

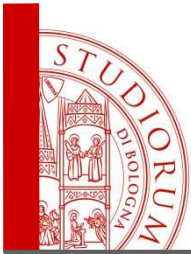
LxGr2017

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What the corpus can(not) tell us about metaphor:

A corpus-assisted analysis of crisis-related lexical/ grammatical metaphor in the 2008 financial press

Antonella Luporini
University of Bologna
antonella.luporini@unibo.it



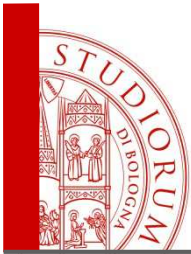
Acronyms (in order of appearance)

- **CMT** for Conceptual Metaphor Theory (and **CM** for conceptual metaphor)
- **SFL** for Systemic Functional Linguistics
- **GMT** for Grammatical Metaphor Theory (and **GM** for grammatical metaphor)
- **LM** for lexical metaphor
- **SkE** for Sketch Engine
- **FT** for *The Financial Times* corpus
- **S24O** for *Il Sole 24 Ore* corpus



Outline

- Introduction
- ➔ A word on the frameworks used in this study:
CMT (Lakoff & Johnson 1980);
SFL/GMT (Halliday & Matthiessen 1999; 2004)
- Methodology
- Findings rundown
- ➔ What the corpus can(not) tell us about LM & GM:
frequency, patterns of synergy and potential effects
- Final thoughts
- Metaphor in times of crisis: legitimizing austerity?

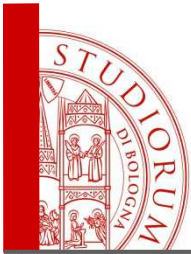


CMT

Challenging the *ornamental* view of metaphor:

“metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system [...] is fundamentally metaphorical in nature” (Lakoff & Johnson 1980: 3)

- ➔ Metaphor & cognition: tendency to map physically-grounded concepts (SOURCE) onto abstract concepts (TARGET)
- ➔ Language as major source of evidence



CMT & the corpus

Extensive body of corpus-assisted research since the inception of CMT

(see, e.g., Tissari 2017)

Is automated extraction of metaphor from corpora possible?

(Mason 2004; Berber-Sardinha 2010)

LMs – non-literal/ transferred use of **lexical units** – widely studied as markers of CMs

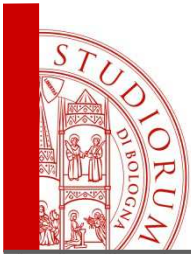


GMT

An approach to metaphor analysis nascent in the same years as CMT, within Hallidayan SFL:

“there is also such a thing as grammatical metaphor, where the variation is essentially in the grammatical forms, although often entailing some lexical variation as well” (Halliday 1985: 320)

➔ As lexical units have **literal** meanings, similarly grammatical structures have **congruent** functions in the linguistic system



GMT: nominalization

A nominal form expresses a Process/ Quality meaning

↳ with effects on the **lexico-grammatical** structure of **the whole clause/ clause complex**

‘Thingified’ Processes/ Qualities become...

➔ atemporal, ‘condensed’ and depersonalized

➔ and so also less open to negotiation (cf. Thompson 2014)

“A great deal of semantic information is lost when clausal expressions are replaced by nominal ones” (Halliday 1993: 78)



Nominalization: an example

- [CONGRUENT]

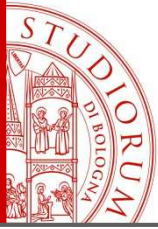
The taxpayers are **anxious**, because the government **passed** a new bill



- [METAPHORICAL]

The **passing** of a new bill caused **anxiety** among taxpayers

(Devrim 2015: 11)



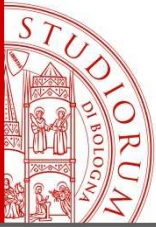
CMT & GMT: areas of convergence

(cf. Koller & Davidson 2008; Luporini forthcoming a; Ritchie & Zhu 2015)

Metaphor as a **second-order phenomenon** resulting in a 'tension' between wordings and semantics (Taverniers 2006)

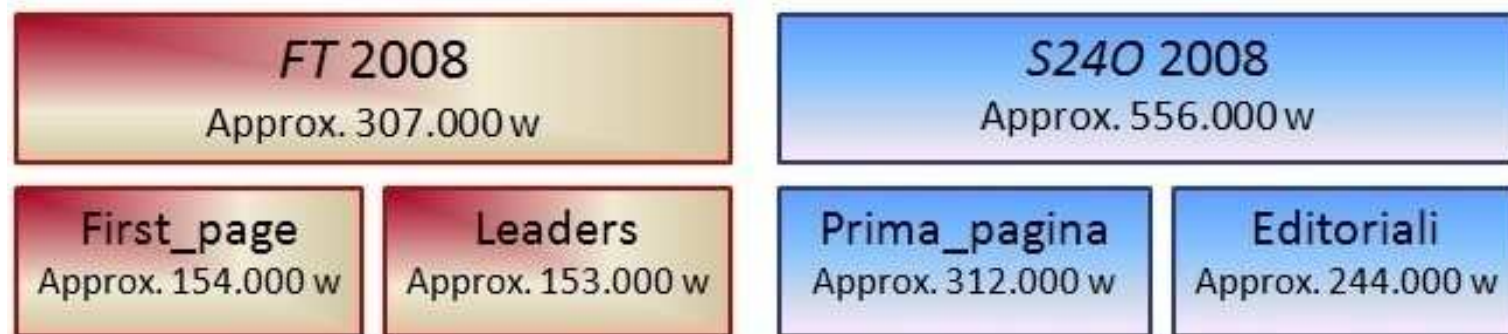
Metaphor as a fundamental strategy to **expand our meaning-making potential** (Halliday & Matthiessen 1999)

Metaphor implies a **shift towards the concrete** (e.g., Lakoff & Johnson 1980; Kövecses 2015 on CMT; Halliday & Matthiessen 1999, 2004; Thompson 2014 on nominalization)



Methodology

- *Ad hoc* corpus including (1) **main first page article**, (2) **leader** from all issues of *The Financial Times* and *Il Sole 24 Ore* 2008

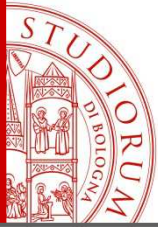


- Lemmatized, Part of Speech-tagged and queried using SkE (Kilgarriff et al. 2004)
- Starting point = TARGET domain: En *crisis*/ It *crisi* as node lemmas



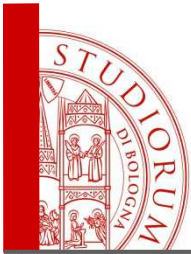
Methodology

- **Pilot survey**
 - Wordlist
 - 5L-5R collocates
 - SkE Word Sketch function
- **+ manual analysis of sentence-length concordances (tot. 1356: En 357 + It 999)**



Methodology: Word Sketch

Crisis (noun)		FT_First_page		Total freq = 203			
OBJECT_OF	<i>logDice</i>	SUBJECT_OF	<i>logDice</i>	MODIFIER	<i>logDice</i>	PP_OBJ_OF	<i>logDice</i>
tackle	11.09	deepen	9.61	credit	11.52	repeat	11.0
avert	10.63	prompt	9.36	financial	10.56	wake	10.83
address	10.32	face	8.31	subprime	10.31	casualty	10.78
quell	10.14	have	6.52	global	9.93	effect	10.22
discuss	10.12	be	6.1	economic	9.37	scale	10.07
combat	10.12			Northern	9.19	bad	8.66
solve	10.07			banking	9.16		
prevent	9.51			recent	9.09	PP_OBJ_TO	<i>logDice</i>
deepen	9.43			mortgage	8.66	response	11.09
trigger	9.4			Rock	8.66	solution	10.83
				[...]		respond	10.51
						PP_OF	<i>logDice</i>
						confidence	10.01



Findings rundown: Frequency/ LM

Sub-corpus	Analysed concordances	Metaphorical concordances	%	Total % in corpus
FT_First_page	180	95	52.8 %	55.2 %
FT_Leaders	177	102	57.6 %	
S240_Prima_pagina	514	282	54.9 %	54.5 %
S240_Editoriali	485	263	54.2 %	

Percentage of metaphorical concordances (LM) in the two corpora



Findings rundown: Frequency/ GM

Sub-corpus	Analysed concordances	Metaphorical concordances	%	Total % in corpus
FT_First_page	180	94	52.2%	51 %
FT_Leaders	177	88	49.7 %	
S240_Prima_pagina	514	204	39.7 %	40.5 %
S240_Editoriali	485	201	41.4 %	

Percentage of metaphorical concordances (GM) in the two corpora




Findings rundown: main SOURCE domains

FT_First_page

- THE CRISIS IS A **PHYSICAL ENTITY** (28%)
- THE CRISIS IS **WAR** (23.7%)
- THE CRISIS IS A **CONTAINER** (15.2%)

S240_First_page

- THE CRISIS IS A **PHYSICAL ENTITY** (29.1%)
- THE CRISIS IS A **CONTAINER** (15.1%)
- THE CRISIS IS **WAR/**
A NATURAL FORCE or 
DISASTER/
A HEALTH PROBLEM
(all 14% circa)



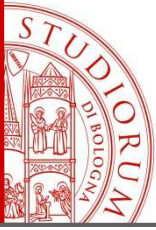
Findings rundown: main SOURCE domains

FT_Leaders

- THE CRISIS IS A **PHYSICAL ENTITY** (28%)
- THE CRISIS IS A **CONTAINER** (21.2%)
- THE CRISIS IS A **HEALTH PROBLEM** (17%)

S24O_Editoriali

- THE CRISIS IS A **PHYSICAL ENTITY** (29.6%)
- THE CRISIS IS A **CONTAINER** (17.2%)
- THE CRISIS IS **WAR/ A HEALTH PROBLEM** (both 14% circa)



Examples

- The **crisis** *has spread* to prime mortgage assets in the US and *engulfed* Bear Sterns (FT_FP, March 22)

CRISIS AS ANIMATE PHYSICAL ENTITY

- Il distretto delle ceramiche [...] *è entrato in crisi* [The ceramics district [...] has entered a crisis period] (S24O_PP, Dec 10)

CRISIS AS CONTAINER

- the latest dramatic intervention by the US government to *combat* the financial crisis (FT_FP, Sept 17)

CRISIS AS WAR

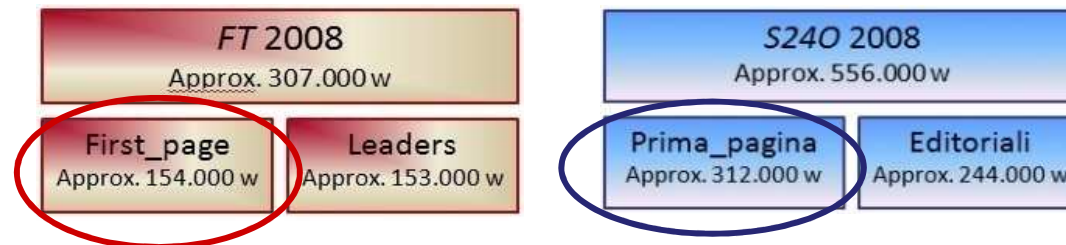
- le grandi banche [...] *epicentro* della crisi [the big banks [...] the epicentre of the crisis] (S24O_PP, June 29)

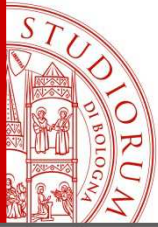
CRISIS AS NATURAL FORCE/ DISASTER



Findings rundown: compelling synergies between LM and nominalization

- Patterns emerging from the combination of corpus and ‘armchair’ linguistics (Fillmore 1992: 35)
- Consequent in-depth analysis carried out on first page sub-corpora (leaders on the agenda)





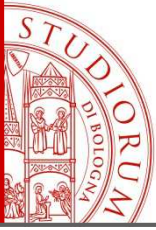
Findings rundown: compelling synergies between LM and nominalization

Sub-corpus	Analysed concordances	Bi-metaphorical concordances	%
FT_First_page	95	70	73.7 %
S24O_Prima_pagina	282	153	54.3 %

Bi-metaphorical concordances in the first page sub-corpora

Sub-corpus	Bi-metaphorical concordances	Concordances showing synergy	%
FT_First_page	70	54	77.1 %
S24O_Prima_pagina	153	111	72.5 %

Bi-metaphorical concordances showing LM/ nominalization **synergy**



Synergies between LM/ CM and nominalization

Nominalized element contributes to coherent/ effective linguistic realization of underlying CM through abstract → concrete shift

- (1) we are *in the depths* of the world's credit **crisis** (FT, Feb 29)

THE CRISIS IS A CONTAINER + nominalized Quality construed as spatial location; focus on additional property of INESCAPABILITY



Synergies between CM and nominalization

(2) *Si proietterà* quindi sul prossimo anno [...] *la durezza* dell'attuale **crisi** finanziaria

[The hardness/ hardship of the current financial crisis will project itself onto the next year] (S240, Dec 17)

THE CRISIS IS A PHYSICAL ENTITY activated by nominalized Quality, which in turn becomes Actor of material Process *proiettarsi* (LM); nominalization also adds a 'perceptible' component of HARM/ SEVERITY

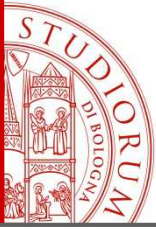


Synergies between CM and nominalization

Nominalized technical terms as 'breeding ground' for CM

- (3) After escaping being badly *hit* by the *fallout* from the US subprime mortgage **crisis**, the large eurozone economies have been slowed down (FT, Aug 15)

Fallout = 'dead' nominalization (Actor) triggering **THE CRISIS IS A NATURAL (NUCLEAR) DISASTER**; multiple-layered metaphorical scenario

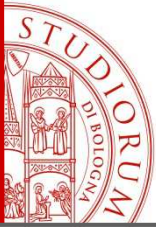


Synergies between CM and nominalization

LM/ nominalization: strategies to condense information

- (4) I *timori* per l'*impatto* della **crisi** finanziaria sull'economia pesano [...] sulle borse
[Fears for the impact of the financial crisis on the economy are weighing [...] on the stock exchange]
(S240, Oct 3)

Nominalisations and CM-evoking LMs compress highly structured information (cf. Ritchie & Zhu 2015), while also giving a more 'vivid' account of the events



Final thoughts

- Quantitative analysis: crisis construed in (highly pessimistic) metaphorical terms, already in 2008
- ➔ CM & GM as potential register-idiosyncratic features (Miller & Johnson 2014) of the language of financial journalism
- ➔ Default ways of conceptualizing/ representing the crisis? (Though **not** the only possible way: see percentage of *non*-metaphorical concordances in slides 13-14 above)
- Qualitative analysis: *lexico-grammatical metaphor* functions to portray the crisis as something ‘tangible’
- ➔ Amplifying its disruptive potential
- ➔ Increasing apprehension toward it



Metaphor in times of crisis: legitimizing austerity?

(Luporini forthcoming b)

- CMs
 - ➔ highlight presence of crisis in society, its violence and aggressiveness (PHYSICAL ENTITY, WAR, HEALTH, NATURAL DISASTER)
 - ➔ tend to efface human responsibility/ involvement (CONTAINER, HEALTH, NATURAL DISASTER)
- Nominalizations work synergistically with CMs to
 - ➔ objectify Processes and Qualities related to the crisis, making them atemporal, impersonal and non-negotiable
 - ➔ encapsulate complex meanings, treating them as a given



Thank you!



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Antonella Luporini

Dipartimento di Lingue, Letterature e Culture Moderne (LILEC)
Via Cartoleria 5
Bologna

antonella.luporini@unibo.it

<https://www.unibo.it/sitoweb/antonella.luporini>

Berber Sardinha, T. (2010) “A Program for Finding Metaphor Candidates in Corpora”, *The ESPECIALIST*, 31 (1), 46-67.

Devrim, D. (2015) “Grammatical metaphor: What do we mean? What exactly are we researching?”, *Functional Linguistics* 2 (3), online.

Fillmore, C.J. (1992) “Corpus linguistics or computer-aided armchair linguistics”, in J. Svartvik (ed.), *Directions in Corpus Linguistics*. Berlin: Mouton de Gruyter, 13-38.

Halliday, M.A.K. (1985) *An Introduction to Functional Grammar.*, 1st ed. London: Arnold.

-- (1993) “Some Grammatical Problems in Scientific English”, in M.A.K. Halliday & J.R. Martin (eds), *Writing Science. Literacy and Discursive Power*. London/ Washington, D.C.: Falmer Press, 69-85.

Halliday, M.A.K. & Matthiessen, C.M.I.M. (1999) *Construing Experience Through Meaning: A Language-based Approach to Cognition*. London: Cassell.

-- (2004) *An Introduction to Functional Grammar*, 3rd ed. London: Arnold.

Kilgarriff, A. et al. (2004) “The Sketch Engine”, in G. Williams & S. Vessier (eds), *Proceedings of the Eleventh EURALEX International Congress*, Université de Bretagne Sud, Lorient, 105-116.

Koller, V. & Davidson, P. (2008) “Social exclusion as conceptual and grammatical metaphor: A cross-genre study of British policy-making”, *Discourse & Society* 19 (3), 307-31.

Kövecses, Z. (2015) *Where Metaphors Come From. Reconsidering Context in Metaphor*. Oxford: OUP.

Lakoff, G. & Johnson, M. (1980) *Metaphors We Live By*. Chicago: Chicago UP.

Luporini, A. (forthcoming a) “‘In the depths of the world’s credit crisis’: Compelling synergies between conceptual and grammatical metaphor in a corpus-assisted study of the British and Italian financial press”, in A. Baicchi & A. Bagasheva (eds), *Figurative Language We Live By: The cognitive underpinnings and mechanisms of figurativity in language*. *Textus* 1 (2017).

Luporini, A. (forthcoming b) “Metaphors in times of crisis: Legitimising austerity?”, in K. Power, T. Ali & E. Lebdusková (Eds), *Discourse Analysis and Austerity: Critical Studies from Economics and Linguistics*. Abingdon, Oxon: Routledge.

Mason, Z.J. (2004) “‘CorMet’: A Computational, Corpus-Based Conventional Metaphor Extraction System”, *Computational Linguistics* 30 (1), 23-44.

Miller, D.R. & Johnson, J.H. (2014) “Evaluative phraseological choice and speaker party/gender. A corpus-assisted comparative study of ‘register-idiosyncratic’ meaning in Congressional debate”, in G. Thompson & L. Alba-Juez (eds), *Evaluation in Context*. Amsterdam/ Philadelphia: Benjamins, 345-366.

Ritchie, L.D. & Zhu, M. (2015) “‘Nixon Stonewalled the Investigation’: Potential Contributions of Grammatical Metaphor to Conceptual Metaphor Theory and Analysis”, *Metaphor and Symbol* 30 (2), 118-36.

Taverniers, M. (2006) “Grammatical Metaphor and Lexical Metaphor: Different Perspectives on Semantic Variation”, *Neophilologus* 90, 321-332.

Tissari, H. (2017) “Corpus-linguistic approaches to metaphor analysis”, in E. Semino & Z. Demjén (eds), *The Routledge Handbook of Metaphor and Language*. Abingdon, Oxon: Routledge, 117-130.

Thompson, G. (2014) *Introducing Functional Grammar*. Abingdon, Oxon: Routledge.