A Subjective Illustrated Report of Visual Hallucinations after Total Anesthesia

Vladimir Tamari. <u>vladimirtamari@hotmail.com</u> vladimirtamari.com Tokyo December 20, 2016

A patient describes and illustrates his experience of seeing closed-eye hallucinations after waking up from a 17-hour surgery under total anaesthesia

INTRODUCTION

Auditory and Visual Hallucinations¹²³ and otherconfusing experiences seem to be a common experience for elderly patients who have undergon surgery ander total, even partial anasthesia. I found this for myself and hereby record my own experience.

I am a 74 a year old male visual artist who has observed my surroundings keenly all my life, and am particularly aware of color, 3D shapes (through decades making stereoscopic drawings), and facial expressions.

NATURE OF THE HALLUCINATIONS

On Nov. 4, 2016 I had an operation that lasted five fours. After that I experienced very faint continuous tinnititis - a musical white noise - that disappeared after a few days.

The visual hullucinations appeared after the next operation, a Whipple procedure, performed on Dec 1, 2016, which took 17 hours. For two days in the intensive care unit I experienced vivid visual hallucinations that I will try to describe below. All of them had the following

¹ Otomo,S., Sugita M., Yano T. . Visual hallucinations on eye closure after orthopedic surgery under general anesthesia. J. Anesth. 2008; 22(4):439-42

² https://en.wikipedia.org/wiki/Closed-eye_hallucination

³ Storrs, C. The Hidden Dangers of Going Under. Sc. Amer. Apr.1,2014 https://en.wikipedia.org/wiki/Closed-eye_hallucination

characteristics:

- 1- They only appeared when I closed my eyelids, and would instantly disappear when I opened my eye. The ICU room was usually well lit and at night it had enough ambient light to see one's surroundings. Therefore I had no chance to test whether the visions would appear with eyes open in a totally dark room. The hallucinations had a background sometimes the same color of the closed eyelids. For example when a strong electric light was shining above me the closed eyelids would appear orange, and the hallucinated image was very orange (Fig. 1a). However this morphed into another bright image, but not orange (Fig. 1b). In the almost darkened room the closed eyelid color was very dark and the visions where in faint yellows and greens on a black background (Fig. 2a,b). At other times, perhaps while dozing, the visions had colors that could not have been related to eyelid color. i.e. graphic images in apple green, white, pale yellow and dark shades (Fig 3).
- 3- The visions were all perceived in 3D, and I was very aware of the distance to the objects 'seen'. The range was between about 5 cm-100cm away. In some cases in very dark light I would sense a rocky solid presence like cave walls, arrayed in the above-mentioned space. And upon opening the eyes the vision will disappear and the room appear as usual.
- 4- The visions never stayed the same but constantly changed in time ranging from about 2 Hz and faster. The changes were particularly rapid in the case of the "graphic animation" (Fig. 3) detailed below with the changes changing at perhaps 4 to 5 Hz.
- 5- No auditory effects were associated with the hallucinations.

THE THEMES OF THE HULLUCINATIONS:

The three episodes I remembered at the time and remembered still 12 days afterwards were of three distinct sequences seen at various times within the 2 post-operative days mentioned. I have depicted them rather sketchily in the 3 numbered figures below. They were:

1- Textured orange fur of the same color as the well-lit eyelid color. The fur was folded in various ways, which morphed into vividly colored patches of skin with very detailed textures. I now recall having seen such a skin sample when my surgeon showed me a piece of gut extracted from a previous operation. Other skin 'samples' appeared discolored in various areas as if diseased.

- 2- Male faces with intense long-suffering sardonic expressions would appear and be replaced by others. Some were distorted and leering, somewhat like the zombie sailors in the Pirates of the Caribbean movies.
- 3- Computer-graphic like animation. The style, coloring and scenes were completely self-consistent as in an animated story. The style was of cubistic shapes in apple-green, pale- yellow and a couple of other colors, making up forms in 3D. The scene was of a busy mall or station full of people, signs, architectural features, all rendered in the same style and at a very rapid rate of change. It might seem strange that the brain would generate animated scenes in a certain style. I recall that years ago I had a dream of attending an exhibition of paintings all appearing in a uniform style but not of my usual paintings.

The visions diminished and completely disappeared some three days after they started.

WAKING DREAMS?

The fact that the hallucinations appeared when the eyes were closed and instantly disappeared when the eyes were opened, as well as the nature of the images themselves, suggests that they were very similar to dreams. Somehow the anesthasia may have suspended the distinction the mind makes between sleeping and waking. When the eyes open the visual input from the real world momentarily overwhelms the internal visions of the dream-world.

FIGURES



Fig. 1 Depictions of first hallucinations – orange 'fur' (left) morphed into diseased skin (right.)

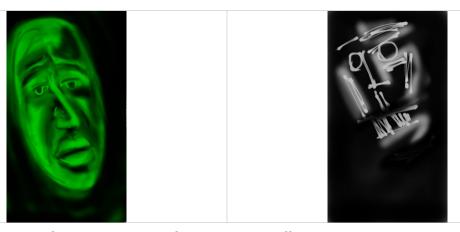


Fig. 2 Second set of hallucinations – first the long-suffering sardonic green-lit figure(left) then a series of jeering zombie faces such as those from the Pirates of the Caribbean films (right.)

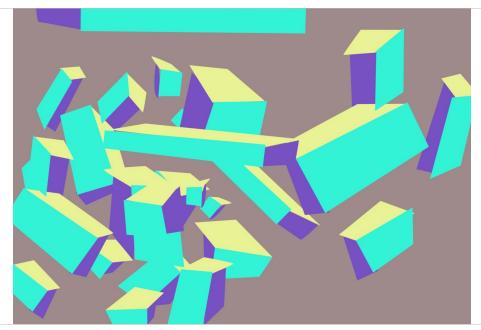


Fig. 3 Third set of hallucinations were of an animated "movie" of a mall or station scene depicted entirely in the same cubistic 3D style depicted here. People, architectural features etc. were seen in a rapidly developing overlapping series of events in the same location, all seen in this graphic style.