## **COGS101 – Lecture Notes**

## Dyslexia

- Acquired Dyslexia
  - A reading impairment in someone who had learned to read normally but lost that ability as a result of brain damage
- Developmental Dyslexia
  - A reading impairment of someone who never learned to read normally We will focus on this
- No child will learn to read without the appropriate conditions and instruction
- However, some children (10-15%) fail despite:
  - o No obvious neurological or sensory impairment
  - Supportive environments
  - Dyslexia or Specific Learning Disability forms regardless
- Some children may be "instructional casualties" that may benefit from intensive intervention and are not actually suffering from Dyslexia or any learning disability
  - This is called the Response to Intervention model
- As reading involves many processes, we would not expect it always to fail in the same way
- Different kinds of dyslexia form depending on which subskill has not developed normally
- To understand this, we need to know more about how reading works and how it develops

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- Reading is not a single skill
  - o It consists of many different skills, even at the level of single words
  - It is difficult to separate in fluent reading but it is apparent when reading fails
- Children go through different broad phases of reading acquisition as they learn different skills
- Logographic phase (3-4yrs+)
  - Small sight of vocabulary known words
  - Often identified by salient graphic features
  - Can't attempt unfamiliar words
  - As number of words increases, problems occur
  - At this stage they identify words more as pictures and features than actual words
- Alphabetic phase (5-6yrs+)
  - o Acquire phonic knowledge able to sound out
  - Attempt to pronounce words not seen before
  - Reading may feed back into spoken vocab in order to form connections between letters and sounds
- Orthographic phase (7-8yrs+)
  - o Reads words as whole units without sounding out
  - O Not visual or cue-based like the logographic phase
  - Rapid recognition of familiar letter strings
- Two key processes

- o Sounding out or 'non-lexical' skills
  - Reads new words and nonsense words
  - Mistakes with irregular words
- Whole word or 'lexical' skills
  - Reads all familiar words, including irregular ones
  - Can't read new words or nonsense words
- o Basis of dual route mode of skilled reading
- Different kinds of dyslexia
  - o Surface dyslexia
    - Reads words as they sound