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Semantic-conditioned peripheral vision acuity fading awareness (PVAFA).

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Summary: This is a pilot study report that explores one of the factors that influence one's awareness of the extent of vision acuity other than biological reasons. Semantic factor is chosen to put to test to match the tests' linguistic nature of words reading. Look-then-answer style of self-report method is adopted to better reflect this experiment's goal of understanding how one "consciously knows" his or her quality of vision at that moment of words reading. By comparisons of fixating and gazing at a two-character segment of a reading line set in forms of Chinese and Korean characters of right-reading and wrong-reading versions, it can be checked to see how semantic factors influence one's Peripheral Vision Acuity Fading Awareness (PVAFA). Results show the tendencies that partially support semantic-conditioned interpretations that: (1) the better a reading line's semantic meaning understood, e.g., native Chinese readers gaze at Chinese characters, the more peripheral visions smeared than gazing at Korean characters; (2) the harder the lexical information can be identified, i.e., gazing at wrong-reading characters (in this case, upside-down typesetting), the lenient the PVAFA effect to occur. A follow-up discussion stresses how semantic factors mingle with vision acuity awareness in a lab set-up is worthy further hypothesized to probe its broader implications on visual form perception in both real world situations and human-computer interacted environments.

Keywords: foveal visions; vision acuity; visual form perception; visual logics
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