Chomsky: The Nature of Mind

Agnes Maria S.

Department of Psychology, Faculty of Science, University of Western Australia

C. Wahju P.

Faculty of Psychology, University of Surabaya

Abstract. The article investigates Chomsky's hypothesis of the nature of the mind based on five characteristics: the mind and the body, the mind as having species-specific properties, the mind as having genetically determined properties, the role of environment as a trigger and the universality of grammar. Each characteristic is explored to prove that the innate capacity that Chomsky proposes needs the support from the environment in order to develop language.

Key words: Chomsky's hypothesis, mind and body, species-specific properties, genetic factors, role of environment, universality of grammar.

Abstrak. Artikel ini meneliti hipotesis Chomsky tentang hakikat mind berdasarkan 5 karakteristik: mind dan tubuh, mind yang mempunyai sifat-sifat khas-species, mind yang sifat-sifatnya telah ditentukan oleh gennya, peran lingkungan sebagai pemicu dan keuniversalan tata bahasa. Tiap karakteristik dieksplorasi untuk membuktikan bahwa kapasitas bawaan yang diusulkan Chomsky membutuhkan dukungan lingkungan untuk berkembangnya bahasa.

Kata kunci: hipotesis Chomsky, mind dan tubuh, sifat-sifat khas-species, faktor-faktor genetis, peran lingkungan, universalitas tata bahasa

Chomsky believes that the mind and body are determined by species-specific, genetically determined properties. Both of them need environment to trigger growth and shape their structure (Chomsky, 1980). This revolutionary idea is logical in the sense that it can explain how children acquire language without prior experience, a fact that cannot be answered merely in terms of stimuliresponse. However, Chomsky's idea is abstract and difficult to verify empirically. He limits his explanation only on the nature of language (especially in terms of grammar or syntactic rules) and he does not take into account any other aspects of the mind, such as intelligence, in his hypothesis.

This article will examine Chomsky's hypothesis of the nature of the mind based on five characteristics: the mind and the body, the mind as having species-specific properties, the mind as having genetically determined properties, the role of environment as a trigger, and the universality of grammar.

The Mind and the Body

Unlike Descartes and other mentalist philosophers, Chomsky does not make clear distinction between the mind and the body. According to him, human mind is a specific biological system (Chomsky, 1979). It consists of a complex system of organs and it is closely related to human brain (Chomsky, 1990). This argument is consistent with the finding that humans' ability to think and understand mental states is related to the front area of the brain (Povinelli & Preuss, 1995).

However, if Chomsky's argument is true that the mind is similar to the body, then the mind must follow the mechanistic principle like the body. And if the mind is indeed mechanistic, why Chomsky argues that it is specific? Chomsky's argument seems to be trapped in the logic of behaviourists, the logic that he opposed (Lyons, 1977).