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“Near-death experience” memories found to share qualities with true ones

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Courtesy of the University of Liège
and World Science staff

Memories of “near-death experiences”—such as the proverbial light at the end of the tunnel sensed during a brush with death—have qualities of true memories, a study has found.

Researchers said these unusual memories, often described by people revived after mortal situations or close encounters with them, are even more detailed than normal memories for real events.

That doesn’t mean the near-death “events” really occurred, they added, but it does suggest there has been a “hallucination” resembling the reported experience. These memories may also be examples of “flashbulb memories,” they said—memories formed when “a highly emotional, personally important, and surprising event” is seared into the brain in unusually detailed and lasting form.

Near-death experiences are a widely documented phenomenon in which people report sensations such as seeing a bright light, going through a tunnel, ending up in another “reality” or leaving their own body after being close to death. Often these sensations are described as deeply meaningful or mystical.

The new findings, by scientists at the University of Liège in Belgium, were published online March 27 in the research journal *PLoS One*.

Near-death experiences have generated beliefs and theories of every kind. They have been all the more difficult to study because the experiences arise during chaotic conditions, which make investigating them in real time almost impossible, the scientists noted. They, therefore, tried an unusual approach.

Investigators specializing in coma science and cognitive psychology collaborated to look into the near-death experience memories with the notion that if the memories were pure products of the imagination, their characteristics should be closer to those of imagined memories. But if the near-death process is experienced in a way similar to that of reality, their characteristics would be closer to the memories of real events.

They compared the responses provided by three groups of patients, each of which had survived a coma in a different way, and a group of healthy volunteers. They studied the memories of near-death experiences and the memories of real events and imagined events with the help of a questionnaire.

The brain is prey to chaos during the near-death events, the scientists said. Physiological and pharmacological mechanisms go out of whack. Some scientists have proposed physiological explanations for components of the near-death experiences. For instance, “out-of-body experi-

ences” have been attributed to dysfunctions in a brain area called the tem-p-oro-parietal lobe. The new study suggests these same mechanisms could also could also create a perception of “real-ity,” which would thus be processed as coming from the real world