Currently influential models and approaches in reading comprehension

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Reading comprehension is a national problem in Mexico (Díaz Gutiérrez et al., 2007) and specifically for UJAT students reading in English as a Foreign Language (Perales Escudero, 2011). In order to contribute to a greater understanding of this problem, this paper reviews some influential theoretical models of comprehension: the Psycholinguistic Guessing Game (PGG), the Interactive Compensatory Model, and the Construction-Integration (C-I) model.

According to Grabe (2009) and Han &D'Angelo (2007), prevalent EFL reading pedagogical practices are founded on a model of the reading process called "the psycholinguistic guessing game." First proposed by American psychologist Kenneth Goodman, this model defines reading as follows.

Reading is a selective process. It involves partial use of available minimal language cues selected from perceptual input on the basis of the reader's expectations… efficient reading does not result from precise perception and identification of all elements, but from skill in selecting the fewest, most productive cues necessary to produce guesses… the ability to anticipate that which has not been seen, of course, is vital in reading (Goodman, 1967, p. 127).

Goodman's definition of reading was a reaction against the idea that reading is "a sequential process involving precise identification of letters, words, spelling patterns, and large language units" (id.). The recognition of individual letters underlies a phonics approach to reading. A phonics approach consists of teaching sound-letter correspondences to children so that they can accurately perceive and decode words. The phonics approach assumes a bottom-up model of comprehension, that is, one where comprehension issues from decoding letters, words, and so on. Goodman's model is a top-down model of comprehension (Grabe, 2009). What this means is that it presumes that the reading process is guided not by decoding of letters and parsing of syntax and semantics, but by a reader's expectations. That is, a reader constructs meaning from what s/he already knows and expects from the text. The model also ascribes great power to the ability to guess and antici-

pate. The model opposes the idea that reading involves precise and sequential parsing of letters and words. Rather, for Goodman, reading entails identifying and parsing only a minimal number of letters and words, just enough to produce accurate guesses at text meaning. Thus, in this model a good reader relies on context cues, and poor readers rely on close letter and word identification.

The set of pedagogical practices that are based on Goodman's model is called Whole Language. This is an approach to the teaching of reading that, in its most extreme form, advocates that reading should not be taught at all (Presley, 2002). Instead, learners should simply be given lots of opportunities to interact with text. That is, learners learn to read by reading a lot. In less extreme forms, a Whole Language approach involves giving learners background knowledge on the topic of a text, encouraging learners to predict the meaning of a text using context cues such as titles and sub-titles, images, and so on; it also involves teaching strategies to guess the meaning of new words (Presley, 2002). The Whole-

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Language movement has been the single most influential force on EFL reading pedagogy (Grabe, 2009), which makes extensive use of guessing from context and providing background knowledge.

The C-I and the ICM are two models that oppose the tenets of the PGG. According to the C-I model (Kintsch, 1998), text comprehension is defined as a mental representation, or situation model, that is the outcome of the combination of two distinct but connected components: the textbase and background knowledge relevant to the situation presented in the text. The textbase is that aspect of the mental representation that "comprises those nodes and links in the mental representation of the text that have direct correspondences in the text itself." (McNamara &Kintsch, 1996, 251). McNamara and Kintsch (1998) state that, in order to develop a textbase, both syntactic and semantic knowledge are required. That is, readers must know vocabulary and be able to parse the syntactic and semantic relations created by the language of a text in order to understand it. This understanding of a text's linguistically-encoded meaning is the textbase. In this way, the model assumes that some sequential, linear parsing of lexis and syntax is needed to create an accurate representation of a text's meaning. The model also assumes that comprehension is primarily text-driven (bottom-up) as it is the parsing of the text that begins to generate cognitive activity and a text-base that then interacts with the situation model (Nasajji, 2007). Despite the primacy it accords to text, the C-I model also assigns great weight in comprehension to prior knowledge, because it is prior knowledge that allows for the textbase to be interpreted by the reader. That is, a reader may parse the vocabulary and syntax of a text really well but not have the relevant cultural or topic knowledge to create a good "complete picture" of what the text means. This "complete picture" is called "situation model" in the C-I.

The C-I then presumes some bottom-up processing and also some top-down processing. The bottom-up processing is involved in the creation of an accurate textbase. The top-down processing is involved in using background knowledge to interpret the textbase and create a good situation model. However, the C-I model is not explicit about the role of bottom-up and top-down processing in comprehension. This model also does not say anything about the processes of comprehension. The interactive-compensatory model of comprehension (Stanovich, 2000 [1980], 2000 [1984]) does explain the role of top-down and bottom-up processing. The model posits that comprehension includes processes operating at many levels, e.g. letter recognition, word recognition, phrase recognition, and so on. Then, the model makes two assumptions. First, there is

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Importantly, the alternative models are better supported by empirical research than the PGG (Grabe, 2009) although they have not translated well into pedagogy (Han & D'Angelo, 2007). This essay has aimed at making the C-I and ICM models better known in the context of UJAT. Interested readers are encouraged to refer to Grabe (2009) for pedagogical applications of these models to EFL reading pedagogy.

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the assumption that "recognition [of meaning] takes place via the simultaneous amalgamation of information from many different knowledge sources" (2000 [1980], p. 49). Some of these sources can be higher-level ones, like topic knowledge, while others can be lower-level ones, like syntactic or orthographic knowledge. Second, there is the assumption that "deficiencies at any level in the processing hierarchy can be compensated for by greater use of information from other levels irrespective of the level of the deficient process" (id.). That is, failure to understand an idea using previous knowledge, can trigger the application of careful syntactic and semantic analysis of the corresponding text segment to repair such failure. The model predicts that both good and poor readers may use both bottom-up and top-down processes at different times during reading based on moment-to-moment needs and difficulties. Summing up, there are different models and approaches to comprehension. The Whole Language Approach is a popular one that appears to have influenced EFL reading pedagogy. This approach is entirely based on PGG, a top-down model of comprehension. Under this model, the reading process is guided by a reader's expectations rather than the decoding of letters and parsing of syntax and semantics. By contrast, there are other alternative models of comprehension available, such as the ICM, and the C-I. These models are based on a more interactive combination of top-down and bottom-up processes of comprehension, and they accord greater importance to the language of the text and interaction with it.