Exploring Arabic speakers' perceptions of EAP reading: Cross-linguistic effects on processing and strategy use

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Overview

- Background to the study
- Arabic & English
- Student perceptions of text difficulty and strategy use
- Observations of real-time interactions with English texts

Background

L1 Reading – compensatory model of reading

 'a deficit in any knowledge source results in a heavier reliance on other knowledge sources, regardless of their level in the processing hierarchy' (Stanovich, 1980:63)

L2 Reading – multiple information sources

 Reliance 'on multiple information sources not ... determining what is an "important" source, but, ... bringing whichever source to bear at an appropriate moment of indecision or insecurity' (Bernhardt, 2011:37)

Background

Processing

- L1 reading processes utilised to varying degrees when reading in L2
- can either help or hinder readers' proficiency (Koda, 2007; Nassaji, 2014)

 Major cause of hindrance = distance between languages

(Cook and Bassetti, 2005)

Distance between languages

- Orthography
- Phonology
- Morphology

Evidence of cross-linguistic effects

- Arabic and Japanese students (Fender 2003):
 - processing English words in isolation
 - reading sentence-embedded words
- Arabic-L1 ESL learners:
 - intra- or pre-lexical processing involves heavy reliance on grapho-phonological mediation
 - word integration processing focuses on context

Evidence of cross-linguistic effects

Effects of vowels and context on Arabic reading (Abu-Rabia):

- both poor and skilled Arabic-L1 readers rely automatically on context in both vowelized and unvowelized conditions (1997a; 1997b; 1998)
- Arabic may be 'the only language in which skilled readers must first understand the sentence in order to recognise the word' (1998:116)

The study

Arabic-L1 students' perceptions and my observations:

- difficulties with English texts
- awareness of processing
- strategy use
- Questionnaire and follow-up interviews
- Data from interviews and real-time reading

Student perceptions – Text difficulty

- Typical of ESL students:
- Long words/sentences/texts
 - 'a lot of academic words' and 'very long sentences with complicated words'
- Topic unfamiliarity
 - '...when I read another text related to other disciplines I found it so difficult,
- Quantity of unknown words
 - especially because there is a lot of vocabulary I didn't understand it.'

Student perceptions – Strategy use

Use of context

• 'I can't guess the meaning from ... the single word, I have to link it with the whole sentence ...'

• 'I try to connection between, ... this sentence with this sentence'

Skimming

 'I just run through the paragraph, I maybe catch three, four, even more five in the line, and try to understand what's this paragraph about.'

• New words \rightarrow translation/google translator*

- 'I try to find the words that I don't know and just translate the words firstly ...'
- '... sometimes [it] * has ... how to pronoun[ce] the word.
 So I am not just having the meaning, I have to hear how he can pronoun[ce] it.'

Real-time interactions: Strategy use

- Frequent use of higher-level processing strategies
- Prevailing tendency for automatic reliance on context for comprehension regardless of L2 reading proficiency
- Limited use of word-level strategies

Real-time interactions with English texts

- Gaps in knowledge of English:
 - phonological
 - orthographic
 - morpho-syntactic

Decoding unfamiliar words

What do you think the text might be about?

sea the Low Countries fight barriers

What problems do you think students might have?

Text 1(excerpt)

Holding the Waters Back

Water has always been a very important factor in human development. The first towns grew up on rivers and coasts. People used the seas and rivers to transport people and goods long before there were good roads. To do this better, people invented ways to control the level of the water. Rising sea or river levels cause flooding, but people can prevent this using a variety of methods.

In Europe, Holland is famous for its fight against the sea. Another name for Holland in English is 'the Low Countries'. Much of western Holland was under water, in swamps or lakes, until people began to build dykes. These dykes were walls or embankments that kept the sea out and reclaimed areas. In the 13th century, there were 350 square kilometres of such areas. From the 15th century, the Dutch used windmills to pump the water out and so were able to greatly increase the area of reclaimed land over the centuries. Today, there are over 6,500 square kilometres of reclaimed land in Holland.

In London, one of the biggest hydraulic engineering projects in the world is the Thames Barrier. It protects London from very high 'surge tides' which have flooded the city and areas near the river Thames for thousands of years. A surge tide in 1953 killed over 300 people. However, the city did not complete construction of the Barrier until 1982. The Thames Barrier is 520 metres long. The barrier, together with the dykes built along the banks of the river, can keep out surge tides of more than seven metres high. Scientists calculate that a surge tide this high occurs only once every thousand years. However, the Barrier will only protect London until 2025. ...

Text Source: 'Holding the Waters Back' in Sabanci University (2003) Beyond the Boundaries: English in an Academic Environment Level 1 Book Two Unit 7 pp11-12

Decoding unfamiliar words

Problematic words	Phonological realisations	Interpretation	Impact				
Text 1							
Low Countries /ˈləʊˌkʌntrɪz/	/'lɔ: əv ˌkʌntrɪz/ (law of countries)	laws on setting boundaries between countries across stretches of water	completely changes meaning and reader is misguided				
Text 2							

Text 2 (excerpt)

Background noise affects taste of foods, research shows.

Jason Palmer, Science and technology reporter, BBC News

The level of background noise affects both the intensity of flavour and the perceived crunchiness of foods, researchers have found. Blindfolded diners assessed the sweetness, saltiness, and crunchiness, as well as overall flavour, of foods as they were played white noise. While louder noise reduced the reported sweetness or saltiness, it increased the measure of crunch.

The research is reported in the journal Food Quality and Preference. It may go some way to explaining why airline food is notoriously bland ...

Text source: Jason Palmer (14.10.10) BBC News at <u>http://www.bbc.co.uk/news/science-environment-11525897</u> [Accessed 12.9.13]

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Text 2						
crunchiness /ˈkrʌnt͡ʃɪnəs/	/ˌkrʌn tʃaɪ 'niːz/; / 'krʌntʃɪnəs/ (correct)	something Chinese; characteristic of food	incorrect initial guess leads to misinterpretation, but then correctly identifies stem and suffixes			

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assessed /ə'sest/	/əˈsest/ (correct)	helps	major breakdown in understanding			

Implications

We need to guide learners to increased efficiency and effectiveness in reading by:

- paying attention to gaps in learners' linguistic knowledge of English e.g. pronunciation, spelling, word forms
- helping learners to develop lower-level processing strategies more suited to English e.g. attention to vowels, word forms, grammatical information

References

- Abu-Rabia, S. (1998) 'Reading Arabic texts: Effects of text type, reader type and vowelization'. *Reading and Writing: An Interdisciplinary Journal* 10, 105–119
- Abu-Rabia, S. (1997a) 'The need for cross-cultural considerations in reading theory: the effects of Arabic sentence context in skilled and poor readers'. *Journal of Research in Reading* 20 (2), 137-147
- Abu-Rabia, S. (1997b) 'Reading in Arabic orthography: The effect of vowels and context on reading accuracy of poor and skilled native Arabic readers in reading paragraphs, sentences, and isolated words'. *Journal of Psycholinguistic Research* 26 (4), 465–482
- Bernhardt, E. B. (2011) Understanding Advanced Second Language Reading. Abingdon: Routledge

References

- Cook, V. J. and Bassetti, B. (eds.) (2005) Second Language Writing Systems. Clevedon, GBR: Multilingual Matters Limited
- Fender, M. (2003) 'English word recognition and word integration skills of native Arabic-and Japanese-speaking learners of English as a second language'. *Applied Psycholinguistics* 24, 289-315
- Koda, K. (2007) 'Reading and language learning: Crosslinguistic constraints on second language reading development'. *Language Learning* 57 (1), 1–44
- Nassaji, H. (2014) 'The role and importance of lower-level processes in second language reading'. *Language Teaching* 47 (1) 1-37
- Stanovich, K. E. (1980) 'Toward an interactive-compensatory model of individual differences in the development of reading fluency'. *Reading Research Quarterly* 16 (1), 32–71