0.2 Changing media discourses and genres

A general definition of discourses from an empirical perspective: discourses are the collective communication outlets or tools used to store and deliver information or data. Discourse is the use of spoken or written language in a social context. Dynamic discourse developments over the last 25 years:

- All discourse is digital
- Understanding human interaction mainly through spoken (or written) language via "tools"?

Multiple categorizations in different communities of practice:
- New platforms for multi-purpose discourses (blogs)
- Old discourse media were replaced or transformed:
  - Print → on-line newspapers
  - Digital processing:
    - E.g. NOW (more oral "text-types")

New discourse changes with different text functions / different focus:
- E.g. Search Engines, stratified News Collections, esp. internet data: YouTube, Twitter, newspapers, news corpora
- Digital processing:
  - Bottom-up: to discover patterns
  - Top-down: to support hypotheses, to answer research questions
- National Twitter discourses & norms
- Special usage perception

Digital media research in applied linguistics

Digital humanities (DH) is an area of scholarly activity at the intersection of computing or digital technologies and the disciplines of the humanities. It includes the systematic use of digital resources in the humanities, as well as the reflection on their application. DH can be defined as new ways of doing scholarship that involve collaborative, transdisciplinary, and computationally engaged research, teaching, and publishing. It brings digital tools and methods to the study of the humanities with the recognition that the printed word is no longer the main medium for knowledge production and distribution.

By producing and using new applications and techniques, DH makes new kinds of teaching and research possible, while at the same time studying and critiquing how these impact cultural heritage and digital culture. Thus, a distinctive feature of DH is its cultivation of a two-way relationship between the humanities and the digital: the field both employs technology in the pursuit of humanities, research, and subjects technology to humanistic questioning and interrogation, often simultaneously.

Digital media as input data
- In sociolinguistics: more oral "text-types"
- Corpus linguistics
  - Esp. internet data: YouTube, Twitter, newspapers, news corpora
  - User evaluation of materials: publication of BA/MA/PhD theses

Digital output
- Web publishing: academia.edu, ResearchGate
2. National discourses & norms from Twitter data

Introduction to DH/media news forms

Journalistic discourses & change

National Twitter discourses & norms

Special usage perception of discourse

Humanoid teachers

Conclusions
2.1 Data collection from Twitter in Nigeria (Lagos, Kano)

2.2 National discourses in Nigerian elections: "good governance"

2.3 National norms: Nigeria between UK and US (Twitter)

Table 1: Frequencies of occurrence (pmw) of the most frequent lemmata with word-final British English –our and American English –or in the Lagos sub-corpus of Nigerian Twitter English

<table>
<thead>
<tr>
<th>Lemma</th>
<th>British orthography</th>
<th>American orthography</th>
</tr>
</thead>
<tbody>
<tr>
<td>fav[ou]r</td>
<td>65.08</td>
<td>23.95</td>
</tr>
<tr>
<td>hon[ou]r</td>
<td>36.97</td>
<td>23.95</td>
</tr>
<tr>
<td>col[ou]r</td>
<td>34.89</td>
<td>26.55</td>
</tr>
<tr>
<td>lab[ou]r</td>
<td>25.51</td>
<td>5.73</td>
</tr>
<tr>
<td>neighb[ou]r</td>
<td>13.54</td>
<td>14.58</td>
</tr>
<tr>
<td>behavi[ou]r</td>
<td>12.50</td>
<td>20.31</td>
</tr>
<tr>
<td>flav[ou]r</td>
<td>9.89</td>
<td>2.60</td>
</tr>
</tbody>
</table>

Table 2: Chi-squared and probability-of-error values for the difference between word-final British English –our and American English –or in the Lagos sub-corpus of Nigerian Twitter English

<table>
<thead>
<tr>
<th>Lemmata</th>
<th>$\chi^2$</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>favor : favour</td>
<td>21.12</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>honor : honour</td>
<td>5.38</td>
<td>0.010</td>
</tr>
<tr>
<td>color : colour</td>
<td>2.17</td>
<td>0.070</td>
</tr>
<tr>
<td>labor : labour</td>
<td>24.07</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>neighbor : neighbor</td>
<td>0.07 (0.392)</td>
<td></td>
</tr>
<tr>
<td>behavior : behavior</td>
<td>3.57</td>
<td>0.029</td>
</tr>
<tr>
<td>flavor : flavor</td>
<td>8.17</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Table 3: Frequencies (pmw) of British versus American English prepositional occurrence in the Lagos sub-corpus of Nigerian Twitter English

<table>
<thead>
<tr>
<th>Feature No.</th>
<th>Variants</th>
<th>Occ. of British</th>
<th>Occ. of American</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>fill in : fill out</td>
<td>3.64</td>
<td>0.52</td>
</tr>
<tr>
<td>2</td>
<td>[<em>day</em>] through/br[<em>day]</em></td>
<td>3.12</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>get on (with) : get along (with)</td>
<td>0</td>
<td>0.52</td>
</tr>
<tr>
<td>4</td>
<td>at the weekend : on the weekend</td>
<td>0</td>
<td>1.04</td>
</tr>
<tr>
<td>5</td>
<td>[negative] + for years : [negative] + in years</td>
<td>0.52</td>
<td>1.04</td>
</tr>
<tr>
<td>6</td>
<td>in : on [street names]</td>
<td>1.04</td>
<td>8.33</td>
</tr>
<tr>
<td>7</td>
<td>to protest against : to protest [+ DO]</td>
<td>3.64</td>
<td>18.22</td>
</tr>
</tbody>
</table>

Table 2: Frequencies (pmw) of British versus American English prepositional occurrence in the Lagos sub-corpus of Nigerian Twitter English

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>fill in : fill out</td>
<td>5.60</td>
<td>2.39</td>
</tr>
<tr>
<td>2</td>
<td>[<em>day</em>] through/br[<em>day]</em></td>
<td>7.10</td>
<td>0.33</td>
</tr>
<tr>
<td>3</td>
<td>get on (with) : get along (with)</td>
<td>3.31</td>
<td>4.20</td>
</tr>
<tr>
<td>4</td>
<td>at the weekend : on the weekend</td>
<td>7.62</td>
<td>1.22</td>
</tr>
<tr>
<td>5</td>
<td>[negative] + for years : [negative] + in years</td>
<td>0.45</td>
<td>0.73</td>
</tr>
<tr>
<td>6</td>
<td>in : on [street names]</td>
<td>0.82</td>
<td>2.06</td>
</tr>
<tr>
<td>7</td>
<td>to protest against : to protest [+ DO]</td>
<td>1.92</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Table 3: Frequencies (pmw) of British versus American English prepositional occurrence in the Nigerian sub-corpus of GloWBE
I am hoping to find a new good friend, because I don’t like being all alone.

I need to talk to a winner of this race; I don’t know who she is.

Teachers may be not to blame.
4. Humanoid Teachers: specific discourses with robots

4.1 Special research programme as a large frame (text & progress)

Hybrid societies: humans interacting with embodied technologies

4.2 General models from Alexa to Sophia

Calling All Robot Bachelors: Sophia the Robot Might Want to Start a Family

https://www.inverse.com/article/38833-sophia-robot-family (20/05/18)

4.3 Humanoid Teachers Research questions and interface

1) Can success in human-machine and machine-human discourses be maximized by using deep artificial neural networks to generate and employ digital pneumonia?
2) Can virtual conversational pedagogical agents gain credibility as discourse partners?

linguistic components:
- input collection and control,
- output evaluation
- output evaluation in sociolinguistic terms ("credibility", "acceptability")

- project is located at the intersection of
  - Corpus/Sociolinguistics,
  - Deep Artificial Neural Networks,
  - Pedagogical Agents

within machine-human interaction in hybrid societies

4.4 Iteration of four research stages of the Humanoid teacher

5. Conclusions

5.1 New discourse data from digital media
new discourses genres replace traditional ones (letters → emails, digital newspapers, e-journals) new easy digital access to difficult discourses (e.g. Twitter is half-way to spoken language)

5.2 Limits of "Media Discourse"
DH shows us the limits of media discourse: understanding human interaction mainly through spoken (or written) language via "tags"

5.3 Old and new research
new digital discourses, tools and techniques offer new research opportunities

- to pick up old research questions and
- to create new ones;
- to demonstrate that we can all make a contribution to DH and
- to "advertise" human/teacher discourses as an important contribution to our universities and societies

References (selected)

Altmann, Gerry T. M. 2011. Language can mediate eye movement control within 100 milliseconds, regardless of whether there is anything to move the eyes to. Acta Psychologica 137(2), 190–200.


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