

---

# Reading Comprehension and Reading Models

---

Janet Paul<sup>1</sup>, Research Scholar, Department of English, Andhra University, Visakhapatnam

Prof. P. Rajendra Karmarkar<sup>2</sup>, Principal, College of Arts and Commerce, Andhra University, Visakhapatnam

---

## Abstract

Reading occupies a crucial role in shaping the future of a nation. Reading opens doors to the treasure of knowledge. In any language, comprehension is the cornerstone on which the superstructure of expression is built. Comprehension is the pliant side of language learning. There are two aspects to comprehension. It might result from the language when it is spoken, or it might result from the reading of the written material. This paper discusses five models of reading and their impact on reading comprehension.

**Keywords:** Reading, Comprehension, Reading Models

## Reading and Comprehension

Traditionally, reading is viewed as a two-component process: decoding and comprehension. Decoding is considered to be the visual analysis of the printed material, and comprehension is getting the meaning from the decoded material. Lately, many researchers have suggested a third component to reading: metacognition. It is suggested that metacognition is "the ongoing activity of evaluating and regulating one understands of written (or spoken) text" (Casanave, 1988: 283). Goodman (1988) considers reading to be a "psycholinguistic guessing game". He believes that meaning does not come just from the printed letters but that there is interplay between thought and language. While reading, readers hypothesise ideas, predict and guess what will come next, and then test and check those

predictions. Smith (1971) also holds a similar view. He claims that reading is not a passive reception of meaning from the text but an active ongoing process. He is of the opinion that reading makes use of the interaction between the reader's knowledge and the text. This knowledge includes syntax, grammar, semantics and the word in general. Fry opines that "(It is very difficult to define reading comprehension. Reduced to its simplest elements, it might be said that comprehension is a part of the communication process of getting the thoughts that were in the author's mind into the reader's mind" (24). The most widespread view is that reading is a bilateral process involving understanding the word and knowledge of the language. They interact and coordinate to facilitate the understanding of the text (Williams and Moran, 1989). Therefore, it can be said that comprehension is affected by the reader's background, purpose and strategy. Since the intellectual outcome of the reading process is comprehension, it can be said that if a person wants to obtain pleasure and profit, enjoyment and information, comprehension of the reading material is a 'MUST'. Russel has pointed out that "The purposes of the reader, the physical condition of the reader, his interest in the material, and the difficulty of the selection have a bearing on comprehension. The skills involved in Reading Comprehension are numerous and interrelated. Word recognition is a prerequisite to comprehension" (353).

## Reading

Reading is a highly complex information processing in which the reader interacts with a text in order to (re)create meaningful discourse (Silberstein, 1994: 12). It involves many components simultaneously. First, the reader should be able to perceive the elements of the code – are these elements letters of the alphabet or signs and symbols.

Then the reader should be able to distinguish them. Then, following the original code and the language writing system, the reader should be able to decode these elements. The reader should know the meaning of the words and the relations between these words. These relations become more meaningful in their positions and functions in the sentence if the reader possesses this knowledge. That is to say, the reader should have an inherent syntactic structure of the language of the original code. After that, the association of the world to the meanings of these words follow. Finally, the reader should be able to hold together these meanings and their outcomes in order to get the suggested meaning intended by the writer.

Here, the word 'outcomes' implies 'reading between the lines', or to put it more clearly, the comprehension of the text. These elements interact in parallel processing and, therefore, are not necessarily in the same 'logical' view expressed above. Presently, the widely-held view divides this processing into two types—top-down processing, in which general predictions are made first and then checked against the incoming information, and bottom-up processing, which occurs when the reader ascertains the incoming data first and then makes inferences about the prevailing situation. Advanced readers apply both processes almost automatically and simultaneously. Generally speaking, native speakers lean towards top-down processing, whereas second language readers lean towards bottom-up processing. These models are discussed in some detail below.

### **Reading Models**

According to Urquhart and Weir (1998), reading models can be divided into two major types: The process models and componential models. Componential models describe what factors are included in the reading activity, whereas process models try to explain how factors work and interact during reading.

#### *Process Models*

Most literature on reading refers to the bottom-up models, top-down models, and interactive models.

The following is a discussion on how they influence reading and comprehension.

**The Bottom-up approach:** The most popular is that of Gough's (1972), in which the reader starts with the small units of the text, that is, letters. These letters are recognised by a scanner. After that comes the transfer of the information to a decoder, which converts these letters into systematic phonemes. This string of phonemes is thus passed to the Librarian, and with the help of the lexicon, it is recognised as a word. Now the word can be uttered (as is the case in reading aloud). Then the reader fixates on the following word and continues processing words in the same way to the end of the sentence. Finally, they proceed to a component, in which syntactic and semantic rules assign a meaning to the sentence.

**Top-down Approach:** The term 'top-down' implies the opposite of the term 'bottom-up'. In reality, it does not exist. We do not begin by looking at the whole text down to the sentence and then down to the letter: It is argued that "the term is used to refer to approaches in which the expectations of the reader play a crucial, even dominant, role in the processing of the text" (Urquhart and Weir, 1998: 42). The reader comes up with hypotheses, then reads and verifies his hypotheses, checks and tests his guessing (Goodman 1967). The top-down approaches are usually associated with Goodman (1967) and Smith (1971, 1973).

**Interactive Approach:** If in the bottom-up model the process of reading is thought to be sequential, in the interactive model, it is simultaneous, in the sense that all patterns and elements from different sources interact simultaneously to synthesise comprehension. Interactive approaches are accredited to two authors: Rumelhart (1977) and Stanovich (1980). Urquhart and Weir (1998: 45) provide a summary of Rumelhart's model:

... once a Feature Extraction Device has operated on the individual Information Store, it passes the data to a Pattern Synthesiser which receives input from Syntactical,

Semantic, Lexical and Orthographic Knowledge, all potentially operating at the same point.

#### *Componential models*

The process models try to describe the actual reading process and how it really occurs and comes into existence. On the other hand, the componential models do not try to explain the process, but they tell us which components are involved in the reading process. They, in fact, provide us with a description of skills involved in it, namely, word recognising and knowledge are thought to influence the reading ability rather than the reading process. The following paragraphs describe these models briefly.

**The Two-Component Model:** This model was first introduced by Hoover and Tunmer (1993), to which they refer as 'the simple view'. It consists of two components: word recognition and linguistic comprehension. They claim that Fry (1963) and others share the same view. Hoover and Tunmer (1993) provide evidence to 'prove' that these two variables are separable. The strongest evidence is that L1 illiterates understand the language but cannot decode it. People with dyslexia are linguistically competent, but they are deficient decoders on the other hand. Children suffering from hyperlexia have high decoding skills, but they generally show low linguistic comprehension. Finally, longitudinal studies of the correlation between decoding and comprehension show that these two variables are low in the early stages of learning but become steadily high as the children advance in the early stages of learning.

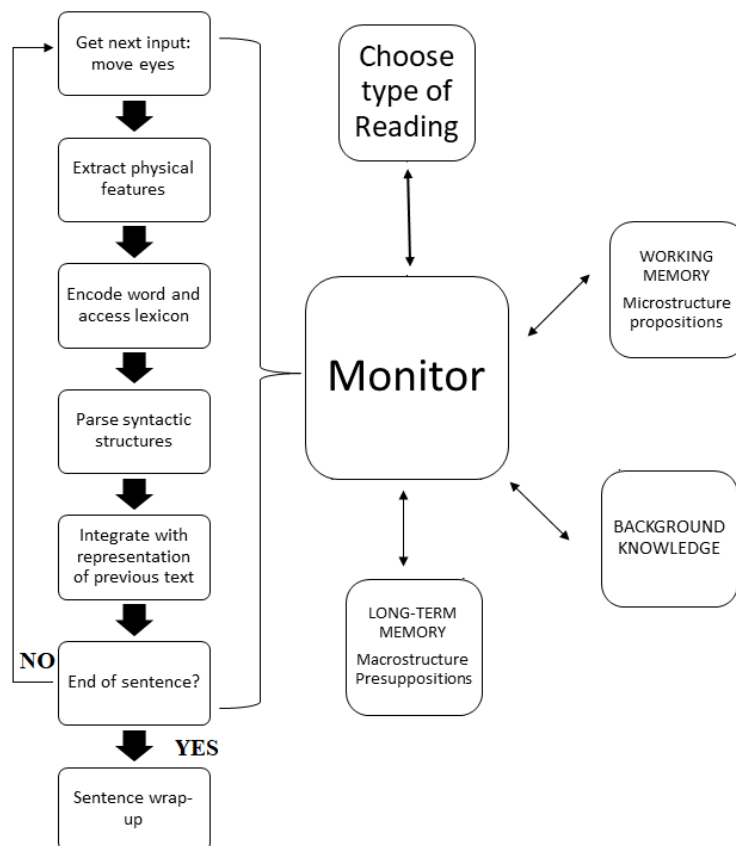
**The Three-Component Approach:** Coady (1979) and Bernhardt (1991) described L2 reading as consisting of three variables. For Coady, these variables are Conceptual Abilities, Process Strategies and Background Knowledge. Conceptual abilities are similar to intellectual capacity, which might explain the failure of foreign students to achieve the competence necessary for university instruction, not

because they cannot learn English but because they lack background knowledge. But for Coady, it is not an addition to comprehension, but it is a component of it. Process strategies mean both knowledge of the language system and the ability to use this knowledge. Urquhart and Weir (1998) point out that Coady's model lacks a vital component which is found in Hoover and Tunmer's (1993) model: "The only acknowledgement Coady makes of this is to include phoneme/grapheme correspondences as part of the process strategies component" (50).

Bernhardt's (1991) model also consists of three variables: Language, Literacy and World Knowledge. World knowledge equals background knowledge. Language includes those elements perceived from the text, such as word structure, word meaning, syntax and morphology. Like Coady in this component, she lacks a separate word-recognition component. "Literacy equals operational knowledge – knowing how to approach text, knowing why one approaches it and what to do with it" (Hoover and Tunmer, 1993: 50).

#### **Conclusion**

Thus, we have five types of models for reading and how they are viewed. Indeed, they are all important in understanding reading comprehension. Unless we know the components of reading, we may not be able to understand how the reading process operates. A model that was created by Just and Carpenter (1980) and expanded by Urquhart and Weir (1998) is given below. This model is the most comprehensive of many models proposed earlier. It integrates both process and componential types of models. It shows how they complement each other and how interaction and coordination between different elements of 'reading and comprehension' are achieved through the monitor. In this model, the monitor is central, and it seemingly represents the mental consciousness and strategies awareness, as we would prefer to call it.



A Model for Reading based in Urquhart and Weir (1998)

## References

- Bernhardt, E. B. *Reading Development in Second Language: theoretical, empirical, and classroom perspectives*. Norwood, NJ: Ablex Publishing Corporation, 1991.
- Casanave, Christine Pearson. "Comprehension Monitoring in ESL Reading: A Neglected Essential." *TESOL Quarterly*, vol. 22, no. 2, 1988, pp. 283-302.
- Coady, J. "A psycholinguistic model of the ESL reader." *Reading in a Second Language*, edited by R. Mackay, B. Barhman and R. R. Jordan, Rowley, Mass: Newbury House, 1979, pp. 5-12.
- Dechant, Emerald V. *Improving the Teaching of Reading*. New Delhi: Prentice-Hall of India Private Limited, 1969.
- Fry, Edward L. *Reading Faster: A Drill Book*. Cambridge: Cambridge University Press, London, 1963.
- Fry, Edward L. *Teaching Faster Reading*. Cambridge University Press, London, 1963.
- Goodman, K. S. "Reading: A Psycholinguistic Guessing Game." *Journal of the Reading Specialist*, vol. 6, no. 4, 1967, pp. 126-135.
- Gough, P. P. "One Second of Reading." *Language by Ear and Eye*, edited by J. P. Kavanagh, and I. G. Mattingly, Cambridge: M.I.T. Press, 1972, pp. 331-335.
- Hoover, W. A., and Tunmer, W. E. "The components of reading." *Reading Acquisition Processes*, edited by G. B. Thompson, W. E. Tunmer, and T. Nicholson, Clevedon: Multilingual Matters, 1993, pp. 1-19.
- Just, M. A., and Carpenter, P. A. "A theory of reading: from eye fixations to comprehension."

- 
- Psychological Review*, vol. 87(4), 1980, pp. 329-54.
- Russel, D. H. *Children Learn to Read. Teaching Reading: A Challenge*. NCERT, Publication Unit, 1966.
- Silberstein, Sandra. *Technique and Resource in Teaching Reading*. New York: Oxford University Press, 1994.
- Smith, F. *Understanding reading: A psycholinguistic analysis of reading and learning to read*. Holt, Rinehart and Winston, 1971.
- Williams, E., and Moran, C. "Reading in a foreign language at intermediate and advanced levels with particular reference to English." *Language Teaching*, 22, 1989, pp. 217-28.
- Urquhart, A. H., and Weir, C. J. *Reading in a Second Language: Process, Product and Practice*. 1<sup>st</sup> ed., London and New York: Longman, 1998.