

## Chapter 4.7

# Virtual Worlds and Avatars for the Development of Primary Foreign Languages and Primary Foreign Languages for the Development of Real Children

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### EXECUTIVE SUMMARY

*The case study is a chronicle of Korean elementary students' efforts to gain autonomous control of a foreign language, English, from the top down, that is, through use of English in communication (as opposed to mere exposure to English through study or through the passive absorption of comprehensible input). This communicative use of English is realized through materials pertinent to their overall development and not just to their language development. The materials include a surrogate self or avatar within a virtual learning environment which can, in principle, though not in this study, connect them with children all over the world. The question for this study is how the use of an avatar in a virtual learning environment brings about not only the learning of vocabulary and grammar (similar to the piecemeal learning that happens in any classroom) but also interacts with and even activates the child's overall psychological development the way that play awakens developmental functions on the playground.*

### BACKGROUND

Vygotsky teaches us that the study of discrete elements rarely leads to a proper understanding of a complex phenomenon. Instead we need to under-

stand how each element works in a unit that, like a cell, preserves the properties of the whole. For example, we need to look at how word meaning is constructed in order to understand how mental developments such as ostension, indication, naming, and ultimately, conceptualizing can occur.

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Since meaning presupposes generalization, it is part of thinking. But since meaning is a part of a word, it is also part of speech (1987: 49). Through a meeting of lines of development and a dialectical mutual transformation between thinking and speech, which, according to Vygotsky and Stern, occurs around the age of two, thinking becomes verbal and speech becomes intellectual (1987: 111 112, and 117).

But to say that the lines of development meet is not to say that they merge into a homogeneous mass. Instead, the lines of thinking and speech are differentiated into many threads. These threads are phylogenetically and ontogenetically distinct but culturally linked in a functional (that is, a functioning) unit, similar to the way that differently evolved organs (e.g., organs for breathing and organs for eating) are linked in the vocal tract.

Understood in this way, Vygotsky's developmental theory is not simply about how one line of development replaces another and becomes dominant, only to become again peripheral at the next level of development. Rather, it is about how a more dynamic relationship between past and future functions, between matured and maturing lines of development, contribute to reorganizing the child's whole position in the environment. This reorganization then creates a new social situation of development (SSD), leading previously undeveloped functions to mature in turn.

Vygotsky suggests that development is both an evolutionary and a revolutionary process. By

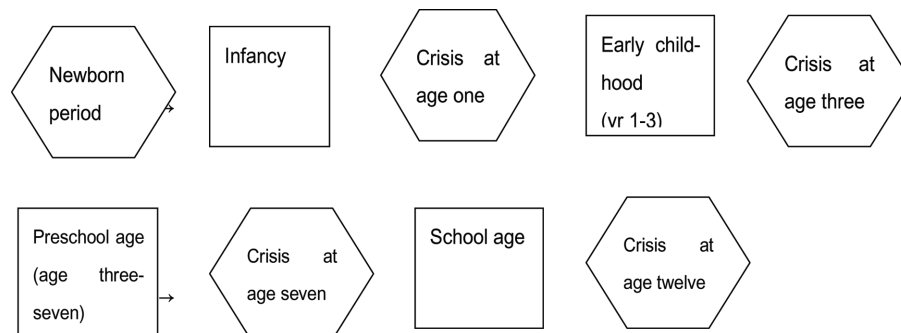
this he means that radical changes occur in crises at birth, and then at ages one, three, seven, and twelve. We may represent the stream schematically as follows.

The periods between each crisis (represented by squares) are rather stable periods in which development of the whole is subordinated to the developmental rule of the parts.

From the very first day of birth, the baby is a social being since his or her needs are fulfilled only through others. But in differentiating between inner and outer experience, the child does not construct an individual self; instead, the infant constructs an undifferentiated "Proto-we" identity (in German, an *Ür-wir*) with the people around the infant (Vygotsky, 1997: 233). The child's predicament is that he/she lacks the main means by which communities are constructed among humans, namely speech. In response, without knowing grammar or vocabulary, the child attempts speech, based on the imitation of speech externals such as intonation, nasopharyngealized vowels (that is, crying), and simple labial consonants (babbling). This incomprehensible "autonomous speech" gives rise to a crisis at age one (Gillen, 2003: 76).

During the ages from one to three, the child replaces this babble with communicative speech, or rather reduces the role of babble to nonsense rhymes and onomatopoeia, where it remains as a kind of fossil. In this process, children begin to isolate the self from the environment. But often

*Figure 1. Schematic flow of child's development*



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