Metaphor", in R.W. Gibbs (Ed.), *The Cambridge Handbook of Metaphor and Thought*. Cambridge: Cambridge University Press, 17 – 38.

Lakoff, George and Johnson, Mark (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.

Lakoff, George and Johnson, Mark (1999). *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*. New York (NY): Basic Books.

Lakoff, George and Kövecses, Zoltán (1987). "The cognitive model of anger inherent in American English", in D. Holland and N. Quinn (Eds), *Cultural Models in Language and Thought*. Cambridge: Cambridge University Press, 195 – 221.

Lakoff, George and Turner, Mark (1989). *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.

Laks, André (1994). "Substitution et connaissance: une interpretation unitaire (ou presque) de la théorie aristotélicienne de la métaphore", in D.J. Furley and A. Nehamas (Eds), *Aristotle's Rhetoric*. Princeton: Princeton University Press, 283 – 305.

Lawler, John M. (1983). "Reviews: *Metaphors We Live By*", in *Language* 59 (1), 201 – 207.

Levin, Samuel R. (1977). *The Semantics of Metaphor*. Baltimore (MD): Johns Hopkins University Press.

Levinson, Stephen C. (1983). *Pragmatics*. Cambridge: Cambridge University Press.

Lindstromberg, Seth (1997). *English Prepositions Explained*. Amsterdam and Philadelphia: John Benjamins.

Locke, John (1690/1735). *An Essay Concerning Human Understanding. Volume II.* London: Bettesworth and Hitch.
[E-book available in Google Books: books.google.com, search words *Locke*, *Essay*, *Volume 2*, *Bettesworth*].

Lorusso, Anna Maria (Ed., 2005). *Metafora e conoscenza*. Milan: Bompiani.

Low, Graham and Todd, Zazie (2010). "Good practice in metaphor analysis: Guidelines and pitfalls", in L. Cameron and R. Maslen (Eds), *Metaphor Analysis*. London: Equinox, 217 – 229.

Mahon, James E. (1999). "Getting your sources right: what Aristotle didn't say", in G. Low and L. Cameron (Eds), *Researching and Applying Metaphor.* Cambridge: Cambridge University Press, 69 – 80.

Malinowski, Bronislaw (1923/2003). "The Problem of Meaning in Primitive Cultures", in J. Maybin (Ed.), *Language and Literacy in Social Practice: A Reader*. Bristol: Multilingual Matters, 1 – 10.

Manetti, Giovanni (2005). "Aristotele e la metafora. Conoscenza, similarità, azione, enunciazione", in A.M. Lorusso (Ed.), *Metafora e conoscenza*. Milan: Bompiani, 27 – 67.

Martin, James R. (1992). *English Text: System and Structure*. Amsterdam and Philadelphia: John Benjamins.

Martin, James R. (1993). "Life as a noun: Arresting the universe in science and humanities", in M.A.K. Halliday and J.R. Martin (Eds), *Writing Science: Literacy and discursive power*. London: Falmer Press, 221 – 267.

Martin, James R. (2000). "Beyond Exchange: Appraisal Systems in English", in S. Hunston and G. Thompson (Eds), *Evaluation in Text*. Oxford: Oxford University Press, 142 – 175.

Martin, James R. and Rose, David (2003). *Working with Discourse. Meaning Beyond the Clause*. London and New York: Continuum.

Martin, James R. and White, Peter R.R. (2005). *The Language of Evaluation: Appraisal in English*. Basingstoke: Palgrave Macmillan.

Mason, Mary (1990). "Dancing on air: Analysis of a passage from an economics textbook", in A. Dudley-Evans and W. Henderson (Eds), *The language of economics: The analysis of economics discourse (ELT Documents 134)*. Basingstoke: Macmillan, 16 – 28.

Matthiessen, Christian M.I.M. (1995). *Lexicogrammatical cartography: English systems*. Tokyo: International Language Sciences Publishers.

Matthiessen, Christian M.I.M. (2005). "The 'Architecture' of Language According to Systemic Functional Theory: Developments since the 1970s", in R. Hasan, C.M.I.M. Matthiessen and J.J. Webster (Eds), *Continuing Discourse on Language. A Functional Perspective. Volume Two*. London: Equinox, 505 – 561.

Matthiessen, Christian M.I.M., Teruya, Kazuhiro and Lam, Marvin (2010). *Key Terms in Systemic Functional Linguistics*. London and New York: Continuum.

McCloskey, Donald N. (1983). "The Rhetoric of Economics", in *Journal of Economic Literature* XXI, 481 – 517.

McEnery, Tony and Wilson, Andrew (1996). *Corpus Linguistics*. Edinburgh: Edinburgh University Press.

McEnery, Tony, Xiao, Richard and Tono, Yukio (2006). *Corpus-Based Language Studies*. London: Routledge.

Miller, Donna R. (2000). "On computing appraisal in a corpus of parliamentary debate, or, ticklish trawling". Unpublished paper delivered to the Euro Systemic-Functional Workshop, Glasgow, 19-22 July.

Miller, Donna R. (2004). *Language as Purposeful: Functional Varieties of Texts*. Bologna: AMS ACTA ALMA-DL.
[Available at http://amsacta.unibo.it/866/].

Miller, Donna R. (2007a). "Construing the 'primitive' primitively: grammatical parallelism as patterning and positioning strategy in D.H. Lawrence", in D.R. Miller and M. Turci (Eds), *Language and Verbal Art Revisited: Linguistic Approaches to the Study of Literature*. London: Equinox, 41 – 67.

Miller, Donna R. (2007b). "Towards a typology of evaluation in parliamentary debate: from theory to practice – and back again", in M. Dossena and A.H. Jucker (Eds), *(Re)volutions in Evaluation*, *Textus* 20 (1), 159 – 180.

Miller Donna R. (2012), "Slotting Jakobson into the social semiotic approach to 'verbal art': A modest proposal", in F. Dalziel, S. Gesuato and M.T. Musacchio (Eds), *A Lifetime of English Studies: Essays in Honour of Carol Taylor Torsello*. Padua: Il Poligrafo, 215 – 226.

Miller, Donna R. and Johnson, Jane H. (2009). "Strict vs. Nurturant Parents? A Corpus-Assisted Study of Congressional Positioning on the War in Iraq", in J. Morley and P. Bayley (Eds), *Corpus Assisted Discourse Studies on the Iraq Conflict: Wording the War*. London: Routledge, 34 – 73.

Miller, Donna R. and Johnson, Jane H. (*to appear*, 2013). "Evaluative choice as 'register-idiosyncratic' meaning? A corpus-assisted comparative study of Congressional debate", in L. Fontaine, T. Bartlett and G. O'Grady (Eds), *Choice: Critical considerations in Systemic Functional Linguistics*. Cambridge: Cambridge University Press.

Morley, John (1998). *Truth to Tell*. Bologna: CLUEB.

Morley, John (2004). "The sting in the tail: persuasion in English editorial discourse", in A. Partington, J. Morley and L. Haarman (Eds), *Corpora and Discourse*. Bern: Peter Lang, 239 – 255.

Narayanan, Srinivas S. (1997). *Knowledge-based Action Representations for Metaphor and Aspect (KARMA)*. Unpublished Doctoral Dissertation. University of California, Berkeley.

O'Donnell, Mick (2008). "The UAM Corpus Tool: Software for corpus annotation and exploration", in Carmen M. Bretones Callejas *et al.* (Eds), *Applied Linguistics Now: Understanding Language and Mind / La Lingüística Aplicada Hoy: Comprendiendo el Lenguaje y la Mente*. Almería: Universidad de Almería, 1433 – 1447.

Ortony, Andrew (Ed., 1979). *Metaphor and Thought.* First edition. Cambridge: Cambridge University Press.

Ortony, Andrew (Ed., 1993). *Metaphor and Thought.* Second Edition. Cambridge: Cambridge University Press.

Painter, Claire (2003). "The use of a metaphorical mode of meaning in early language development", in A.M. Simon-Vandenbergen, M. Taverniers and L. Ravelli (Eds), *Grammatical Metaphor: Views from Systemic Functional Linguistics*. Amsterdam and Philadelphia: John Benjamins, 151 – 168.

Painter, Claire, Derewianka, Beverly and Torr, Jane (2007). "From microfunction to metaphor: learning language and learning through language", in R. Hasan, C.M.I.M. Matthiessen and J.J. Webster (Eds), *Continuing Discourse on Language. A Functional Perspective*. *Volume Two*. London: Equinox, 563 – 588.

Parrill, Fey and Sweetser, Eve (2004). "What we mean by meaning. Conceptual Integration in gesture analysis and transcription", in *Gesture* 4 (2), 197 – 219.

Pragglejaz group (2007). "MIP: A Method for Identifying Metaphorically Used Words in Discourse", in *Metaphor and Symbol* 22 (1), 1 – 39.

Pounds, Gabrina (2010). "Attitude and Subjectivity in Italian and British hard-news reporting: The construction of a culture-specific 'reporter' voice", in *Discourse Studies* 12 (1), 106 – 137.

Quintilian. *La formazione dell'oratore*, *Volume secondo*. Edited by Marco Calcante (1997). Milan: Biblioteca Universale Rizzoli.

Ravelli, Louise (1995). "A dynamic perspective: implications for metafunctional interaction and an understanding of Theme" in R. Hasan and P.H. Fries (Eds), *On Subject and Theme: A Discourse Functional Perspective*. Amsterdam and Philadelphia: John Benjamins, 187 – 234.

Reddy, Michael J. (1979/1993). "The conduit metaphor: A case of frame conflict in our language about language", in A. Ortony (Ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press, 164 – 201.

Richards, Ivor A. (1936). *The Philosophy of Rhetoric*. Oxford: Oxford University Press.

Ricoeur, Paul (1977). *The Rule of Metaphor*. Toronto: University of Toronto Press. [French edition *La métaphore vive*, 1975. Paris: Éditions du Seuil].

Rojo López, Ana M. and Orts Llopis, María A. (2010). "Metaphorical pattern analysis in financial texts: Framing the crisis in positive or negative metaphorical terms", in *Journal of Pragmatics* 42, 3300 – 3313.

Ruiz de Mendoza Ibáñez, Francisco José and Díez Velasco, Olga Isabel (2002). "Patterns of conceptual interaction", in R. Dirven and R. Pörings (Eds), *Metaphor and Metonymy in Comparison and Contrast*. Berlin: Mouton de Gruyter, 489 – 532.

Ruiz de Mendoza Ibáñez, Francisco José and and Pérez Hernández, Lorena (2011). "The Contemporary Theory of Metaphor: Myths, Developments and Challenges", in *Metaphor and Symbol*, 26 (3), 161 – 185.

Rychlý, Pavel (2008). "A lexicographer-friendly association score", in P. Sojka and A. Horák (Eds), *Proceedings of the Second Workshop on Recent Advances in Slavonic Natural Languages Processing, RASLAN 2008*. Brno: Masaryk University, 6 – 9.

Sapir, Edward (1921). *Language: An introduction to the study of speech*. New York (NY): Harcourt, Brace and World.

Schmid, Helmut, Baroni, Marco, Zanchetta, Eros and Stein, Achim (2007). "The Enriched TreeTagger System", in *Intelligenza Artificiale* IV (2), 22 – 23.

Scott, Mike (2012). *Wordsmith Tools version 6*. Liverpool: Lexical Analysis Software.

Searle, John R. (1979/1993). "Metaphor", in A. Ortony (Ed.), *Metaphor and Thought*. Cambridge: Cambridge University Press.

Semino, Elena (2002). "A sturdy baby or a derailing train? Metaphorical representations of the euro in British and Italian newspapers", in *Text* 22 (1), 107 – 139.

Semino, Elena and Masci, Michela (1996). "Politics is football: metaphor in the discourse of Silvio Berlusconi in Italy", in *Discourse and Society* 7 (2), 243 – 269.

Simon-Vandenbergen, Anne-Marie, Taverniers, Miriam and Ravelli, Louise (Eds, 2003). *Grammatical Metaphor: Views from Systemic Functional Linguistics*. Amsterdam and Philadelphia: John Benjamins.

Sinclair, John (1991). *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.

Sontag, Susan (1991). *Illness as Metaphor and AIDS and Its Metaphors*. London: Penguin Books.

Soskice, Janet M. (1987). *Metaphor and Religious Language*. Oxford: Clarendon Press – Oxford University Press.

Sperber, Dan and Wilson, Deirdre (1995). *Relevance: Communication and Cognition*. Second Edition. Oxford: Blackwell.

Sperber, Dan and Wilson, Deirdre (2008). "A Deflationary Account of Metaphors", in R.W. Gibbs (Ed.), *The Cambridge Handbook of Metaphor and Thought*. Cambridge: Cambridge University Press, 84 – 105.

Stefanowitsch, Anatol (2006). "Corpus-based approaches to metaphor and metonymy", in A. Stefanowitsch and S.T. Gries (Eds), *Corpus-based Approaches to Metaphor and Metonymy*. Berlin: Mouton de Gruyter, 1 – 16.

Steen, Gerard J. (2008). "The paradox of metaphor: Why we need a three-dimensional model of metaphor", in *Metaphor and Symbol* 23, 213 – 241.

Steen, Gerard J., Dorst, Aletta G., Hermann, J. Berenike, Kaal, Anna A., Krennmayr, Tina and Pasma, Trijntje (2010). *A Method for Linguistic Metaphor Identification: From MIP to MIPVU*. Amsterdam and Philadelphia: John Benjamins.

Sweetser, Eve (1990). *From Etymology to Pragmatics: The Mind-As-Body Metaphor in Semantic Structure and Semantic Change*. Cambridge: Cambridge University Press.

Swiggers, Pierre (1984). "Cognitive Aspects of Aristotle's Theory of Metaphor", in *Glotta* LXII (1/2), 40 – 45.

Taverniers, Miriam (2003). "Grammatical metaphor in SFL: A historiography of the introduction and initial study of the concept", in A.M. Simon-Vandenbergen, M. Taverniers and L. Ravelli (Eds), *Grammatical Metaphor: Views from Systemic Functional Linguistics*. Amsterdam and Philadelphia: John Benjamins, 5 – 34.

Taverniers, Miriam (2006). "Grammatical Metaphor and Lexical Metaphor: Different Perspectives on Semantic Variation", in *Neophilologus* 90, 321 – 332.

Tendhal, Markus and Gibbs, Raymond W. (2008). "Complementary perspectives on metaphor: Cognitive linguistics and relevance theory", in *Journal of Pragmatics* 40, 1823 – 1864.

Thomson, Elizabeth A., White, Peter R.R. and Kitley, Philip (2008). ""Objectivity" and "Hard News" Reporting across Cultures", in *Journalism Studies* 9 (2), 212 – 228.

Thompson, Geoff (2004). *Introducing Functional Grammar.* Second Edition. London: Arnold.

Turner, Mark (1987). *Death Is the Mother of Beauty: Mind, Metaphor, Criticism*. Chicago: University of Chicago Press.

Webster, Jonathan (2009). "An Introduction to *Continuum Companion to Systemic Functional Linguistics*". In M.A.K. Halliday and J.J. Webster (Eds), *Continuum Companion to Systemic Functional Linguistics*. London and New York: Continuum, 1 – 11.

Whorf, Benjamin Lee (1956). *Language, thought, and reality*. Cambridge (MA): MIT Press.

Wilson, Deirdre and Carston, Robyn (2006). "Metaphor, Relevance and the 'Emergent Property' Issue", in *Mind and Language* 21 (3), 404 – 433.

Wilson, Deirdre and Sperber, Dan (2004). "Relevance Theory", in L.R. Horn and G. Ward (Eds), *The Handbook of Pragmatics*. Oxford: Blackwell, 607 – 632.

Wilson, Deidre and Wharton, Tim (2006). "Relevance and Prosody". In *Journal of Pragmatics* 38, 1559 – 1579.

Wu, Canzhong (2009). "Corpus-based research", in M.A.K. Halliday and J.J. Webster (2009), *Continuum Companion to Systemic Functional Linguistics*. London and New York: Continuum, 128 – 142.