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場所：京都大学教育学研究科 本館2階 中央実験室

<http://www.educ.kyoto-u.ac.jp/access.htm>

<Title> Abstract conditioning is modulated by attention and consciousness

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<Abstract> Disorders of consciousness (DOC) patients pose difficulties regarding assessing their level of consciousness, resulting in a high rate of misdiagnosis (40%). This poses problems regarding appropriate care, rehabilitation and end of life decisions. Tests not relying on overt responses are therefore developed as more reliable tools for assessment.

Aim: Validating a test which determines the degree of integration between learning and language networks in healthy volunteers. We adapted the paradigm of Bekinschtein et al (2009), who showed that some DOC patients acquired differential classical tone trace conditioning, but we now used words as stimuli. The essential difference between the words is the category (animals and objects).

Hypothesis: Semantic conditioning is possible and is modulated by attention. Semantic conditioning requires awareness (Clark & Squire, 1998).

Differential semantic trace conditioning: 50 animal-words, 50 object-words (25 monosyllabic, 25 disyllabic) CS+ = animal or object words, 53 participants, 3 conditions: a) Attention to category alone, b) Attention to category plus button press, c) Attention to syllables plus button press.

We measured: Awareness Questionnaire concerning stimulus contingencies, electromyography (EMG) recorded from the inferior and lateral orbicularis oculi muscles, RTs.

Results and conclusions: Semantic conditioning is possible. Conditioning is modulated by attention. Attention to syllable: less conditioning than attention to category. Conditioning requires awareness, all good learners reported stimuli contingencies, but also, awareness does not necessarily imply conditioning. Semantic conditioning is an appropriate test for language and learning network integrative processes.

主催：京都大学グローバルCOEプログラム

「心が活きる教育のための国際的拠点」 ユニットA

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