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Art and Cognitive Science.
Art presents a challenge and an opportunity for study in cognitive science (Espinel, 1994; 1996; 1998). This research concerns the creation of abstract art. One that is supposed to impact the viewer without recognizable, without memory-evoking images (Schapiro, 1980). This ideal was achieved by Jackson Pollock, who with it pioneered modern American art. His paintings, tangles of smears of paint on canvas, have been explained as unconscious expressions (Schapiro, 1980 & O Connor FV, Thaw EV, (Eds.), 1978). An Autonoetic Hypothesis on creativity would suggest otherwise. Here is a study of a painting representative of Pollock’s abstracts, Lavender Mist, at the National Gallery of Art (Figure 1).

Method.
An investigative approach was devised previously to study works of art (Espinel, 1994; 1996; 1998; 2002). This method is applied to analyze concerning Lavender Mist: 1. Reports, Pollock’s own and art experts, about his creation; 2. In the painting, by direct observation, photography, and digital techniques devised by the author (Espinel, 2002): a) physical and aesthetic characteristics, and b) systematically, cues of space and form; 3. Other works by Pollock, exhibited and published.

Results.
1. Reports did not disclose memories, thoughts or experiences that might have originated Pollock’s creation. 2. In Lavender Mist: a) Direct observation and photography showed no recognizable space or form cues (Figure 1); b) Digital analysis by color revealed 9 layers of smears, called here, digital paintings (Figure 2); c) Of these, 8 showed no recognizable space or form; but d) In the ninth, The Pink, the image of a horned animal was discovered (Figure 3). 3. In a Pollock drawing from his symbolic stage, 10 years before, an image was found that is reminiscent of the one hidden in Lavender Mist (Figure 4).

Conclusions.
1. The discovery of the horned animal image under tangles of smears suggests Pollock’s awareness of it, and a conscious, deliberate concealment. 2. That the image can be traced to a past event, to a contextually specific stage of his artistic development, suggests Pollock’s autonoetic recall. 3. The image, perhaps as a form of episodic memory (Tulving, 2001), might have been germinal to the creation of Lavender Mist.

The Autonoetic Hypothesis.
Autonoesis entails the conscious re-experience of past events in the present. A form of episodic memory might be crucial to the creation of abstract art.

References.