

Stimulus-Response and the Innateness Hypothesis: Childhood Language Acquisition of “Genie”

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Abstract : Scholars have long disputed the relationship between the origins of language and human behavior. Historically, behaviorist psychologist B. F. Skinner argued that language is one instance of the general stimulus-response phenomenon that characterizes the essence of human behavior. Another, more recent approach argues, by contrast, that language is an innate cognitive faculty and does not arise from behavior, which might develop and reinforce linguistic facility but is not its source. Pinker, among others, proposes that linguistic defects arise from damage to the brain, both congenital and acquired in life. Much of his argument is based on case studies in which damage to the Broca’s and Wernicke’s areas of the brain results in loss of the ability to produce coherent grammatical expressions when speaking or writing; though affected speakers often utter quite fluent streams of sentences, the words articulated lack discernible semantic content. Pinker concludes on this basis that language is an innate component of specific, classically language-correlated regions of the human brain. Taking a notorious 1970s case of linguistic maladaptation, this paper queries the dominant materialist paradigm of language-correlated regions. Susan “Genie” Wiley was physically isolated from language interaction in her home and beaten by her father when she attempted to make any sort of sound. Though without any measurable resulting damage to the brain, Wiley was never able to develop the level of linguistic facility normally achieved in adulthood. Having received a negative reinforcement of language acquisition from her father and lacking the usual language acquisition period, in adulthood Wiley was able to develop language only at a quite limited level in later life. From a contemporary behaviorist perspective, this case confirms the possibility of language deficiency without brain pathology. Wiley’s potential language-determining areas in the brain were intact, and she was exposed to language later in her life, but she was unable to achieve the normal level of communication skills, deterring socialization. This phenomenon and others like it in the case limited literature on linguistic maladaptation pose serious clinical, scientific, and indeed philosophical difficulties for both of the major competing theories of language acquisition, innateness, and linguistic stimulus-response. The implications of such cases for future research in language acquisition are explored, with a particular emphasis on the interaction of innate capacity and stimulus-based development in early childhood.

Keywords : behaviorism, innateness hypothesis, language, Susan “Genie” Wiley

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