

Face recognition is not template-based

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In the field of face perception and face representation there are rival theories, how faces are encoded, stored and recognized. On the one hand, template-based and holistic approaches assume that faces are encoded and represented in kind of templates or holistic entities retaining all global configural information. On the other side, local approaches postulate the representation of only local information such as cardinal features (e.g. eyes, mouth, nose) or local-configural properties, but not of larger configurations. Ss had to evaluate fully presented familiar faces (FULL) and familiar faces that only consisted of cardinal features and their global spatial relations (PART) regarding to their configural veridicality in a memory task. Already slight alterations to the global configuration were detected fast and accurately in FULL faces, but not in PART faces. Furthermore, this dissociation was also found for the same material in simultaneous matching task, which indicates that already the encoding of global face configurations was not possible. Therefore, faces seem to be encoded and represented mainly by means of their cardinal features and their micro-configurations, but not on the basis of face-templates.