

Day 4-Textlinguistics, Orthography, and Reading

Lecture 2

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Lecture Outline

1. Presentation of the Model
2. Definition of Textlinguistics
3. Insights from TTS
4. Reading vs. Speaking
5. Punctuation
6. Diacritics
7. Other Textual Conventions

Focus on the Textlinguistic Component

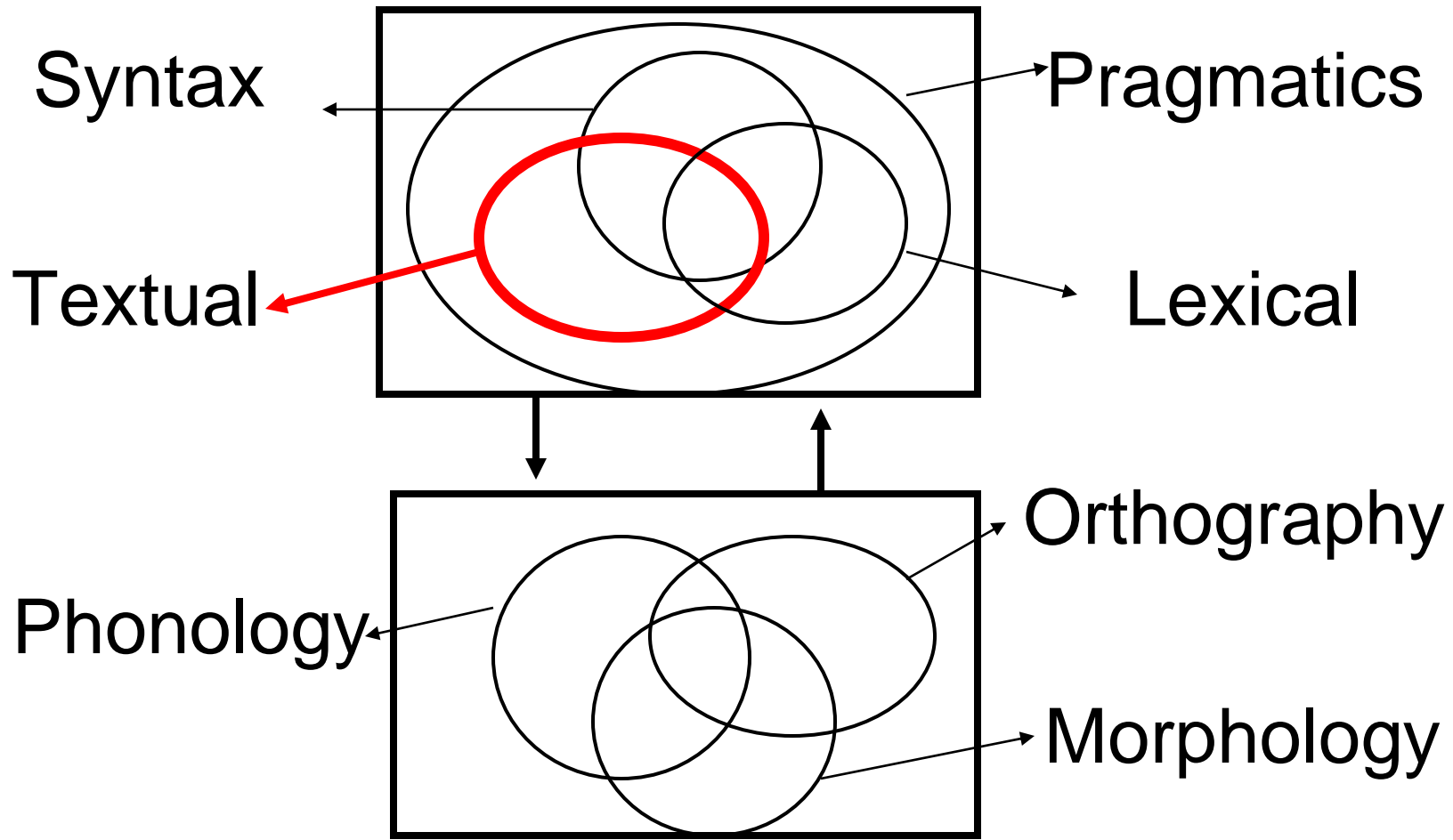
Textual Competence-1

- **Definition:** Textual competence can be defined as any or all the necessary skills needed to read written texts accurately. This competence includes but is not limited to the following:
 1. Text format
 2. Text genres
 3. Font types and sizes

Textual Competence-3

1. Punctuations
2. Diacritics
3. Textual conventions

Top-Down and Bottom-up Processes



Focus on Text-to-Speech

TTS Phonology-1

- **Definition:** Text-to-Speech Phonology is a computational linguistic approach which seeks to derive the correct pronunciation of written texts into synthesized speech. As such it brings phonological, morphological, syntactic, semantic, and **textual** information to bear on the reading of written texts.

Applications of TTS to Human Reading

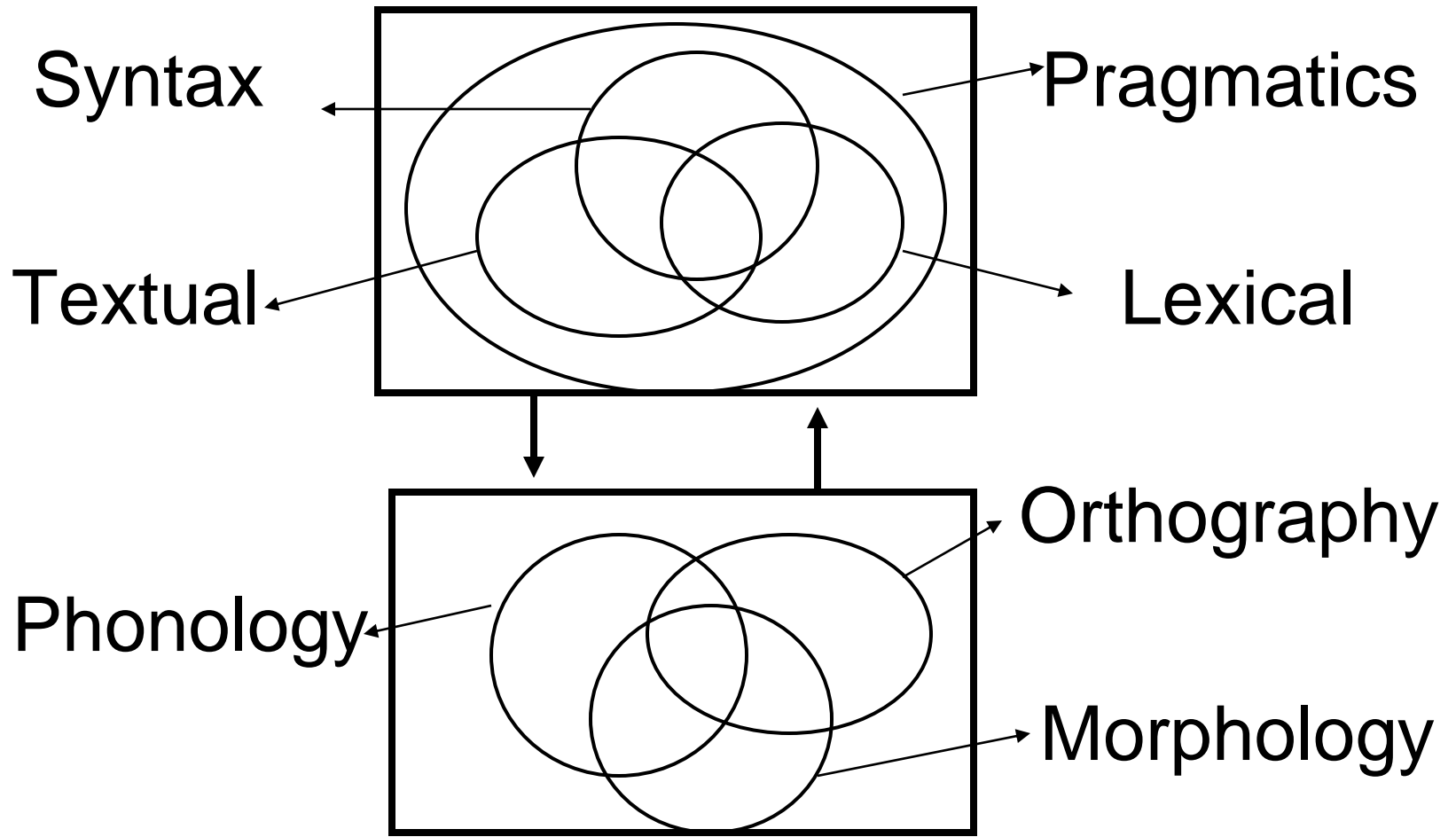
- **From Machines to Humans:** If machines can be programmed to read somewhat accurately, humans also can be taught to read accurately. Understanding what it takes for machines to read accurately can help us in designing optimal orthographies for African languages. For this to happen, a sound approach to reading is needed.

Speaking vs. Reading

Written Language vs. Spoken Language

N0.	Features	Speaking	Reading
1.	Innate	+	-
2.	Conscious	±	+
3.	Metalinguistic	-	+
4.	Neural Mapping	+	+
5.	Cognitive Complexity	±	+
6.	General Intelligence	-	+

Top-Down and Bottom-up Processes



Criticism of the Whole Language Approach-1

- **Linguists attack on WLA:** “Children learn to speak instinctively without being taught. Learning to read and write is not like learning to speak. Recently, however, the **Whole Language Approach** to reading has suggested that children can learn to read as they learn to talk, through `constant interaction with family and friends, teachers and classmates.”

Criticism of the Whole Language Approach-2

- ... This view is given in a National Council of Teachers of English brochure that appears on the World Wide Web. It opposes the view that children be taught to segment speech into individual sounds and relate these sounds to the letters of the alphabet, which is sometimes referred to as teaching **phonics**. As we have seen in this chapter, most written languages are based on oral language. The Whole Language advocates do not understand the way that children acquire language. ...

Criticism of the Whole Language Approach-3

- ... They deny the fact that the ability to learn language is **innate, biologically** determined aspect of the human brain, whereas reading and writing are not. Otherwise, one would not find so many people who speak so many languages that have no written form.” Fromkin et al. (2003:561). *Introduction to language*, 7th edition.

Neurolinguistics and Read & Writing

Benefits of Neurolinguistic Research

- “Data from acquired dyslexia allow researchers to build models that specify the components of normal reading ability and their relationship to each other. Clearly, this type of analysis plays a very important role in the development of our understanding of language, the mind, and the brain,” O’Grady et al. (2005:478)

Brain Anatomy and Reading Aloud

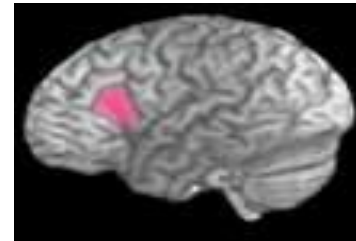
- Reading aloud involves a very complex neurological activity which includes:
 1. Visual or sensory input
 2. Auditory out
- Many parts of the brain are activated during the reading aloud process

Impairments of Reading and Writing

1. Impairments in reading and writing caused by damage to the brain provide linguists and neurologists with information on the areas of the brain responsible for reading and writing.
2. Impairment of reading ability is known as **acquired dyslexia** (also **acquired alexia**).
3. Impairment of writing ability is known as **acquired dysgraphia** (also **acquired agraphia**).

Brocas Area

- **Location:**
 1. Left hemisphere
 2. Frontal lobe
 3. Right above the left eye



Broca's Aphasiac and Writing-1

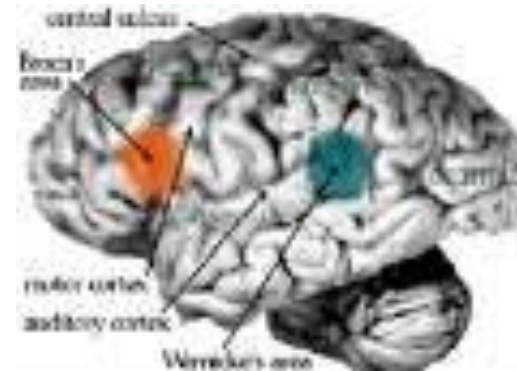
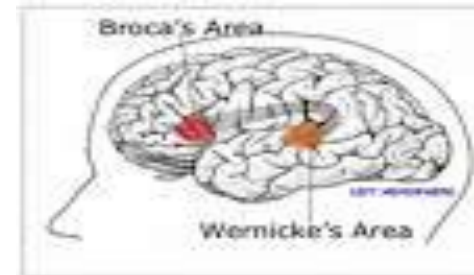
- Most Broca's aphasiacs show writing disturbances that are comparable to their speaking deficit, O'Grady (2005:476). Their writing errors are called **paragraphia** and consists in cluster simplification
 1. <spoon> = <poon>
 2. <hard> = <har>
- Diagraph simplification is also common:
 1. <with> = <wit>

Broca's Aphasiac and Writing-2

- Function words are omitted
- Inflectional morphology is omitted
- Silent reading is good
- Reading aloud has the same characteristics as speaking.
- “These observations reinforce the view that the deficit in Broca's aphasia is much more than a speech articulation deficit. It is a production deficit at a very deep level of language planning,” O'Grady (2005:476).

Wernicke's Area

- **Location:**
 1. Left hemisphere.
 2. Towards the of the side of the back of the head.
 3. Near the left ear.



Wernicke's Aphasiac and Reading & Writing-1

- Wernicke's aphasiacs also show reading and writing deficits that match their deficit in speaking and listening, O'Grady et al. (2005:477).
- The spelling and handwriting of Wernicke's aphasiacs are usually very good. However, their writing, like their speaking, makes little sense.

Wernicke's Aphasiac and Reading & Writing-1

- “Again the conclusion to be drawn is that Wernicke’s aphasia, like Broca’s aphasia, involves a central disturbance of language competence – the knowledge that underlies language functioning. In such cases of central language disturbance, whatever impairment the patient has in listening and speaking will be matched in reading and writing,” O’Grady et al. (2005:477)

Phonological Dyslexia

- “It is a type of acquired dyslexia in which the patient seems to have lost the ability to use spelling-to-sound rules. Phonological dyslexics can only read words that they have seen before. Asked to read a word such as <blug> aloud, they either say nothing or produce a known word that is visually similar to the target word (e.g., <blue> or <bug>), O’Grady et al. (2005:477)

Surface Dyslexia

- “Surface dyslexics seem unable to recognize words as wholes. Instead, they must process all words through a set of spelling-to-sound rules,” O’Grady et al. (2005:477).

Punctuation

Punctuation Convention-1

- **Punctuation:** Readers and writers make use of punctuation conventions in interpreting texts.
- **Flexibility:** “Languages vary in regard to how much punctuation is used in writing. Some have little or none, such as Chinese. Germans uses capitalization, a form of punctuation, ...

Punctuation Convention-2

- ... for all nouns. English uses punctuation to set apart sentences and phrases and to indicate questions, intonation, stress, and contrast,” Fromkin et al. (2010:554).
- **Main Punctuation Conventions:**
 1. Period/comma: <.> Longer pause
 2. Colon: <,> pause
 3. Semi-colon: <:> pause

Punctuation Convention-3

4. Question mark: <?> or < ¿...? >
Yes/No questions and WH questions
5. Exclamation mark: <!> or <!...!>
6. Quotation mark: < “...” >
7. Explanation mark: < : >

Metalinguistic Awareness

- **Naming Punctuation Marks:** Orthography planning is language planning. Consequently, when people become literate in a language, they should be able to name the punctuation marks used in their language. For more information on this, see Koffi (1990:199-04) available online at:

<http://www.orthographyclearinghouse.org>

Syntax and Punctuation

Road Sign Imagery

- Roberts (2008) has presented a compelling rationale for indicating some punctuation marks at the beginning of sentences. He notes that road signs warn of road conditions beforehand. Following this analogy, he claims that the following punctuation marks serve the reader better if they are indicated at the beginning of the sentence:

The Question Mark

- Roberts (2008:A215) has developed a very compelling argument for considering the use of the convention < ǂ...? > to indicate questions in Kabye and some other African languages where Yes/No questions are not differentiated from declarative sentences

Exclamation Mark

- Roberts (2008:A215) has developed a very compelling argument for considering the use of the convention `<i...!>` to indicate exclamative sentences in Kabye.

The Conditional Mood

- Roberts (2008:A215) argues that the conditional mood creates difficulty for Kabye speakers because it is often confused with the indicative mood. He proposes the the convention $\langle \pm \rangle$ to signal the conditional mood.

Sociolinguistics and Orthography

- **Societal Acceptance:** The punctuation < ¿...? > and < ¡...! > are used in Spanish. Will they be accepted in your language(s) if the ex-colonial language does not use them?

Diacritics

Orthography and Diacritics

- **Definitions:** Diacritics are orthographic signs placed over, under, or inside of graphemes that has meaning/function. Here are some common diacritics in African languages:
 1. **Contraction diacritic:** <'> as in <can't>
 2. **Tone diacritics:** <^ ˇ ˘ ˙ >
 3. **Nasalization diacritic:** <~>

Textual Conventions

Other Conventions-1

- **Modernization and Expansion of the Lexicon:** Oral languages may have the word formation process known as clipping (professor 📎 prof.) but they may lack abbreviation such as CIA, FBI, Dr., St., etc. Orthography planners should anticipate such convention, especially as it regards loan phonology

Other Conventions-2

- ... for the measurements of the units time, distance, liquid, quantity, etc.
- How will the orthography deal with these word formation processes that come as the direct result of the reduction of the language to writing?

Thank you for the Invitation!

Thank you for the fellowship!!!!

Homework

Exercise 1

1. What punctuation marks are used in the orthography of your language(s)?
2. How are yes/no questions differentiated from declarative sentences in your language(s)?

Exercise 2

3. What syntactic rationale underpins the use of commas in English?
4. What syntactic rationale is used to motivate the use of commas in your language(s)

Selected References

Selected References-1

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2. Fromkin, Victoria et al. 2010. *Introduction to Language*, 9th ed. New York: Wadsworth Cengage Learning.

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- O'grady, William. 2005. *Contemporary Linguistics: An Introduction*, 5th ed. New York: Bedford/St. Martin's.

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4. Roberts, Dave. 2008. *L'Orthographe du Ton en Kabye au Banc d'Essai*. Thèse de Doctorat. Paris: Institut National des Langues et Civilisations Orientales (INALCO). Available online at:
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