

Economy, iconicity or productivity? A typological study of causative constructions

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Outline

1. Research questions
2. Typological data
3. Quantitative analyses
4. Interpretation of the results

Direct vs. indirect causation

- Direct: spatiotemporal overlap of cause and effect, direct involvement of Causer, etc.
 - John killed Bill in his mansion last Friday
 - ??by stabbing him in the forest on Wednesday
 - ??by tampering with his gun
 - ??by not preventing his suicide.
- Indirect: no spatiotemporal overlap, no direct involvement of Causer, etc.
 - John caused Bill to die in his mansion last Friday
 - by shooting him in the forest on Wednesday
 - by tampering with his gun
 - by not preventing his suicide.

Typological universal

- “[T]he kind of formal distinction found across languages is identical: the continuum from analytic via morphological to lexical causative correlates with the continuum from less direct to more direct causation” (Comrie 1981: 165)
- But: the continuum analytic – morphological – lexical corresponds in fact to different conflated formal parameters.

Formal correlates of (in)directness

- (In)directness is reflected mostly in:
 - Autonomy & distance between the elements, due to the principle of iconicity (e.g. Haiman 1985)
 - Length, due to the principle of economy (Haspelmath 2008)
 - Productivity, due to historical development and iconicity-based reanalysis (Shibatani & Pardeshi 2002)

Formal correlates: distance and autonomy

- (In)directness is reflected mostly in:
 - Distance & autonomy between the elements, due to the principle of iconicity (e.g. Haiman 1985)
 - Length, due to the principle of economy (Haspelmath 2008)
 - Productivity, due to historical development and iconicity-based reanalysis (Shibatani & Pardeshi 2002)

Iconicity

- “Meanings that belong together more closely semantically are expressed by more cohesive forms” (Haspelmath 2008: 2)
- If cause and effect are closely integrated or close semantically, the elements that express them will be formally integrated/in proximity, too.

Distance

DIRECT

- John **killed** Bill.
- zero

INDIRECT

- John **caused** **Bill** **to die**.
- greater (-d, Causee, to)

Autonomy

Morpheme < Word < Clitic + Host < VP < Sentence

Autonomy

DIRECT

- John **killed** Bill.
- zero

INDIRECT

- John **caused Bill to die**.
- greater (two clauses)

Formal correlates: Length

- (In)directness is reflected mostly in:
 - Autonomy & distance between the elements, due to the principle of iconicity (e.g. Haiman 1985)
 - Length, due to the principle of economy (Haspelmath 2008)
 - Productivity, due to historical development and iconicity-based reanalysis (Shibatani & Pardeshi 2002)

Length

DIRECT

- John **killed** Bill.
- shorter

INDIRECT

- John **caused** Bill **to die**.
- longer

Formal correlates: Productivity

- (In)directness is reflected mostly in:
 - Autonomy & distance between the elements, due to the principle of iconicity (e.g. Haiman 1985)
 - Length, due to the principle of economy (Haspelmath 2008)
- Productivity, due to historical development and iconicity-based reanalysis (Shibatani & Pardeshi 2002)

Productivity

DIRECT

- John **killed** Bill.
- non-productive

- *oros-* “bring down”
from *ori-* “come down”
(Japanese)
- non-productive

INDIRECT

- John **caused Bill to die**.
- productive

- *ori-sase-* “cause to
come down”
- productive suffix *-(s)ase*

Research question

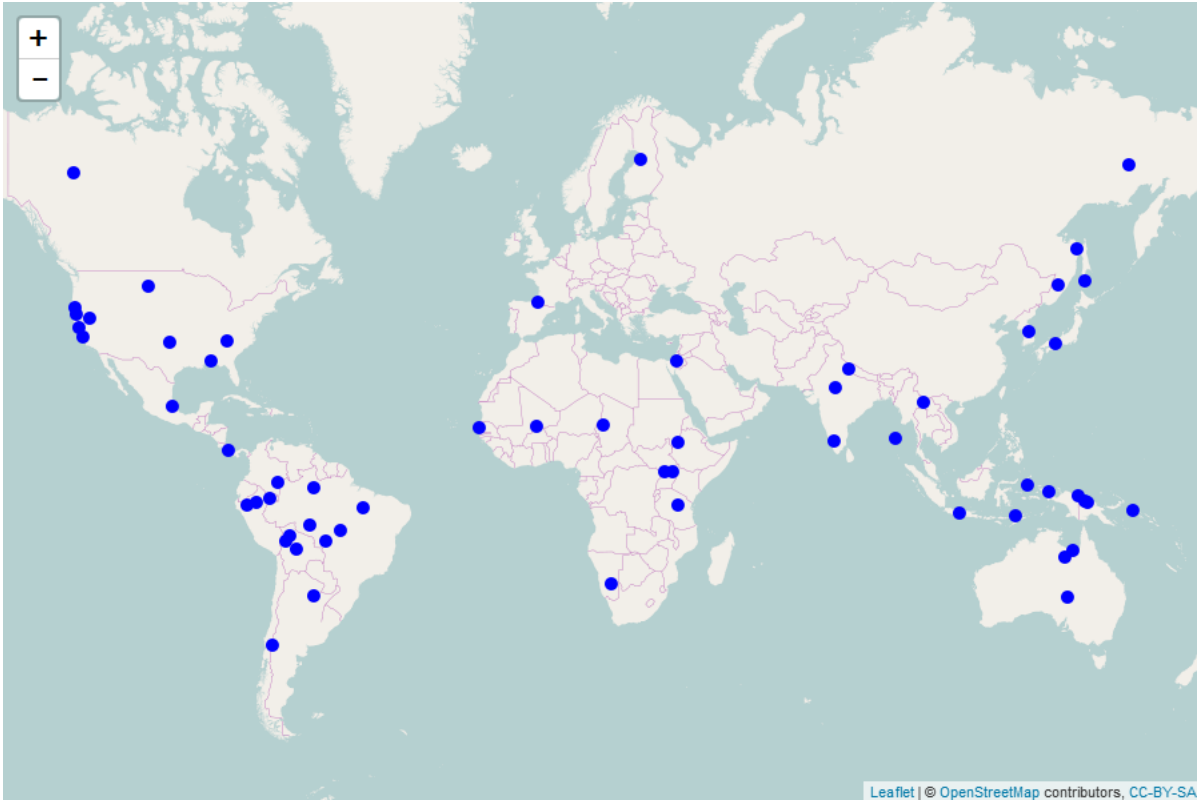
- Which of the formal parameters is the most strongly associated with the semantic distinction?

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Typological data

- 58 languages from different language families (according to WALS)
- Only those languages where a description of **two or more different causative constructions** was available in reference grammars or research articles.
- For example, a grammar of Ik, an Eastern Sudanic language (Schrock 2014), describes two causative constructions:
 - a morphological causative with the suffix *{-it-}*
 - a periphrastic causative with verb *itín-* ‘force’.



Data set

- Direct/indirect distinction found in 46 languages
- Rich inventory of causatives:
 - Two Caus = 1 contrasting pair: Caus1 vs. Caus2
 - Three Caus = 3 contrasting pairs: Caus1 vs. Caus2, Caus2 vs. Caus3, Caus1 vs. Caus3
 - Four Caus = 6 contrasting pairs, etc.
- Overall, 74 contrasting pairs

What is direct and indirect?

- direct and indirect causation
- strong vs. weak integration of events
- manipulative vs. directive causation
- contact vs. distant causation
- direct vs. mediated causation
- the Causee as non-controlling undergoer or controlling agent (and therefore the main source of energy)
- default vs. ballistic causation...

What is direct and indirect?

- ...factitive vs. permissive causation
- caused state (or change of state) vs. caused activity
- default causation vs. causation with human intermediary
- default vs. curative or 'indefinite' causation
- general vs. 'mild' or 'weak' causation
- default vs. caused by ordering X to do Y
- implicative vs. non-implicative causal relationships.

Example 1

- contact vs. distant in Nivkh (isolate), from Nedjalkov & Otaina (2013: 234)

a. Lep tʰe-ɖ

bread be.dry-IND

‘The bread dried up.’

b. If lep+se-**u**-ɖ.

s/he bread+be.dry-TR-IND

‘He dried up the bread (for dried crusts)’.

c. If lep+ətu-dox qʰau-r tʰe-**gu**-ɖ.

s/he bread+cover-SUP not.be-CONV:NAR:3SG be.dry-CAUS-IND

‘Not covering the bread, he let (it) dry up.’

Example 2

- default vs. curative ('indefinite') causation, where the Causee is backgrounded in Ainu, Tamura (2000: 214)
 - a. *e* 'to eat'
 - b. *é-re* 'to have (someone) eat, feed'
 - c. *e-yar* 'to have something eaten'

Example 3

- Factitive implicative vs. permissive non-implicative in Waimiri-Atroarí (Cariban), from Bruno (2003: 100)

a. Ka k-yeepitxah-**py**-pia.

3PRO I+2O -laugh-CAUS-IMMP

‘She/he made us laugh.’

b. Aa ka m-**injaky**-piany wyty ipy-na **tre'me**.

1PRO ? 2O -permit/let-RECP meat look for-? PART

‘I permitted/let you (to) leave to hunt.’

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Number of languages

Parameter	Direct < Indirect	Direct = Indirect	Direct > Indirect
Distance	27	26	0
Autonomy	24	28	0
Productivity	24	28	1
Length	39	10	2

Number of contrasting pairs

Parameter	Direct < Indirect	Direct = Indirect	Direct > Indirect
Distance	44	30	0
Autonomy	41	33	0
Productivity	40	33	1
Length	59	13	2

Exceptions: length

- In Kayardild, the causative suffix expressing direct causation is actually longer than the one expressing indirect causation (Evans 1995: 355)
 - direct causation: suffix **-THarrma-tha**
 - thulatha ‘descend’ > thulatharrmatha ‘take down’
 - daliya ‘come’ > daliyarrmatha ‘bring’
 - indirect causation: suffix **{-lu-tha}**
 - dulbatha ‘sink (intr)’ > dulbalutha ‘cause to sink, drown’
(e.g. by shooting and not allowing to get out of water)

Exceptions: length

- Mutsun (Penutian) Okrand (1977: 216)
- the mediopassive-causative suffix *-mpi* (causing a change of state) is longer than the active causative *-si* (making someone do something).

Exceptions: productivity

- Filomeno (Totonacan) (McFarland 2009: 149)
- construction expressing indirect causation *maq(a)-*, which can be only combined with verbs of emotion and physical sensation, e.g. “make cry by scolding”, is less productive
- the prefix *maq-* expressing direct causation, which can be combined with any verb, is more productive

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Summary

- Regardless of what we count, languages or contrasting pairs, we find the following alignment, with very few exceptions:

Direct causation

- shorter
- less distant
- less autonomous
- less productive

Indirect causation

- longer
- more distant
- more autonomous
- more productive

Research question

- Which formal parameter is the best aligned with (in)directness?

Research question

- Which formal parameter is the best aligned with (in)directness?

length

Research question

- Which formal parameter is the best aligned with (in)directness?

length

... then distance

Research question

- Which formal parameter is the best aligned with (in)directness?

length

... then distance

...then autonomy and productivity

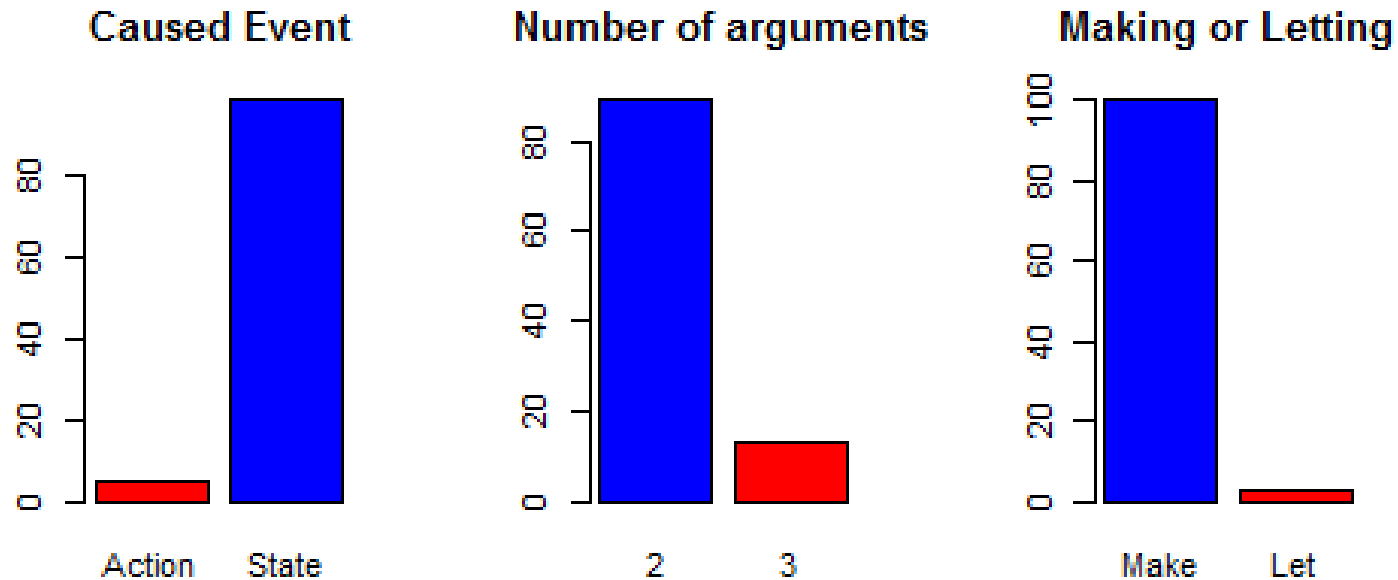
Why?

- Frequency asymmetry: direct causation is more frequent than indirect (Levshina, In prep.)

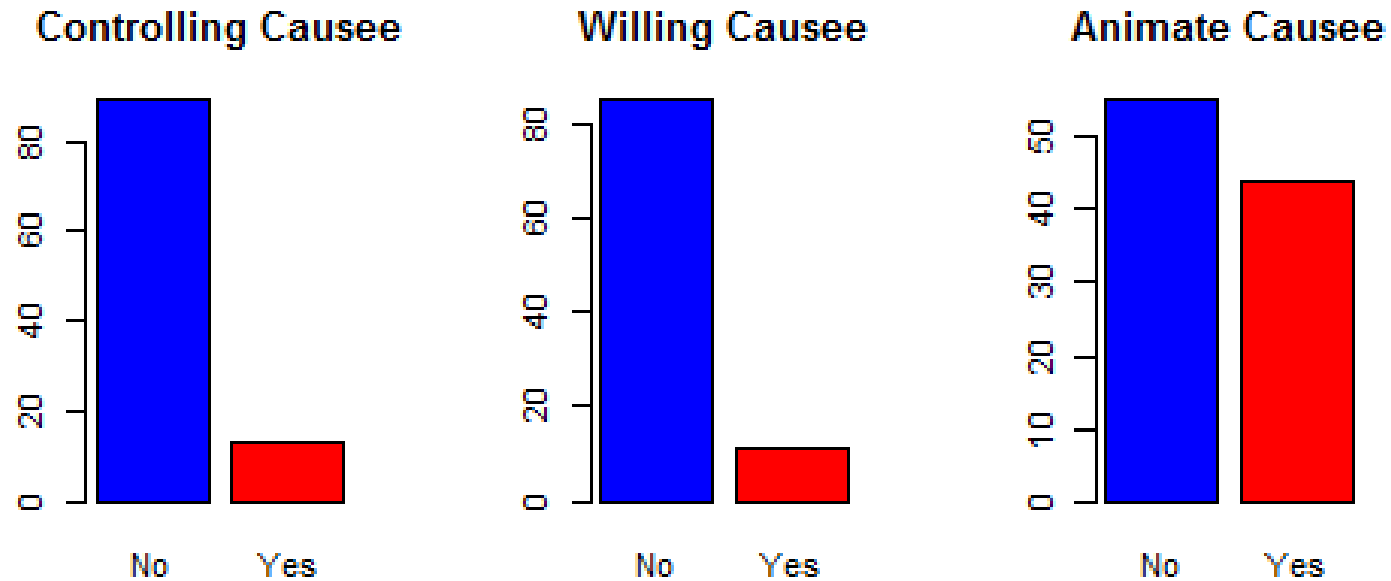
Preliminary corpus evidence

- Santa-Barbara Corpus of Spoken American English (Du Bois et al. 2000-2005).
- A sample of 103 causative situations from seven informal spontaneous dialogues.
- Coded for the semantic and syntactic variables that have been found to be related to (in)directness.

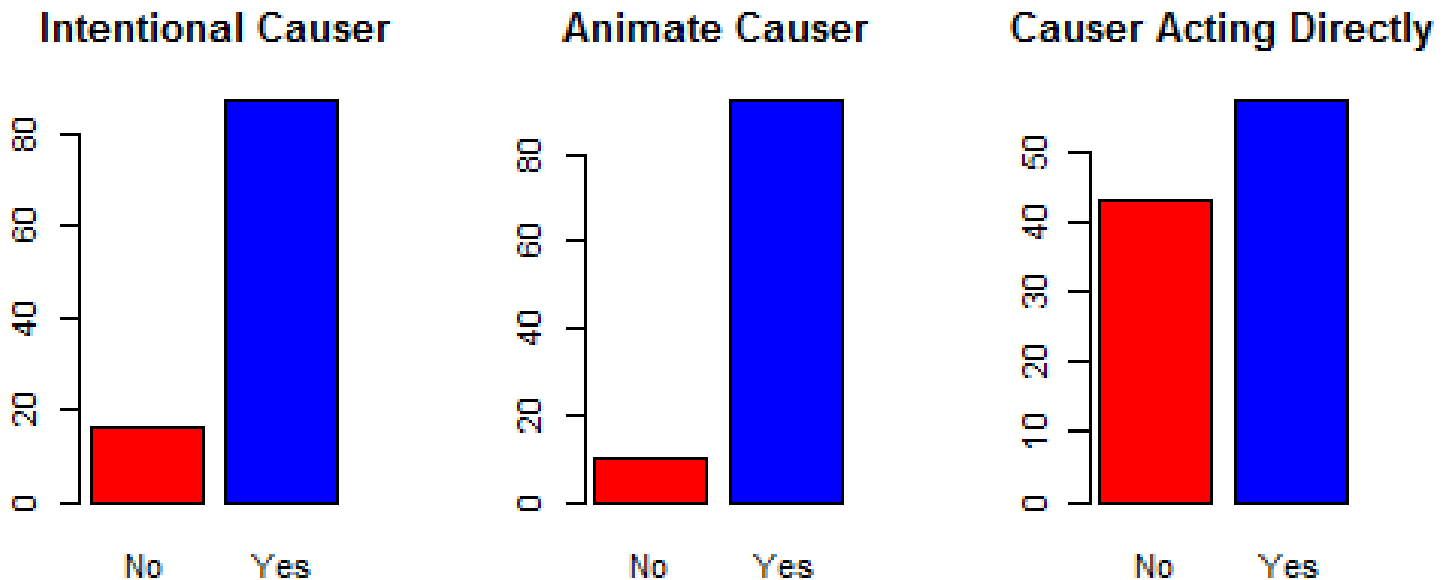
Frequencies of causation types



Frequencies of causation types



Frequencies of causation types



Frequency effects

- Economy / communication efficiency
 - ➔ direct causatives are shorter than indirect ones
- Shorter and semantically weakened (due to frequent repetition) forms are grammaticalized
 - ➔ smaller distance and autonomy
- High token frequency of individual direct causatives
 - ➔ loss of productivity, lexicalization



frequency

Thanks!

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The slides are available at

www.natalialevshina.com/presentations.html