Linguistic and terminological approaches to term variation.
Variation phenomena in specialized languages

20.07.2017

Dr. Laura Giacomini
Universität Hildesheim / Universität Heidelberg
Topics:

• Which notion of variation?

• Which types of variants?
Which notion of variation?

Computational linguistics and computational terminology:

- Different semantic relations, e.g. synonymy, antonymy, hyperonymy (cf. Daille 2005).

- Focus on variation depends on the envisaged application.

- Primary need for a reliable variant formalisation > influence on typologisation

- Analysis is not only carried out at morphosyntactic level: much research concentrates on the detection of semantic relations among terms by exploiting variation description.

(Socio)terminology and translation studies:

- Diasystemic variation on the lexical level (synonymy)

- Classes of variants are usually represented by synonymous pairs (Auger/ Boulanger 1997, Auger 2001); focus on lexical variants which have no morphological affinity

- More recent studies are dedicated to the cognitive/ textual motivation of terminological variation (Freixa 2006) along with the conceptual patterns behind it (Fernández-Silva/ Freixa/ Cabré 2016, Alarcón-Navío et al. 2016).
7 types of diasystemic synonym classes (excerpt from Auger 2001: 205-210)

- synonymie géographique ou régionale  
  *(french fries/ chips)*
- synonymie chronologique ou temporelle  
  *(mahométisme/ islamisme)*
- synonymie de niveau de langue  
  *(infarctus/ crise du coeur)*
- synonymie professionnelle  
  *(mois comptable/ exercise mensuel)*
- synonymie fonctionnelle  
  *(compact disc/ disque compact)*
- synonymie concurrentielle ou
  socio-économique  
  *(réfrigérateur/ Frigidaire)*
- synonymie fréquentielle  
  *(néologie/ néonymie)*
VARIATION INVOLVING
SYNONYMY

DIASYSTEMIC
VARIATION

NON-DIASYSTEMIC
VARIATION

VARIATION INVOLVING
DIFFERENT SENSE
RELATIONS

terminology,
translation studies

computational linguistics
Case study: thermal insulation products
Wood fibre natural insulation from Pavatex provides a high level of thermal resistance in roofs, walls (both internally and externally), floors and attics to reduce heat loss and to save on energy costs. (…)

For our added health and well-being, wood fibre softboards are a totally natural, sustainable and eco-friendly product made from new timber off-cuts from local sawmills. (…)

Pavatex receive this material as chippings, splinters and slabs and then further process it to create wood fibre thermal insulation boards that form part of the ecological lifecycle. (…)

There is no requirement to wear any protective clothing when installing Pavatex wood fibre boards. (…)

The Pavatex boards are manufactured using both the dry and wet processes, without the addition of any harmful toxins. (…)

This excess heat can be stored in the wood fibre natural insulation boards for as much as 10 to 12 hours due to their excellent thermal mass properties. (…)

http://www.acaraconcepts.com/wood-fibre-insulation
Clusters of synonymous variants:

- wood fibre natural insulation from Pavatex
- wood fibre softboards
- wood fibre thermal insulation boards
- Pavatex wood fibre boards
- Pavatex boards
- wood fibre natural insulation boards
Clusters of morphologically related synonymous variants:

- wood fibre natural insulation from Pavatex
- wood fibre softboards
- wood fibre thermal insulation boards
- Pavatex wood fibre boards
- Pavatex boards
- wood fibre natural insulation boards
<table>
<thead>
<tr>
<th>SYNONYMOUS VARIANTS:</th>
<th>DIASYSTEMIC VARIANTS</th>
<th>NON-DIASYSTEMIC VARIANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO MORPHOLOGICAL SIMILARITY</td>
<td>Blinker / Fahrtrichtungs wechselanzeiger [AUTO]</td>
<td>dämmen / isolieren [BUILDING]</td>
</tr>
</tbody>
</table>
DEF. Intra-discourse terminological variation

The intra-discourse variation of a term is the intra-domain availability of one or more synonymous terms on the same diasystemic level.

Synonymy is intended as the *semantic function* of terms that are totally or extensively co-referent in a specific context.

Intra-discourse terminological variation is habitually characterised by *morphological similarity*, with *similarity* implying the presence of at least one shared *lexical morpheme*. 
Which types of variants?

• **MV, morphological variation** (partial / total):
  changes in lexical morphemes

• **SV, syntactic variation:**
  changes in the part of speech, word order, and sentence construction

• **GV, (orto)graphical variation:**
  changes in hyphenation, capitalisation etc.
● = total variation
○ = partial variation
〇 = no variation
GV = (orto)graphical variation
MV = morphological variation
SV = syntactic variation
Variation from the morphological and syntactic perspective:

<table>
<thead>
<tr>
<th>MV</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>●</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MV</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MV</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MV</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MV</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>●</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MV</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions for discussion:

- How far are different notions of term variation complementary?

- Which aspects (e.g. morphology, syntax, pragmatics, etc.) should be included in a definition of variation?

- For which applications are diasystemic and non-diasystemic variation most relevant?
References


