

Peer Review

Review of: "Collective Pareidolia"

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Professor Robert Bednarik describes an interesting series of events regarding petroglyphs found in Hubei province in China by at least 20 persons. In 2015, a group of three specialists was invited to study them but could not find evidence of petroglyphs, and the event was regarded as a result of pareidolia.

The images were "taken out" by placing thick paper over a rock, spraying it lightly with water, covering it with a thick cloth, and stamping the paper *mâché* into position with stiff brushes. The black pigment was then applied by stamping with small brushes. Two operators, commencing from different parts of the panel, worked on a single design which emerged without verbal communication between the two operators and produced a stylised face arrangement. It was considered particularly difficult to account for the converging images produced by two recorders working on a single panel. This was considered a result of collective pareidolia.

In response to the review of Caroline Watt, Prof. Bednarik defines his point in more detail. "The paper 'Collective pareidolia' was specifically submitted to Qeios because of this journal's unique interdisciplinary format, in the idle hope that someone could explain one simple factor: why, in the described experiment, individual expectancies turned out to match one another in the form of shared perceptions of non-existent markings? After all, the two operators could not have previously agreed on a pattern because they could not have predicted which of the many boulders was going to be selected by the three rock art specialists. However, starting from opposite ends of the rock panel, they produced matching parts of a single composition without engaging in detectable communication."

The study of this intriguing question would benefit from separating the "seeing" of pareidolia images and "taking them out".

We recently published an article (1) about the "Turku Image Dispute." In the city of Turku, Finland, Nikolai Kaario, an artist, found seemingly medieval images on the walls of houses known to be built at

clearly later dates. Despite expert opinion stating that the images were new, the discussion of their origin lasted for about 20 years, and such images were found even after the death of Kaario in 1958. We attributed these events to Kaario's particularly strong tendency for pareidolia.

The impression conveyed by the technique used in revealing the images in the film describing Kaario's work process (2) suggests that the image design developed during the procedure of "taking it out." This aligns with ideas associated with embodied cognition, where acting and perceiving elicit a continuous, reciprocal causation in a creative process (for references, see, e.g., 3). In my opinion, it is feasible that the two students "taking out" the petroglyph, described by Prof. Bednarik, synchronized their image making through such a process.

References:

J.P. Mäkelä, E-L. Fagerlund. An Image Dispute Resulting from Pareidolia? *LEONARDO*, Vol. 58, No. 2, pp. 214–219, 2025.

2) "Turun kuvariita," Kansallinen audiovisuaalinen instituutti, https://www.finna.fi/Record/kavi.elonet_elokuva_128959?sid=4840665088.

3) L.H. Malinin, "Creative practices embodied, embedded, and enacted in architectural settings: Toward an ecological model of creativity," *Frontiers in Psychology* 6 (Jan 2016), doi: 10.3389/fpsyg.2015.01978

Declarations

Potential competing interests: No potential competing interests to declare.