**UNDERSTANDING PROCESSING OF FACIAL EMOTION EXPRESSIONS IN PARKINSON’S DISEASE**

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*Aims* A deficit in recognition memory for faces has been associated with impairments in configural processing, and it has been suggested configural processing deficits could also underlie poor performance on tasks of facial emotion recognition. We aimed to replicate Narme et al’s (2011) result of a facial emotion expression recognition impairment in a larger sample, adding a composite face paradigm to test this hypothesis.

*Methods* 16 people with Parkinson’s (without concomitant dementia), and 17 matched controls. 40 black and white photographs of 10 faces (5M) from Radboud Faces Database representing of four basic emotions (fear, disgust, anger and sadness) were presented in a counterbalanced, pseudo-random order on a computer screen in three experimental conditions: Whole faces (upright and inverted), Non-aligned Composite faces, and Composite faces.

*Findings* Controls were significantly better at upright face emotion categorization for anger, disgust and fear. There was a clear composite effect, for these three emotions, but not for sad, which was not impaired. However, we also found that when configural processing was disrupted by inversion a similar decrement was observed in both groups.

*Conclusions* Normal upright facial emotion recognition is compromised in Parkinson’s. The composite paradigm provides evidence to support the hypothesis that the underlying mechanism is an impairment in configural processing. Although the literature purports that composite effect and the face inversion effect are both tests of configural processing, our findings indicate that the two tests are not measuring the same thing. This result can be explained if we accept emerging evidence that there is more than one type of configural processing, and that inversion does not spare processing of face features.