講演者: Zorica Stevanov

演題: ôHolistic and Featural Aspects of Face Recognitionô(顔認識における全体と特徴の側面)

日時:4 月 7 日（月）16:30～18:00

場所: 文学部校舎2階　第 2 演習室

(map) http://www.bun.kyoto-u.ac.jp/psy/map2/campus.htm

なお、講演・質疑は英語で行われます。よろしくお願いいたします。

Zorica Stevanov received Magister degree from the University of Belgrade in 2013. She has been working with Dejan Todorovic and Suncica Zdrakovic on research projects studying face perception. In her talk, Zorica will address how holistic and featural aspects of a face might work together to aid face recognition. Below is a brief summary of her key findings.

Place: Kyoto University, Yoshida campus, Building of Graduate School of Letters

(map) http://www.kyoto-u.ac.jp/en/access/campus/main.htm Building No.8

Seminar room 2 on the 2nd floor

Date: Monday, April 7th

Time: 16:30～18:00

Q&A will continue at Hanami (花見) party after the talk. Please join us and participate in informal discussion under Sakura (さくら) tree.

‘Holistic and Featural Aspects of Face Recognition’

Face recognition depends on facial features and their interrelationship. Featural processing emphasis the importance of information contained in facial parts whilst holistic processing argues that information contained in facial gestalt overrides the importance of featural information. Configural processing is based on detection of the first-order relational configuration i.e. eyebrows above eyes, eyes above nose and nose above mouth, and the second-order spatial relations i.e. spacing between features. Although individual features are enough for successful recognition of familiar faces, the particular feature combinations congruent with the first-order configuration significantly facilitate face recognition (Stevanov & Zdravkovií , 2007). This study investigated the effect of various feature interrelations on face recognition. Scrambling facial features impairs holistic processing, however simultaneous visibility of all features can still initiate configural processing even with disrupted first-and second-order interrelations. Therefore, we devised a method for successive presentation of features assuming that it will impair any kind of configural processing. The time between successive presentations of features was systematically varied, while the number of trial repetitions was determined by observers. In additional experiment we probed the importance of contour line of a face and its features and whether such limited information can prompt face recognition. The highest recognition rate was achieved with the first-order congruent features presented simultaneously or with 2s between successive presentations of features. We suggest that delayed successive presentation allows comparisons of single feature against holistic mental representation of the familiar face and in that way promotes configural processing. With no time delay between the successive presentations of features, recognition rate dropped dramatically, trial repetitions increased significantly and reaction time was substantially longer than these in other experimental conditions. Our results support the findings of previous studies accounting featural processing for prolonged reaction time. Finally, accuracy rate for recognition based on face contour and feature contours is low, yet significantly above the chance level. Face contour can facilitate or impede face recognition depending on relational configuration of features.