

Inversion effects for Chinese characters, objects and faces

Man-Ying Wang^a, Yen-An Chen^a, & Shu-Ling Cho^b

^aDepartment of Psychology, Soochow University

70 Linshi Rd., Taipei 111, Taiwan

^bDepartment of Clinical Psychology, Fu Jen Catholic University

510 Chung Cheng Rd., Taipei Hsien 24205, Taiwan

Face inversion effect refers to the finding that the inversion of faces results in a more serious decrement of recognition performance than natural objects (Yin, 1969). This finding has been interpreted in terms of the reliance on configural or holistic information in recognizing faces (Diamond & Carey, 1986; Tanaka & Farah, 1993). Chinese is often considered a logographic script that carries picturesque properties. Would Chinese characters exhibit inversion effects similar to faces? Experiment 1 asked participants to decide on the reality of objects, faces and Chinese characters. The inversion effect for Chinese compound characters is larger than that of faces which, in turn, is larger than objects. Experiment 2 replicated this finding using the naming task. Experiment 3 found that the inversion effect for unique characters is smaller than compound characters and lies between that of faces and objects. The direction of the effect of character frequency also differs between compound and unique characters. These findings suggest that compound characters are processed differently from unique characters and only the latter may share common process(es) with faces or objects.

Keywords: Inversion effect; word perception; Chinese characters

Tel: 886-2-28819471

e-mail : mywang@scu.edu.tw