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Clinical Postcard

Forty years after poodle-face palinopsia: Human-to-cat and cat-to-human facial feature transfer

Brad Duchaine [a,*], *Antônio Mello* [a] *and Jennifer L. Nosker* [b]

[a] *Department of Psychological and Brain Sciences, Dartmouth College, Hanover, NH, USA*
[b] *Department of Neurology, Brigham and Women's Hospital, Boston, MA, USA*

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In 1986, *Cortex* published a report describing a remarkable case of palinopsia (Landis et al., 1986). Nine months after suffering a stroke in the region of the right posterior cerebral artery, Patient 2 was riding in a bus when she looked at a poodle sitting on the lap of a passenger. When she looked away from the dog, everyone on the bus appeared to have the poodle's face in place of their own. This visual perseveration continued even after Patient 2 exited the bus, finally resolving 30 minutes later.

This case of poodle-face palinopsia is notable not only for its extraordinary phenomenology but also for its theoretical implication. Because the poodle's face appeared only on other faces and not on other visual stimuli, it suggests that faces are processed differently than other visual categories. Grüsser and Landis (1991) later included line drawings depicting the events in a chapter on face-processing disorders (Fig. 1, left). It is now possible, though, to produce photorealistic visualizations of such percepts using artificial intelligence tools, and Fig. 1 (right) presents our depiction of Patient 2's poodle-face palinopsia.

Patient 2 was one of three patients described by Grüsser and Landis (1991) with prosopometamorphopsia (PMO), a condition in which faces are distorted (Blom et al., 2021; Herald et al., 2023). Over the last five years, approximately 275 individuals reporting facial distortions have contacted our laboratory through our PMO website (https://prosopometamorphopsia.faceblind.org/). Face substitutions like Patient 2's are rare in PMO. Far more common are

* *Corresponding author*. Department of Psychological and Brain Sciences, Dartmouth College, Hanover, NH 03755, USA.
E-mail address: bradley.c.duchaine@dartmouth.edu (B. Duchaine).
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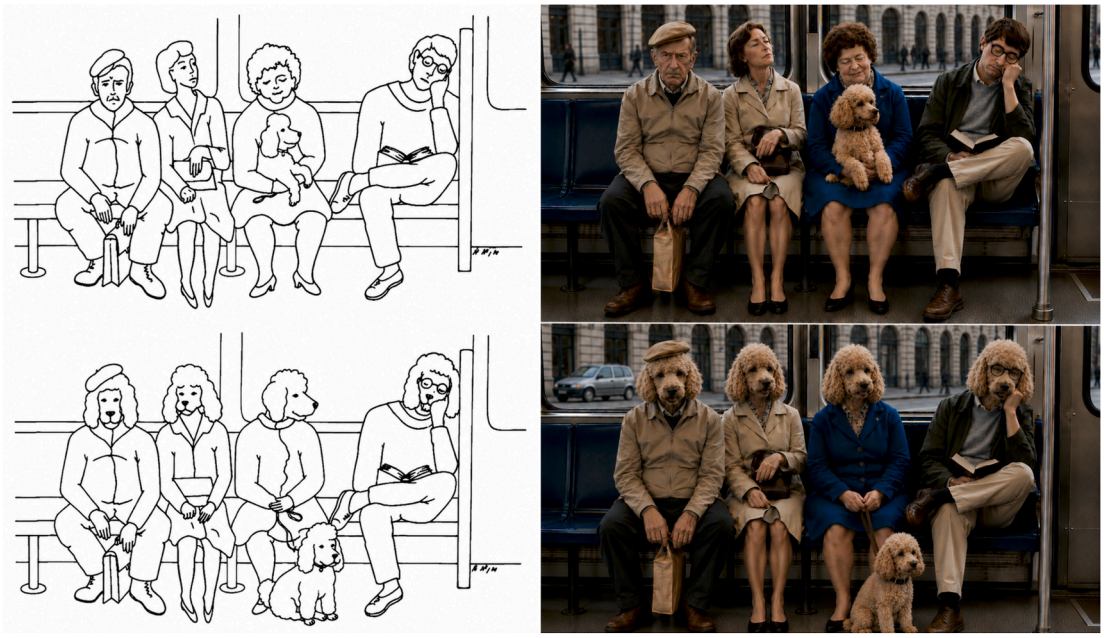


Fig. 1 – Poodle-face palinopsia. After looking at the poodle, the faces of the people on the bus were replaced by the dog's face. On the left is a line drawing based on the original from Grüsser and Landis (1991). On the right is a visualization generated by ChatGPT 5.5 (Open AI) from the line drawing.



Fig. 2 – Karl's lesion and palinopsia. (A) Axial MRI image showing the right posterior temporal cavity resulting from Karl's resection. (B) Participant-guided visualization of Karl's recollection of a percept in which he saw a familiar woman's eye region within his cat's face. (C) A visualization of a remembered percept in which features from the eye region of Karl's cat appeared within a human face. The image in Panel B was generated using ChatGPT 5.5 (Open AI) based on Karl's verbal descriptions. The image in Panel C was generated with ChatGPT 5.5 from a sketch Karl drew. Both images were then repeatedly refined over several months in response to Karl's feedback, with some modifications made directly by Karl using Kimi K3 (Moonshot AI), until he judged them to match his visual experiences.

distortions that alter the shape and position of facial features or the color and texture of the skin (Blom et al., 2021; Herald et al., 2023). However, we have heard from several individuals with PMO who have experienced face palinopsia. Here, we report a case with distortions similar to Patient 2's, but whose palinopsia points to a more fine-grained level of representation than Patient 2's experience suggested.

Karl, a 28-year-old man, developed PMO that included recurrent palinopsia following resection of a right posterior temporal arteriovenous malformation (Fig. 2A). The distortions have persisted for two years. Among the most striking are reciprocal forms of cross-species facial feature transfer. In one, the eye region of a person known to Karl appears within the face of his pet cat, including the person's eye shape and pupil size (Fig. 2B). In the other, human faces take on features of his cat's eye region, including enlarged pupils, cat-like eye sockets, and the surrounding facial shading and texture (Fig. 2C). These episodes often persist for several hours and occasionally last all day. Aside from their unusual combinations of features, the resulting faces appear entirely coherent. The transferred features are seamlessly integrated into the viewed face rather than appearing superimposed, and they change naturally as viewpoint or distance shifts.

Unlike Patient 2's poodle-face palinopsia, Karl's experiences usually do not involve transfer of an entire face. Instead, only particular components of a facial region, sometimes together with associated coloring and texture, are transferred, while the remainder of the viewed face retains its typical appearance. Moreover, the transferred components are not generic features. Instead, Karl identified them as belonging to particular familiar individuals or to his cat, indicating that the substituted features are retrieved from long-term visual memory. Transfers are most noticeable when components from one species appear on the face of another species, but Karl has also frequently experienced human-to-human transfers. Together, these observations indicate that high-level palinoptic percepts can involve the persistent reactivation of identity-specific facial components rather than only whole-face representations.

The present report also highlights a methodological advance. The line drawing of poodle-face palinopsia provided a useful illustration of the patient's percept (Grüsser & Landis, 1991). Here, though, the use of modern technology enabled the production of photorealistic visualizations that convey far greater detail. Because progress in understanding many disorders of visual perception depends on accurately characterizing what patients see, we expect photorealistic visualizations to become an increasingly valuable tool for documenting such experiences (Fortner et al., 2025; Mello et al., 2024; Obrenovic et al., 2024).

CRediT authorship contribution statement

Brad Duchaine: Writing – review & editing, Writing – original draft, Visualization, Investigation, Funding acquisition, Conceptualization. **Antônio Mello:** Writing – review & editing, Visualization, Investigation, Conceptualization. **Jennifer L. Nosker:** Writing – review & editing, Investigation.

Ethics statement

The participant provided written informed consent for participation and for publication of his clinical details, brain scan, and visualizations.

Data availability

No datasets were generated or analyzed during the current report.

Declaration of generative AI and AI-assisted technologies in the manuscript preparation process

During the preparation of this work, the authors used ChatGPT5.5 to generate and refine the visualizations and to improve the clarity of the writing. The authors reviewed and edited the output as needed and take full responsibility for the content of the published article.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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