

Did Socrates know how to see your middle eye?

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Abstract

We describe in our own words a visual phenomenon first described by Gallagher and Tsuchiya in 2020. The key to the phenomenon (as we describe it) is to direct one’s left eye at the image of one’s left eye, while simultaneously directing one’s right eye at the image of one’s right eye. We suggest that one would naturally arrive at this phenomenon if one took a sufficiently literal reading of certain words of Socrates preserved in Plato’s *Alcibiades*. We speculate that perhaps Socrates was aware of the visual phenomenon in question.

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“If the inscription took our eyes to be men and advised them, ‘See thyself,’ how would we understand such advice?”—Socrates (apud Plato, *Alcibiades*)

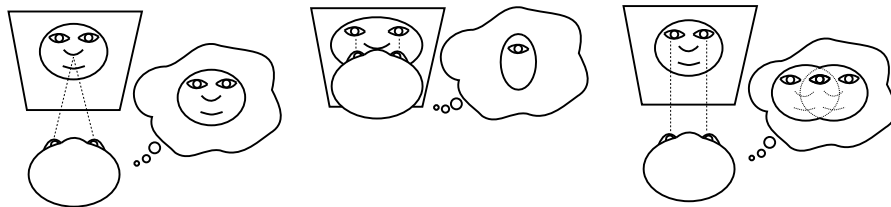


Figure 1: Left: How one usually looks at oneself in a mirror. Middle: The cyclops that appears when one stands nose-to-nose with a mirror. Right: The third eye obtained by slowly backing away from the cyclops while continuing to point one’s eyes at the cyclops’s eye.

In an enlightening paper [1], Gallagher and Tsuchiya describe a visual phenomenon in which, by properly directing one’s eyes, one can perceive a clear and stable illusionary third eye in one’s own reflection or in the face of a colleague. Gallagher and Tsuchiya indicate some surprise at the apparent silence of the literature on this phenomenon (it is indeed surprising considering nothing would prevent its discovery thousands of years ago). We will describe this

phenomenon in our own words (see Figure 1) and then speculate that it might have been known to Socrates.

If you direct your left eye at the image of your left eye in a mirror, and your right eye at the image of your right eye, then you do literally look yourself in the eyes (plural), making each eye “see itself” (to quote Socrates’ variation on the Delphic inscription). One way to do this is to approach as close as possible to a mirror. As you approach the mirror, your eyes will tend to focus on one point (a process called *convergence*), but as you get closer and closer, it will eventually become difficult for your eyes to simultaneously track the same point. At very close proximity—when you can get no closer because of your own nose—each of your eyes will indeed look directly at itself. Just like firing an arrow at point-blank range, an eyeball so close to a desired target has little choice but to see that target!

When you stand so close to the mirror, and each eye gazes at its own reflection, the two eye-reflections will fuse, so a cyclops will stare back at you with one lone eye. This is because, in general, any time your left and right eye are directed at two similar-looking objects, those objects will fuse together in your perception—just as, looking through binoculars, you perceive one aperture, not two. Since your own two eyes look similar, when each eye sees its reflection, those reflections fuse.

And in general, whenever anything (real or illusory) is in your field of vision, you can focus your eyes on it, even while you move. Thus, when you see that illusory cyclops eye, you can consciously focus your eyes on it, while slowly stepping back from the mirror. Consciously focusing your eyes on the cyclops eye, it will persist, even as you back away. Indeed, when you focus your eyes on the cyclops eye, then you focus your left eye on your left eye’s image (for that is what the cyclops eye is to your left eye), so it will continue to point there even as you step back. Likewise, your right eye will continue to point at your right eye’s image. And as you step back, keeping the cyclops eye in focus, each eye’s field of vision will expand, until it includes the other eye’s reflection too. At that point, you will perceive three eyes: each of your eyes will perceive two eyes (a total of four), but two of those remain fused (reducing the total to three).

With practice, it is even possible to learn how to control the direction of your eyes so as to view that third eye without first coming nose-to-nose (you can even do it cross-eyed, directing each eye at the opposite eye’s image). The way we described the process, the crucial key is to direct each eye at itself: the right eye at the right eye, and the left eye simultaneously at the left. This is precisely what we would do if we were to follow the hypothetical advice in the quote at the top of this article. Socrates speaks of the Delphic inscription advising the eyes as men, plural, not as one singular man. And the advice which the inscription gives to each eye is to “see thyself” (singular). Anyone who took this advice literally (or rather, anyone whose eyes took the advice literally) would be confronted by a cyclops or by a third eye, depending on the distance to the mirror. We speculate that of all people who followed the advice literally, Socrates himself may well have been one of them.

Gallagher and Tsuchiya close their paper by quoting Shams Tabrizi, “The summary of the advice of all prophets is this; Find yourself a mirror.” If that’s true, it is abductive evidence of Socrates’ prophethood, for Diogenes Laërtius reports that Socrates “recommended to the young the constant use of the mirror, to the end that handsome men might acquire a corresponding behaviour, and ugly men conceal their defects by education.” We would hardly be the first in the world to suggest there are things hidden between the lines of Plato or Socrates, if we were to suggest that maybe Socrates recommended the use of mirrors for some hidden reason besides grooming, or that maybe there is more than meets the eye in Socrates’ words to Alcibiades.

References

- [1] Regan M Gallagher and Naotsugu Tsuchiya. Third-eye rivalry. *i-Perception*, 11(4), 2020.