Sound-Shape Associations Require a High Level of Vision in Childhood to Develop Properly

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Which one of the following shapes is Kiki, and which one is Bouba? Most sighted people would say that the round shape is Bouba, whereas the spiky one is Kiki. Such sound-shape associations are observed virtually in all cultures. In a large study, we found that groups of people with a history of blindness before the 12th year of life did not show any systematic sound-shape associations while late blind individuals did.

The stabilization of multisensory connectivity depends on a high level of vision in the first 12 years of life. After this time, the learned patterns are not erased even in individuals who had acquired permanent blindness in later years of age. (Visual) rehabilitation programs should be aware of these group differences in high level multisensory processing.