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

INDIRECT
• John caused Bill to die.
• productive

• oros- “bring down” from ori- “come down” (Japanese)
• non-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’.

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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?

- ...factive 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.

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Example 1

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

a. Lep  ṭ’e-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-doχ q’aiu-r ṭ’e-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

• Factivitive 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

<table>
<thead>
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<th>Parameter</th>
<th>Direct &lt; Indirect</th>
<th>Direct = Indirect</th>
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<tbody>
<tr>
<td>Distance</td>
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<td>26</td>
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<tr>
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<td>Productivity</td>
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Number of contrasting pairs

<table>
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<th>Direct &lt; Indirect</th>
<th>Direct = Indirect</th>
<th>Direct &gt; Indirect</th>
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<tr>
<td>Autonomy</td>
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<td>Productivity</td>
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<tr>
<td>Length</td>
<td>59</td>
<td>13</td>
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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’
    - dalija ‘come’ > dalijarrmatha ‘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 *maa*- 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

- 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

![Bar charts showing frequencies of causation types](www.natalialevshina.com/presentations.html)
Frequencies of causation types

Controlling Causee

Willing Causee

Animate Causee

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Frequencies of causation types

Intentional Causer

Animate Causer

Causer Acting Directly

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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

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