The CroCo Translation Archive

Language Archives: Standards, Creation and Access

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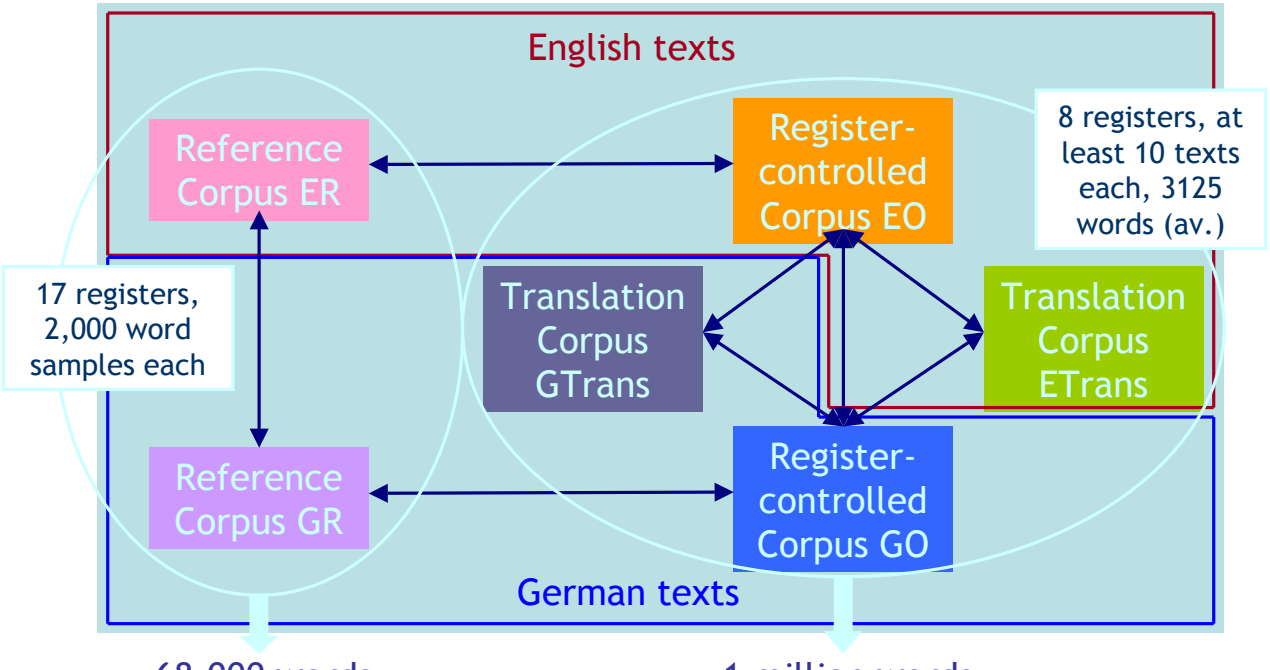
Overview

- CroCo
- Corpus Representation
- Linguistic Annotation
- Alignment
- Outlook

Corpus-based comparison of translations with originals in source AND target language

- Specific properties of translations: e.g. simplification, normalisation, explicitation
- Blum-Kulka 1986, Baker 1996, Olohan & Baker 2000

The CroCo Corpus



- File headers (Text Encoding Initiative)
  - Information about:
    - Author, publication, register information (text type)
    - Translator, translation process
- Text body (multi-layer stand-off XML)
  - Linguistic annotation and alignment

The Header

```
<teiHeader>
<fileDesc>
<filename>GO_FICTION_001.txt</filename>
<subcorpus>FICTION_GO</subcorpus>
<language>German</language>
<titleStmt>
<title>Mein Jahr als Mörder</title>
<author>Delius, Friedrich Christian</author>
</titleStmt>
<translation></translation>
<publicationStmt>
<publisher>Rowohlt Berlin Verlag</publisher>
<date>2004</date>
<distributor>http://www.litrix.de/mmo/priv/15719-WEB.pdf</distributor>
<availability>local</availability>
</publicationStmt>
<registerAnalysis>
…
</registerAnalysis>
```

- Morphology (MPro), part-of-speech (TnT), phrases (MPro), grammatical functions

- Representation format:
  - XML Annotation
  - Multi-layer: each annotation ➔ different layer
  - Stand-off annotation: annotation layers ➔ separate
  - Connection within a language by Xlink, Xpointer, xml:base attributes

XML Annotation

```
<document xmlns:xlink=
 http://www.w3.org/1999/xlink
 name="GO.tok.xml" xml:lang="de"
 docType="ori">
<header xlink:href="GO.header.xml"/>
 <tokens>
 <token id="t64" strg="Ich"/>
  <token id="t65" strg="spielte"/>
  <token id="t66" strg="viele"/>
  <token id="t67„
        strg="Möglichkeiten"/>
  <token id="t68" strg="durch"/>
  <token id="t69" strg=","/>
 </tokens>
</document>
```

```
<document xmlns:xlink=
 http://www.w3.org/1999/xlink
 name="GO.tag.xml">
 <tokens xml:base="GO.tok.xml">
  <token pos="pper"
        xlink:href="#t64"/>
  <token pos="vvfin"
   xlink:href="#t65"/>
  <token pos="pidat"
        xlink:href="#t66"/>
  <token pos="nn"
        xlink:href="#t67"/>
  <token pos="ptkvz"
        xlink:href="#68"/>
  <token pos="yc" xlink:href="#t69"/>
 </tokens>
</document>
```

```
<document xmlns:xlink=
 http://www.w3.org/1999/xlink
 name="GO.chunk.xml">
 <chunks xml:base="GO.tok.xml">
  <chunk id="ch13">
   <tok xlink:href="#t66"/>
   <tok xlink:href="#t67"/>
  </chunk>
  <chunk id="ch14">
   <tok xlink:href="#t70"/>
  </chunk>
  <chunk id="ch15">
   <tok xlink:href="#t71"/>
  </chunk>
 </chunks>
</document>
```

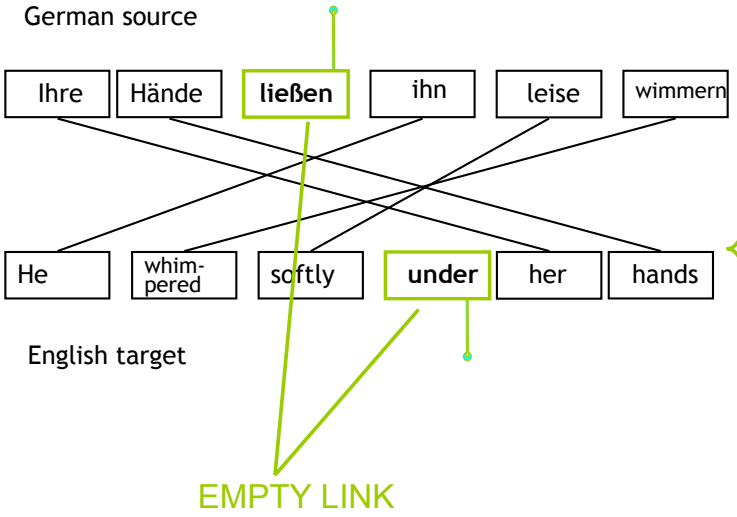
```
<document xmlns:xlink=
 http://www.w3.org/1999/xlink
 name="GO.chunk.xml">
 <chunks xml:base="GO.tok.xml">
  <chunk id="ch13">
   <tok xlink:href="#t66"/>
   <tok xlink:href="#t67"/>
  </chunk>
  <chunk id="ch14">
   <tok xlink:href="#t70"/>
  </chunk>
  <chunk id="ch15">
   <tok xlink:href="#t71"/>
  </chunk>
 </chunks>
</document>
```

```
<document xmlns:xlink=
 http://www.w3.org/1999/xlink
 name="GO.ps.xml">
<chunks xml:base="GO.chunk.xml">
 <chunk ps="NP" xlink:href="#ch13"/>
 <chunk ps="VPFIN"
  xlink:href="#ch14"/>
 <chunk ps="NP" xlink:href="#ch15"/>
 <chunk ps="NP" xlink:href="#ch16"/>
 <chunk ps="PP" xlink:href="#ch17"/>
 <chunk ps="NP" xlink:href="#ch18"/>
 <chunk ps="VPPRED"
  xlink:href="#ch19"/>
 </chunks>
</document>
```

```
<document  xmlns:xlink=
http://www.w3.org/1999/xlink
 name="GO.gf.xml">
 <chunks xml:base="GO.chunk.xml">
 chunk gf="DOBJ" xlink:href="#ch13"/>
  <chunk gf="FIN" link:href="#ch14"/>
  <chunk gf="IOBJ" xlink:href="#ch15"/>
  <chunk gf="DOBJ" xlink:href="#ch16"/>
  <chunk gf="ADV" xlink:href="#ch17"/>
  <chunk gf="PRED" xlink:href="#ch19"/>
 </chunks>
 </chunks>
</document>
```

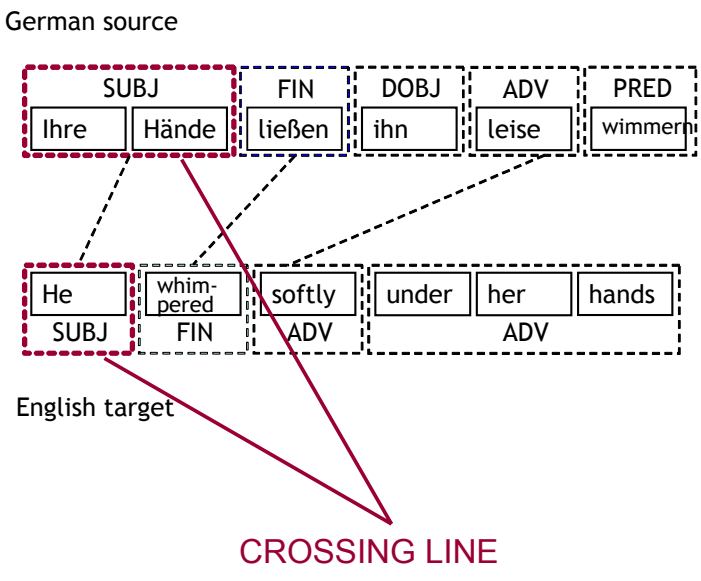

Alignment

- Sentences (WinAlign, Trados), Clauses (MMAX II), Phrases (MMAX II), Words (GIZA++)
- Representation format:
  - XML Alignment
  - Multi-layer: each alignment ➔ different layer
  - Stand-off annotation: alignment layers ➔ separate
  - Connection between source and target language by Xlink and Xpointer attributes plus <translations> element




```
<document xmlns:xlink=
 http://www.w3.org/1999/xlink
 name=„GO2Etrans.tokenAlign.xml">
 <translations xml:base="/corpus/">
  <translation trans.loc=„GO.tok.xml„
               xml:lang="ge" n="1"/>
 <translation trans.loc=„Etrans.tok.xml"
               xml:lang="en" n="2"/>
 </translations>
 <tokens>
  <token>
   <align xlink:href="#t3"/>
   <align xlink:href="#undefined"/>
  </token>
  <token>
   <align xlink:href="#undefined"/>
   <align xlink:href="#t4"/>
  </token>
  <token>
    <align xlink:href="#t4"/>
   <align xlink:href="#t1"/>
  </token>
</document>
```


XML Chunk Alignemnt




```
<document xmlns:xlink=
  http://www.w3.org/1999/xlink
  name=„GO2ETrans.gfAlign.xml">
<translations xml:base="/corpus/">
 <translation trans.loc=„GO.chunk.xml"
              xml:lang="ge" n="1"/>
 <translation trans.loc=„ETrans.chunk.xml"
              xml:lang="en" n="2"/>
</translations>
<chunks>
 <chunk>
  <align xlink:href="#ch1"/>
  <align xlink:href="#ch1"/>
 </chunk>
 <chunk>
  <align xlink:href="#ch3"/>
  <align xlink:href="#undefined"/>
 </chunk>
 <chunk>
  <align xlink:href="#undefined"/>
  <align xlink:href="#ch4"/>
 </chunk>
```

- Corpus exploitation with XQuery and XSLT
- Corpus access via Internet
- Graphical query interface
- Empirical analysis of explicitation (and other translation properties)
- Definition of “the translation unit”?