

Causatives, Iconicity and Frequency

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Causative constructions

- MEANING: causative situations

An entity (person, object, event) causes a change in the state, position, location or status of another entity, or causes something to emerge or happen

e.g. *kill, break* (but not *hit*), *throw, give, sell, cause*
also: *tell* and *show* (transfer of information)

- FORM: very diverse, the most important types being
 - lexical (*kill, send*)
 - morphological (Fin. *odotuttaa* “to cause to wait”)
 - resultative (*make happy*)
 - analytic, or periphrastic (*make wait*)

Main research questions

1. Are there any universal correspondences between form and function of CCs in diverse languages?
2. If yes, how can we explain them?

Evidence in constructional typology

Method	Example	Context	Linguist-independent 'senses'
Decompositional method	Wierzbicka's NSM	-	-
Questionnaires and wordlists	CLICS database (List et al. 2014)	-	-
Experiments (only perceptual!)	MPI Nijmegen	-	-
Parallel corpora	Wälchli & Cysouw 2012	+	+

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Data: film subtitles

Advantages

- Freely available online for a variety of languages
- Close to spoken language
- Time information: easy alignment (also automatic)

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Disadvantages

- Possible distorting effect of the source language ('translationese'), usually English
- Quality issues

An example (the .srt format)

...

646

00:51:27,880 --> 00:51:32,920

*For always evil will look to
find a foothold in this world.*

647

00:51:39,440 --> 00:51:42,603

Not good. Not good at all.

648

00:51:50,040 --> 00:51:51,326

Eww.

649

00:52:06,760 --> 00:52:09,081

Oh, no. Sebastian.

650

00:52:12,800 --> 00:52:13,847

Good gracious.

651

00:52:34,720 --> 00:52:35,767

Come on.

...

Films in this pilot study



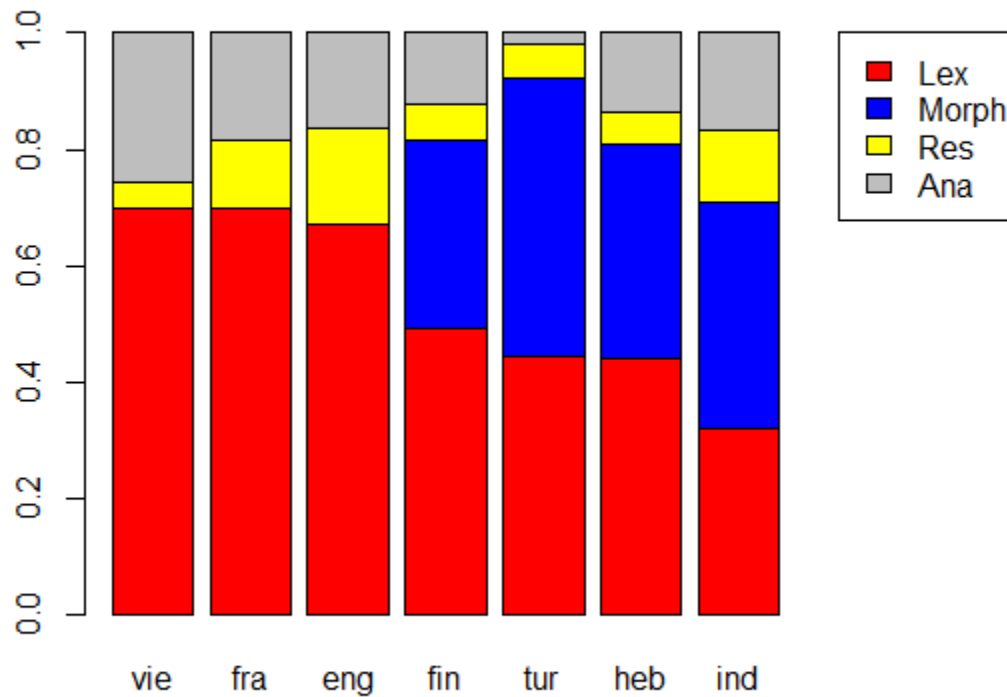
Data set

- A sample of 79 examples of causative situations from the English files
- Translations in six languages:
 - Finnish
 - French
 - Hebrew
 - Indonesian
 - Turkish
 - Vietnamese
- Coded for general CCs as comparative concepts (lexical, morphological, resultative and analytic)

An example

Causative Situation	ENG	FRA	VIE
SMB fixes SMTH	Lex	Lex	Res
SMB makes SMB wait	Ana	Ana	Ana
SMB kills SMB	Lex	Lex	Lex
SMB eats SMTH	Lex	Lex	Lex
SMB stops SMTH	Lex	NA	NA
SMB keeps SMB alive	Res	NA	Res

Relative frequencies of CCs



Form-meaning correspondences

Study	More compact causative	Less compact causative
Comrie (1981; 1989)	Direct causation Low control of Causee	Indirect causation High control of Causee
Haiman (1983; 1985)	Smaller conceptual distance between Cause and Result	Greater conceptual distance between Cause and Result
Givón (1990)	Inanimate Manipulee	Human-Agentive Manipulee
Dixon (2000)	Multidimensional approach: 9(8) parameters of compactness	

Dixon's parameters

More
compact

Less
compact



State (or change of state)

Intransitive

No control

Willing ('let')

Partially affected

Direct

Intentional

Natural

**Relating to
VERB**

**Relating to
Causee**

**Relating to
Causer**

Action

(Di)transitive

Control

Unwilling ('make')

Fully affected

Indirect

Accidental

With effort, violence

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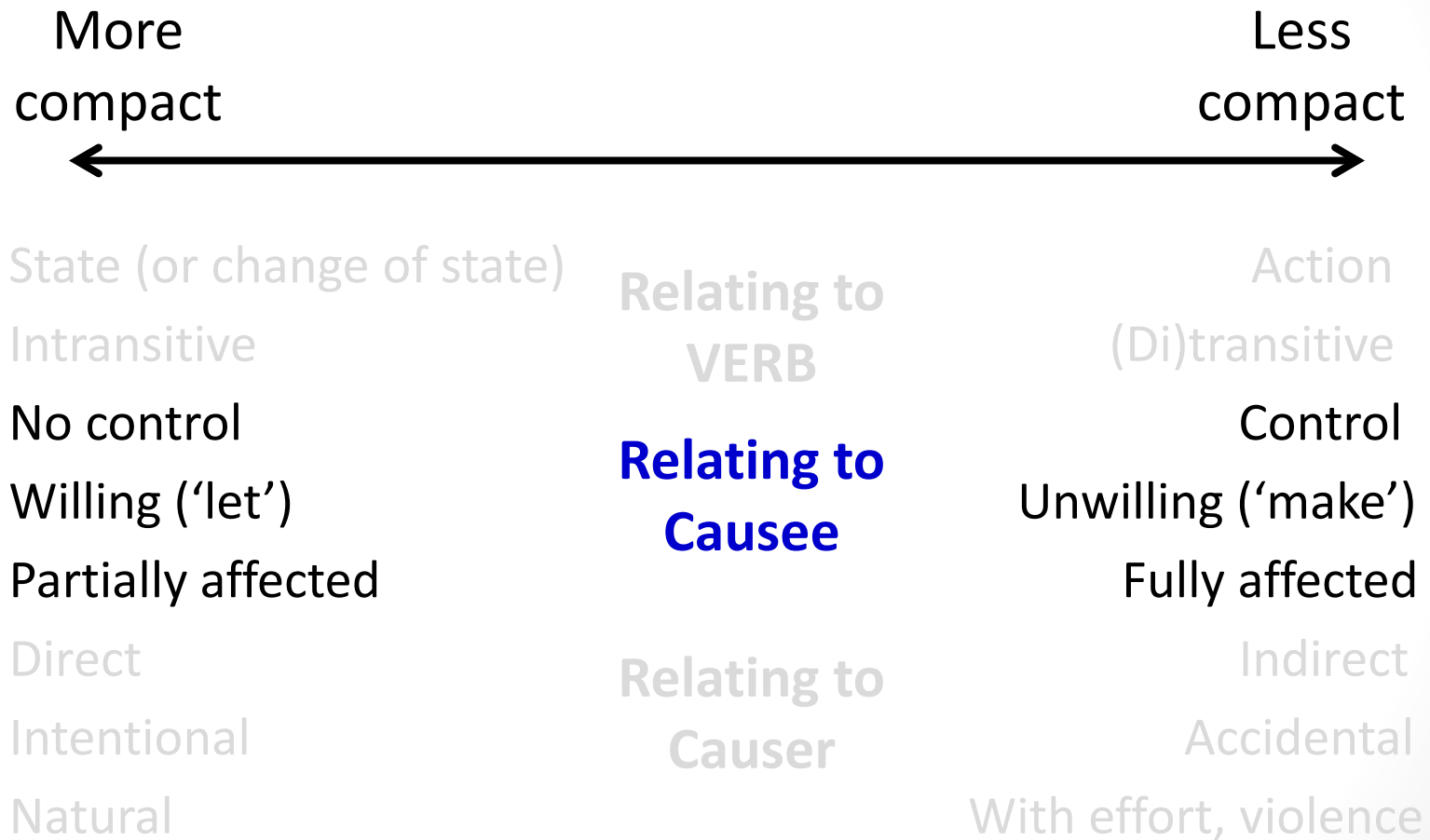
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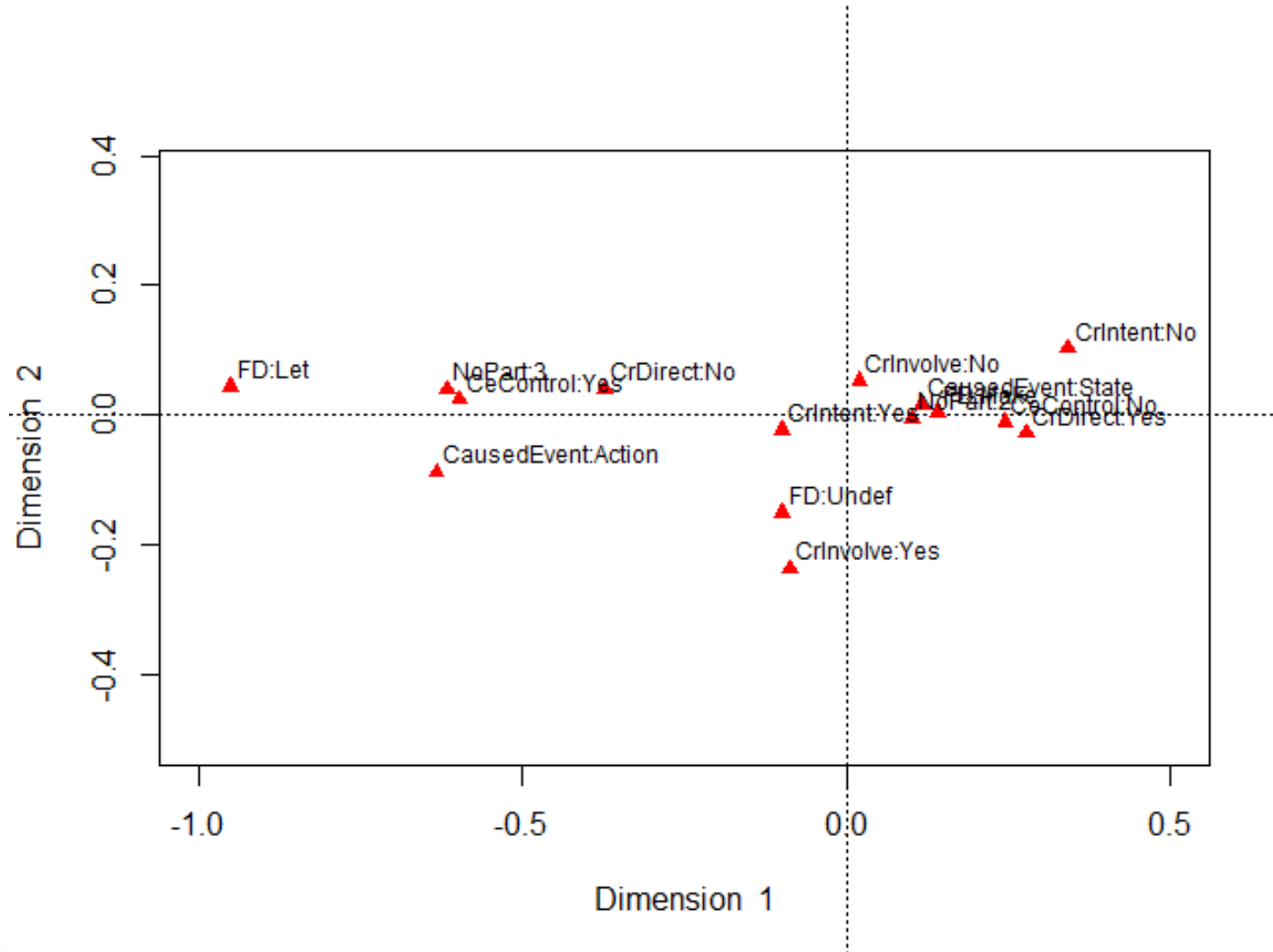
Variables (1)

	Values	Example(s)	Expectations
CausedEvent	State Action	John killed Bill. I walk my dog.	Shorter form Longer form
NumberParticip	2 3	John killed Bill. I gave him a book.	Shorter form Longer form
CeControl	No Yes	John killed Bill. Bring your friends!	Shorter form Longer form
FD (force dynamics)	Let Make Undef	She let him go. John killed Bill. NA	Shorter form Longer form NA
CeAffected	Partially Fully	??? (no examples in English)	Shorter form Longer form

Variables (2)

Variable name	Values	Example(s)	Expectations
CrDirect	Yes No	He cut his hair. He had his hair cut.	Shorter form Longer form
CrIntent	Yes No	She wrote a paper. It makes me happy.	Shorter form Longer form
CrForce	No Yes	He got him to do it. He forced him to do it.	Shorter form Longer form
CrInvolve	No Yes	John killed Bill. Bring your friends! (and come, too)	None (in Dixon 2000)

Associations between features



Regression analysis

- Mixed multinomial ordinal regression (link: logit)
- Response variable: which construction was coded for verbalization of a causative situation in a given language?
 - 4 cxs, representing comparative concepts, arranged in the order of compactness/integration of the causing and caused events:

Lexical > Morphological > Resultative > Analytic

- Predictors (fixed effects): semantic variables
- Random effects: languages and causative situations (random intercepts, no significant random slopes)

Significant predictors

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)	
CrIntentYes	1.8542	0.5875	3.156	0.001598	**
CeControlYes	-2.2476	0.6060	-3.709	0.000208	***
FDMake	3.7503	0.9043	4.147	3.37e-05	***
FDUndef	4.0329	1.2817	3.147	0.001652	**

Interpretation

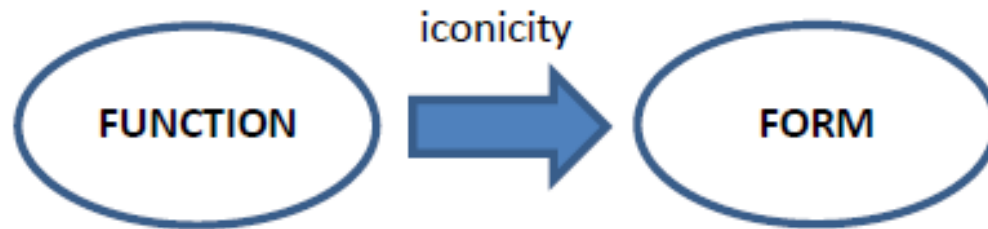
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- OK, but why?
- One possibility (Haiman's 1983 Principle of Iconicity):



Frequency vs. iconicity

- However, Haspelmath (2008) suggests an alternative explanation: causatives representing indirect causation are less compact than causatives that denote direct causation because the former are less frequent than the latter (the Principle of Economy). No resort to iconicity is necessary.

Frequency and economy

Kanzler (m) – Kanzlerin (f)



widow (f) – widower (m)



English lexical and analytic causatives (pairs)

- BNC XML edition
- Parsed by Stanford Parser
- 63 pairs of analytic causatives with auxiliaries MAKE, HAVE, CAUSE and GET and lexical causatives (transitives).

Examples

Analytic	Lexical
CAUSE + bend (intr.)	bend (tr.)
CAUSE + boil (intr.)	boil (tr.)
CAUSE + die	kill
CAUSE + rise	raise

Analytic/Lexical ratio in BNC

PAIR	ANALYTIC	LEXICAL	RATIO
CAUSE melt (intr.) /melt (tr.)	6	321	0.019
CAUSE sink (intr.) /sink (tr.)	7	488	0.014
CAUSE boil (intr.) /boil(tr.)	4	339	0.012
...
CAUSE open (intr.) /open (tr.)	7	10568	0.0007
CAUSE gather(intr.) /gather (tr.)	1	1754	0.0006
CAUSE improve (intr.) /improve (tr.)	2	7221	0.0003

Is iconicity epiphenomenal?

