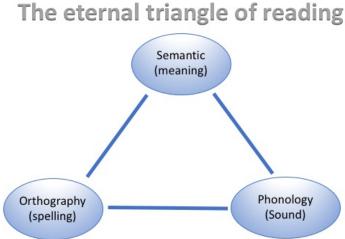
THE ETERNAL TRIANGLE and the TWO PATHWAYS OF READING

The Eternal Triangle describes the brain areas and circuitry that give rise to reading. Like all good triangles, it consists of three points and three lines. Think of the points as areas of brain processing and the lines as brain circuitry. The three areas of processing that lead to reading are, in no specific order:

- Phonology or sound
- Semantics or meaning
- Orthography or spelling



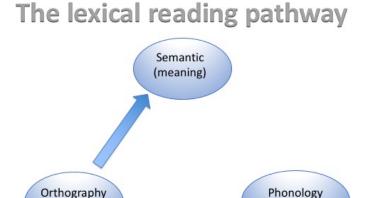
Here is more on each definition:

- **Phonology**: The patterns of sounds in language.
- **Semantics**: The study of word meanings.
- Orthography: The study of how every word has a correct letter sequence.

The Lexical or Whole Word Reading Pathway

(spelling)

The first reading pathway is the one that mature, competent readers use *most* of the time. Known as the **lexical pathway** (or whole word pathway), it is dependent upon only two points of the triangle: meaning and spelling.



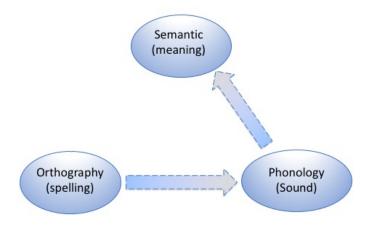
(Sound)

The automatic matching of a word's spelling sequence to pronunciation and meaning is known as **word recognition**. Word recognition is at the heart of the reading process. It operates in seamless and unending cycles of spelling-sound-meaning processing. As we see each word in a sentence, we automatically match its "look" (correct letter sequence) to its sound (phonology) and its meaning (semantics). This matching or processing is so fast that it feels instantaneous.

The Sublexical or Sounding Out Pathway

The second reading pathway, called the **sub-lexical pathway**, is the **sounding out pathway** or **decoding pathway**. Decoding certainly occurs at the level of letters and sounds. But in more advanced readers, it occurs at the "chunking" level. When we encounter an unfamiliar word, or when we have a difficult time instantly recognizing any word, we break that word into chunks in order to read it. Later, and with enough practice, the chunks fade away and the word becomes fully stored as a whole word in our brain dictionary.

The sub-lexical reading pathway



Young readers rely on the sub-lexical pathway a great deal. But as readers become more accomplished, they use the more efficient lexical pathway more often. But it's not as if readers exclusively use one pathway or the other. Rather, readers toggle back and forth between the two pathways. How much each is used depends upon a person's level of reading ability during his or her encounter with texts of varying levels of difficulty.