The Cognitive-Code Approach

The cognitive approach, also known as cognitive code-learning theory, was advocated by cognitive psychologists and applied linguists such as J.B. Carroll and K. Chastain in the 1960s. In the 1970s, it became known for its advocacy that language learning involved active mental processes. This was intended as an alternative to the audio-lingual method. ALM emphasizes habit formation as process of language learning and due to this emphasis on habit formation, students were often expected to learn language by rote. In the Cognitive-Code Approach, lessons focused on learning grammatical structures, but the cognitive code approach emphasized the importance of meaningful practice, and the structures were presented inductively, i.e. the rules came after exposure to examples. There was, however, little use of examples from authentic material.

The cognitive approach is based on gestalt psychology (learning should be holistic; learning becomes easier when one treats the target as part of a structure or system and understands how it is related to the rest of the system) and transformational grammar (language is rule-governed and creative; these are related because you can use a language creatively only when are familiar with the rules of that language).

The cognitive approach considers the conscious study of language rules as central to the learning of a foreign language. Thus, conscious study of grammatical rules is not only allowed, but also considered central to language learning. The teaching of grammar is inductive in this approach. The learner is encouraged and helped to understand the meaning of the grammar, then the students are guided to notice the pattern or structure, after the learners have noticed the structure or pattern, teachers guide the learners to analyze the structure or pattern before they practice and use the rule in meaningful contexts.

One of the most important concepts in the Cognitive Code Approach is meaningful practice. Practice is considered meaningful when the learner understands the rules involved in practice. It represents a sharp contrast to the audio-lingual method which relies on pattern drills as a means of teaching syntax, without explicit explanation of grammatical rules.

Example
The aim of the class is for students to learn that the past form of regular verbs is made using -ed.

The class begins with the teacher asking questions about past activities so that she can elicit a dialogue that includes clear examples of the structure. The teacher checks learner comprehension of the dialog by asking compression questions. The teacher then draws the learners attention to significant features of the structure or pattern by helping the students to analyze the grammar. These guiding questions should help learners gain conscious control over the grammatical form before they use it. Finally the learners practice it in a meaningful context.

Unlike many of the other methods we will discuss this semester, the cognitive approach is essentially a theoretical proposal. It did not lead to the development of any teaching method as far as classroom procedures and activities are concerned. It simply stated that grammar learning should be a conscious process because learners need conscious control over grammatical forms.

Two quotes from Carroll, its first proponent:
"The theory attaches more importance to the learner's understanding of the structure of the foreign language than to the facility in using that structure, since it is believed that provided the student has a proper degree of cognitive control over the structures of the language, facility will develop automatically with use of the language in meaningful situations."
"...learning a language is a process of acquiring conscious control of the phonological, grammatical, and lexical patterns of the second language, largely through study and analysis of these patterns as a body of knowledge." (Carroll, 1966, p. 102)

In the classroom
The approach included the clear and structured use of concept check questions to guide learners identify significant features of the structures and patterns they were learning. The use of concept check questions are still considered useful when teaching grammatical structures today. The PPP/PPU framework, (Presentation, Practice and Production / Presentation, Practice and Use), was also commonly used when teaching a lesson using the Cognitive Code Approach, because a key belief was that a learner needed language clarification and error correction before use.