The bidirectional contrastive method in theory and practice

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Outline

• BCM
  – Preliminaries
  – Contrastive Analysis on the basis of bidirectional translation data
  – The English-Norwegian Parallel Corpus
  – Framework of correspondence
  – Mutual Correspondence

• Case study: The cognates *bring/bringe* in English and Norwegian
  – Degree of congruence *bring/bringe*
  – Patterns of use and Mutual Correspondence
  – Actual correspondences in translations and sources

• Concluding remarks
Contrastive analysis is the systematic comparison of two or more languages, with the aim of describing their similarities and differences.

(Johansson 2007: 1)

Language comparison [...] reveals what is general and what is language specific and is therefore important both for the understanding of language in general and for the study of the individual languages compared.

(Johansson & Hofland 1994: 25)
After a period when contrastive analysis was rejected by many, there has been a revival, in large measure connected with the new possibilities of contrasting languages using multilingual electronic corpora.

(Johansson 2007: xv)
The English-Norwegian Parallel Corpus

- Contains a fiction and a non-fiction part (only the former will be used for the purpose of the bring/bringe study).
- ENPCfiction holds text extracts of 10,000-15,000 words from 30 contemporary novels in each of the two languages. These have been aligned at sentence level with their respective translations in the other language.
- In total, ENPCfiction amounts to 1.6 million running words, distributed across four components, or sub-corpora:
  - English originals (EO), English translations (ET), Norwegian originals (NO) and Norwegian translations (NT).
- The fact that the sub-corpora are equal in size makes a more or less direct comparison of raw frequencies possible and valid.
  (see e.g. Johansson 2007; Johansson et al. 1999/2000).
CA on the basis of translations

- Translation correspondence as
  - perceived similarity (Chesterman 1998, 2007);
  - measure of degree of similarity: Mutual Correspondence (Altenberg 1999)
- Johansson’s (2007) bidirectional parallel corpus model

The corpus can be said to lend an element of empirical inter-subjectivity to the concept of equivalence, especially if the corpus represents a variety of translators.

(Altenberg & Granger 2002: 17)
Contrastive Linguistics: un-/discover systematic differences and similarities between languages

L1 (EO) English

L1t (ET) tertium comparisonis, «common ground»

Translate, «carry across» ideational and interpersonal functions and stylistic features

L2 (NO) Norwegian

Schematic layout of the procedure of doing contrastive analysis based on translation corpora (Ebeling & Ebeling 2017: 33)
Guilt brings us nearer to God.

"Bring in something to eat …
…to bring me a bottle of …
…what brings you here?"

…to bring you luck, and it has ...
…and bring them back.
…to bring her home, ...
…papers report.
Framework of correspondence

Ebeling (submitted); based on Johansson (2007: 25)
Correspondences

Overt congruent translation
(1) En dag, det var en torsdag, brakte budet to pakker. (JW1)
One day, a Thursday, the messenger *brought* two cartons. (JW1T)

Overt non-congruent translation
(2) Aila understood everything, even the things he didn't intend to *bring up* all at once;... (NG1)
Aila forstod alt, også ting han ennå ikke hadde tenkt å si. (NG1T)
Lit.: ... also things he yet not had thought to say

Overt non-congruent source
(3) "Since you 're going anyway, *bring* me a little water." (EH1T)
"Sidan du først går, *ta med* litt vatn til meg." (EH1)
Lit.: ... take with little water to me

Zero correspondence (omission in the translation)
(4) He went to fetch the scattered crutch and *brought* it back. (DF1)
Han hentet den vekksparkede krykken [Ø]. (DF1T)
Lit.: He fetched the awaykicked crutch
Congruent or non-congruent?

(5) He couldn't bring himself to accept any fault within her, ...
(GN1)

Han kunne ikke få seg til å godta noen svakhet ved henne, ...
(GN1T)

Lit.: He could not get himself to accept

Congruent according to Johansson's definition (verb = verb)
Non-congruent for the purpose of this study

- Congruent: bring = bringe
- Non-congruent: bring ≠ bringe
Mutual Correspondence (MC)

The frequency with which different (grammatical, semantic and lexical) expressions are translated into each other. (Altenberg 1999)

Expressed as a percentage by means of the formula:

\[
\frac{(A_t + B_t) \times 100}{A_s + B_s}
\]

In the case of bring and bringe

\[
\frac{(18 + 28) \times 100}{202 + 46} = 18.5\%
\]

\(A_t\) and \(B_t\) = The number of times the compared items (A and B) are translated by each other

\(A_s\) and \(B_s\) = The total number of occurrences of the compared items in the source/original texts
Reverse Mutual Correspondence (rMC)

The frequency with which different (grammatical, semantic and lexical) expressions have each other as source. (Ebeling & Ebeling 2015)

In the case of *bring* and *bringe*

\[
\frac{(28 + 16) \times 100}{187 + 47} = 18.8\% 
\]

- The (r)MC suggests that *bring* and *bringe* have a low degree of similarity, i.e. they are far from perfect cross-linguistic matches.
- The (r)MC gives us a starting point for exploring under what circumstances they tend to match.
Case study: *bring* and *bringe*  

- The study takes two cognates (perceived similarity) as its starting point in order to show the potential of a bidirectional translation corpus in cross-linguistic studies.

- Although intuitively perfect cross-linguistic matches of each other, the English verb *bring* and the Norwegian verb *bringe* seem to have different conditions of use.

- Using the BCM we will be able to establish  
  - how the lemmas are used in the two languages;
  - when they overlap in meaning and use, and when they do not;
  - the extent to which they correspond to each other in translation and what other correspondences they may have (i.e. overview of range and degree of similarity).
**Bring/bringe in the ENPC**

<table>
<thead>
<tr>
<th>Lemma</th>
<th>EO</th>
<th>ET</th>
<th>NO</th>
<th>NT</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>bring/bringe</em></td>
<td>202</td>
<td>187</td>
<td>46</td>
<td>47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Congruence</th>
<th>EO → NT</th>
<th>ET ← NO</th>
<th>NO → ET</th>
<th>NT ← EO</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>bring = bringe</em></td>
<td>18 (8.9%)</td>
<td>28 (15%)</td>
<td>28 (60.9%)</td>
<td>16 (34%)</td>
</tr>
<tr>
<td><em>bring ≠ bringe</em></td>
<td>184 (91.1%)</td>
<td>159 (85%)</td>
<td>18 (39.1%)</td>
<td>31 (66%)</td>
</tr>
<tr>
<td>Total</td>
<td>202</td>
<td>187</td>
<td>46</td>
<td>47</td>
</tr>
</tbody>
</table>
MC = 18.5% - Translation bias 8.9% EO–NT vs. 60.9% NO-ET
rMC = 18.8% - Translation bias 15% ET–NO vs. 34% NT-EO
## Patterns of use

<table>
<thead>
<tr>
<th>Syntactic pattern</th>
<th>Direction of translation</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EO → NT</td>
<td>ET ← NO</td>
<td>NO → ET</td>
<td>NT ← EO</td>
</tr>
<tr>
<td>Monotr.</td>
<td>4/87 (4.6%)</td>
<td>10/91 (11%)</td>
<td>12/16 (75%)</td>
<td>3/9 (33.3%)</td>
</tr>
<tr>
<td>Ditr.</td>
<td>3/16 (18.8%)</td>
<td>4/21 (19%)</td>
<td>5/5 (100%)</td>
<td>2/3 (66.7%)</td>
</tr>
<tr>
<td>Complex tr.</td>
<td>11/93 (11.8%)</td>
<td>14/72 (19.4%)</td>
<td>10/22 (45.5%)</td>
<td>11/32 (34%)</td>
</tr>
<tr>
<td>Fixed phrase</td>
<td>0/6 (0%)</td>
<td>0/3 (0%)</td>
<td>1/3 (33.3%)</td>
<td>0/3 (0%)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>18/202 (8.9%)</td>
<td>28/187 (15%)</td>
<td>28/46 (60.9%)</td>
<td>16/47 (34%)</td>
</tr>
</tbody>
</table>
Congruent correspondences in the syntactic patterns

Monotransitive

(6) ... for amulets of a pine tree struck by lightning bring luck to newborn Diné. (SH1T)

For amuletter av furutre som rammes av lynet bringer lykke til nyfødte dinéer. (SH1)

Ditransitive

(7) “Dette århundre har bragt oss damp, elektrisitet og gass. (EFH1)

“This century has brought us steam, electricity, and gas. (EFH1T)

Complex transitive

(8) This time he wants to capture the animals and bring them back. (MN1T)

Denne gangen vil han fange dyrene og bringe dem tilbake. (MN1)

Phrasal verb (monotrans.)

(9) ... he was a Party apparatchik to his bootstraps, one of those brought in by the present Soviet leader when he had been Chairman of the KGB. (FF1)

Han var Parti-apparatsjik til støvlesålene, en av dem den nåværende Sovjet-lederen hadde brakt inn da han var formann for KGB. (FF1T)
MC & rMC of the complex transitive pattern

Mutual correspondence of complex transitive *bring* and *bringe*

<table>
<thead>
<tr>
<th></th>
<th>EO → NT</th>
<th>NO → ET</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>11 x 100</td>
<td>10 x 100</td>
<td>45.5%</td>
</tr>
<tr>
<td>Source</td>
<td>93</td>
<td>22</td>
<td>19.1%</td>
</tr>
</tbody>
</table>

Reverse MC of complex transitive *bring* and *bringe*

<table>
<thead>
<tr>
<th></th>
<th>ET → NO</th>
<th>NT → EO</th>
<th>rMC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>14 x 100</td>
<td>11 x 100</td>
<td>34%</td>
</tr>
<tr>
<td>Target</td>
<td>72</td>
<td>32</td>
<td>24%</td>
</tr>
</tbody>
</table>
Low MC

- Generally, low MC scores could suggest a lexical gap between languages, or low (lexical) importance of the items compared (Altenberg 1999: 255).

- Neither of these explanations seems likely in the case of bring/bringe.

- What the measures do suggest, however, is that English bring has a correspondence paradigm that is more varied than that of bringe and we need to probe further into the actual correspondences of the verbs to gain more knowledge regarding the nature of these.
Correspondences of simplex *bring*  

<table>
<thead>
<tr>
<th>English corresp.</th>
<th>NO → ET</th>
<th>NT ← EO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bring</td>
<td>27</td>
<td>16</td>
</tr>
<tr>
<td>Take</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Zero</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>7*</td>
<td>23*</td>
</tr>
<tr>
<td>TOTAL</td>
<td>43</td>
<td>43</td>
</tr>
</tbody>
</table>

* 7 different verbs  
*20 different verbs
## Correspondences of simplex *bring*

<table>
<thead>
<tr>
<th>Norwegian corresp.</th>
<th>EO $\rightarrow$ NT</th>
<th>ET $\leftarrow$ NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bringe</em></td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td><em>Ta med</em> (REFL) 'take with (REFL)'</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td><em>Komme med</em> 'come with'</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td><em>Ha med</em> (REFL) 'have with (REFL)'</td>
<td>13</td>
<td>21</td>
</tr>
<tr>
<td><em>Få 'get'</em></td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td><em>Ta 'take'</em></td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td><em>Zero</em></td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td><em>Other</em></td>
<td>50*</td>
<td>64*</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>173</td>
<td>164</td>
</tr>
</tbody>
</table>

* 40 different verbs  
* 33 different verbs
Overview of phrases and phrasal verbs with *bring*

<table>
<thead>
<tr>
<th>Phrasal verb</th>
<th>No.</th>
<th>Phrase</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bring about</em></td>
<td>1 (EO)</td>
<td><em>Bring an end to</em></td>
<td>1 (EO)</td>
</tr>
<tr>
<td><em>Bring down</em></td>
<td>2 (EO); 1 (ET)</td>
<td><em>Bring to an end</em></td>
<td>1 (ET)</td>
</tr>
<tr>
<td><em>Bring in</em></td>
<td>2 (EO); 3 (ET)</td>
<td><em>Bring to court</em></td>
<td>1 (EO)</td>
</tr>
<tr>
<td><em>Bring on</em></td>
<td>1 (ET)</td>
<td><em>Bring to heel</em></td>
<td>1 (ET)</td>
</tr>
<tr>
<td><em>Bring out</em></td>
<td>2 (EO)</td>
<td><em>Bring to life</em></td>
<td>2 (EO); 1 (ET)</td>
</tr>
<tr>
<td><em>Bring up</em></td>
<td>16 (EO); 15 (ET)</td>
<td><em>Bring to mind</em></td>
<td>1 (EO)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Bring up short</em></td>
<td>1 (EO)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>23 (EO); 20 (ET)</td>
<td><strong>TOTAL</strong></td>
<td>6 (EO); 3 (ET)</td>
</tr>
</tbody>
</table>
(10) Who brought him up, and what were they and what did they believe … (RDA1)
Hvem oppdro ham, og hva stod de for og hva trodde de på …(RDA1T)
Lit.: Who upraised him …

(11) Aila understood everything, even the things he didn't intend to bring up all at once;… (NG1)
Aila forstod alt, også ting han ennå ikke hadde tenkt å si. (NG1T)
Lit.: … also things he yet not had thought to say
Conclusion: Case study

• This investigation has gone some way towards explaining the discrepancy in frequency between *bring* and *bringe*.
  – *Bring* seems to be the more favoured of the two because of its broader area of use, including its more frequent use in fixed phrases (cf. Sinclair 1999). *Bring* also appears to be less restricted in terms of level of formality, as it readily corresponds to typically less formal options, i.e. phrasal verbs.

• The verbs show similar preferences in terms of syntactic pattern, but English *bring* is much more frequent overall. Monotransitive *bringe* seems to be restricted to non-human objects of a special kind.

• The study has revealed some clear correspondence tendencies, notably the fact that Norwegian in many contexts prefers a multi-word verb to cover the meaning of *bring*. The study thus illustrates how the same event is encoded by different patterns in two closely related languages.
The broad network of verbs corresponding in one way or another to *bring*/*bringe* attests to the spectre of meanings covered by the core and general "bring" verbs, given the right context (and English *bring* in particular).

(12) ... and the headmaster *brought* him to his auntie's in his car because there was no one at home in his own house. (RDO1)

... og overlæreren *kjørte* ham til tanta hans i bilen sin fordi det ikke var noen hjemme hos Liam. (RDO1T)

Lit.: ... and the headmaster drove him to his aunt in his car
Further research

- A systematic investigation of the correspondences of the most frequently observed translations other than *bring/bringe* (i.e. what are the English correspondences of *ta med/ha med/komme med*? Cf. Dyvik's (1998) "inverse t-image").

- A large-scale monolingual investigation of *bring/bringe* (and the whole semantic network of "bring" verbs in the two languages).

- An expansion of the contrastive dimension of the study by adding more languages to gain a broader cross-linguistic perspective.

- A more detailed discussion of the immediate context and actual collocates of *bring* and *bringe*.

- An investigation of *bring* and *bringe* in other text-types.
Concluding remarks

- The bidirectional contrastive method ensures a systematic and well-defined procedure of identifying and comparing items/units in a cross-linguistic perspective.

- It thereby contributes to a better understanding of how lexico-grammatical patterns, idiomaticity and native-like selection work across languages.

- This is in line with the Idiomaticity project's aim of producing "new knowledge about how words are co-selected to form idiomatic lexico-grammatical patterns across languages".
References


Bokmålsordboka. 2016. Revidert nettutgave [revised online edition], University of Oslo and the Language Council of Norway, hosted by the University of Bergen <http://ordbok.uib.no/>.


**Corpus**