Designing a new platform for AD analysis: the VIW project

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Overview

- Audio description (AD) research
- The VIW (Visuals Into Words) project
- Compiling the corpus: strategies
- Corpus description
- Exploitation needs and annotation levels
- Sample analyses
- Next steps
AD research

• AD, intersemiotic translation (visuals into words)

• AD research: case-studies, descriptive research on various modalities
Corpus research in AD

- Small corpus (Piety 2004)
- TIWO (Salway 2007)
- TRACCE (Jiménez Hurtado et al. 2010)
- Pear Tree Project (Mazur and Kruger 2012), inspired by Chafe (1980)
The VIW project

- Funded by the Spanish Gov. under “Europa Excelencia” funding scheme (Oct 15-Sept 16)
- Rationale
  - one small stimulus, expanding research
  - open access
  - multilingual
  - multimodal
Compiling the corpus: strategies

- Authentic materials/materials created ad hoc?
- Copyright issues: open access
- Multimodal: audio and video, and text
- Multilingual: English, Spanish, and Catalan (possibility to expand it even more)
Corpus description: the short film

- Commission a short film to a film director
- Create copyright agreement

- Literature and guidelines’ analysis on AD challenges:
  - characters and action (including gestures and facial expressions)
  - spatio-temporal settings
  - film language
  - sound effects and silence
  - text on screen
  - intertextual references.
Instructions to the film director

• Standard narrative
• Various actions
• At least four characters, speaking in English except for one
• At least three different spatio-temporal settings
• Incorporate some text on screen and credits.
• Include one non-identifiable sound
• Silent passages for artistic purposes
• 12-15 minutes long
• Awareness about the AD.
What happens while---

- Result is a 14-minute film directed by Núria Nia (trailer & open access link)

- Dubbed into Catalan and into Spanish (professional dubbing studio)
Corpus description: the ADs

• 10 ADs in Catalan, 10 in English and 10 in Spanish

• Service providers contacted with the same instructions, paid by the project

• Copyright issues solved through an agreement
The corpus: textual data

<table>
<thead>
<tr>
<th>AD</th>
<th>Versions</th>
<th>Words</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>10</td>
<td>6,814</td>
</tr>
<tr>
<td>Catalan</td>
<td>10</td>
<td>5,702</td>
</tr>
<tr>
<td>Spanish</td>
<td>10</td>
<td>5,292</td>
</tr>
<tr>
<td>Global:</td>
<td>30</td>
<td>17,808</td>
</tr>
</tbody>
</table>
Exploitation needs

• Comparative analyses
  – Monolingual
  – Multilingual

• Linguistic elements: frequency, POS, semantic?

• AD distribution along the timeline

• AD elements: how is X rendered in the AD?
  Divergences and commonalities
Annotation levels

• ELAN (Sloetjes and Wittenburg 2008)

• Linguistic annotations: sentences, chunks, tokens, part of speech, lemma, and semantic annotations.

• Cinematic annotations: text, sound, and camera.
Data visualisation

• Web application providing access to:

  – XML annotation file conforming to EAF format, visualized in HTML
  – some graphical visualizations using Google Charts API
Sample analyses: comparing two ADs

What-Deluxe-UK vs. What-Mennell-CA comparison

Searching for the voice Rick makes a questioning gesture and James shields his eyes from the sun
Sample analyses: numbers of words

(2) Number of words per sentences:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Num of sentences</td>
<td>63</td>
</tr>
<tr>
<td>Num of Words</td>
<td>623</td>
</tr>
<tr>
<td>Avg. words per sentence</td>
<td>9.92063492063</td>
</tr>
<tr>
<td>Median words per sentence</td>
<td>10</td>
</tr>
<tr>
<td>Mode words per sentence</td>
<td>13</td>
</tr>
<tr>
<td>Min. words per sentence</td>
<td>1</td>
</tr>
<tr>
<td>Max. words per sentence</td>
<td>22</td>
</tr>
<tr>
<td>Range. words per sentence</td>
<td>21</td>
</tr>
</tbody>
</table>
Sample analyses: density in timeline

Density Graph (duration in msec) for What-Able-NZ-Hits.txt:

Mean duration 5567.8888888889 Min duration 950
Median duration 4929 Max duration 14420
Variance 9715490.8765432 Standard deviation 3161.182742291

Utterances in timeline (duration in msec)
Time in timeline is given in msec
Next steps

• Creating a website, a platform and uploading materials: pagines.uab.cat/viw/

• Expanding the corpus: students? Process data? Other languages? Project sustainability

• Another level of annotation: AD annotation (who, what, why, where, when)
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