
ANALYSIS

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REPORT ON *ANALYSIS* PROBLEM No. 14

If I carefully examine a visual after-image, what am I looking at and where is it?

By D. J. O'CONNOR

THIS problem attracted only eight would-be solutions, one of them a conjoint effort from Sweden. Of the others, three were from Oxford, three from the United States and one from Canada. Most of the entries treated the question in a direct and straightforward manner. No one was induced to refer, except very obliquely, to the general problem about sense-data, of which after-images have often been cited as the standard cases. Perhaps this was due to the limit of 600 words. The entries from Oxford were slick and modish but showed a characteristic contempt for fact. One of these entrants indeed did not know what an after-image was.

The best of the determinedly linguistic approaches was by Mr. Carter of Queen's University, Ontario, but I was unconvinced by his prescription for removing problems: it just depends on how we are willing to talk. It seemed to balk the question why some kinds of talk are so much more convenient than others. Miss Brenda Brush of the University of Michigan wrote sensibly and readably but I found some of her analogies unacceptable. For example: "If I can be said to see you when I see you in the mirror, then I can still say 'my after-image is on your forehead'."

No one of the entries was outstandingly better than the rest but two seem to me to be worth printing. The best by Mr. Margolis of the University of California is obscure in places but makes some good points on the distinction between after-images and other sensory experiences. The second by Messrs. Furberg and Nordenstam of the University of Göteborg is a good example of a commonsense answer to the question.

I.

By JOSEPH MARGOLIS

WE are misled into thinking that 'after-image' (and 'hallucination,' 'dream,' etc.) concerns perceptual discriminations. The terminology seems perceptually oriented. But an instance of *déjà vu* may masquerade as a memory-image;

a hallucinatory sound may have the "feel" of a sound produced in a way known to exclude hallucination. Dreams are said to have a "dreamlike quality" though Freud's studies of shell shock have shown that this need not always be so. Any alleged "after-image quality" will similarly be contingent, just as it is contingent that eidetic persons report positive rather than negative after-images. There is no *prima facie* reason why an after-image may not be perceptually indiscriminable from images not taken to be after-images, whatever persistent qualities any selected sample of after-images may exhibit. Consequently, one cannot say "where it is" or "what I am looking at" as if to say more than would be contingently appropriate to the particular after-image I am looking at.

When one speaks of an after-image or of a dream, etc., he speaks of an image (whatever its discriminable qualities) which he supposes (rightly or wrongly) to have been *produced* in a certain way or under certain circumstances. Thus, if one has reasons to infer that he has just awakened from sleep, and in addition if he remembers (dreams have their own peculiar difficulties) images he believes he has "just seen", then he will *infer* that the images were dreams (or, more tellingly, were dreamt). Terms like 'after-image' do have reference to perception of course, in the sense that our interest in reporting after-images is ordinarily an interest in reporting their qualities and the perceived context of their appearance. But they are not perceptual terms primarily but rather terms that refer to the causes of certain images (regardless of the perceived qualities of those images).

After one has said all he can about the qualities of a particular image, he can always meaningfully ask, "But was it merely an after-image, dream, etc.?" He knows people (perhaps himself) have been mistaken in this respect before and he will not trust the perceptual qualities alone. He will be saying something therefore about the causal circumstances of the image if he says that it is an after-image or a dream, etc. And if he satisfies himself about the causes in a given case, he may very well say, "Yes, it was a dream obviously, but I wouldn't have believed it." So that when he uses 'after-image' (and other such terms) in first-person reports upon images, he uses it in a way that conveys his conviction about whether the image (apart from its perceptual qualities) is to be regarded as an after-image or not. The reasons are that the term has a divided role—referring both to perceptual and to causal distinctions and to the latter primarily

—and that causal distinctions are known not to be given, as such, to immediate perception.

In fact, the argument offered is little more than a reminder that we wish to leave entirely open the question whether after-images are perceptually discriminable from images that are not after-images. And if one says 'after-image' must have been introduced by way of contrast between images that are and images that are not after-images, we may answer that the contrast need not have been a perceptual contrast.

University of California.

II.

By MATS FURBERG and TORE NORDENSTAM

MANY people have seen after-images (though perhaps most have not), but has anybody *looked at* an after-image? Our first reaction is to deny it, since 'to look at' means 'to direct one's eyes at', and after-images do not belong to the sort of things that one can direct one's eyes at; but after a while we are inclined to take a milder view. For we can certainly visually attend to after-images, pay heed to them; and normally, though not always, looking at something involves visually attending to it.

The same sort of consideration applies to 'carefully examine'. Therefore, we propose the following reformulation of the problem: If I attend to a visual after-image, (a) what am I seeing and (b) where is it?

(a) Visual after-images have form, colour, a certain genesis, and relational properties (such as 'being to the left of'). A blind man cannot have after-images; it is necessary to have seen some object to have an after-image of it. From being told that the patch which I see is an after-image, I can safely infer that I cannot scrape it or cover it with wallpaper, that you cannot see it, that it will move when I move my eyes, and that it will seem larger when it is far away than when it is close. An after-image seen with closed eyes has the further peculiarity that it cannot be measured in feet and inches, though it can be judged bigger or smaller than other patches. Thus, *when I see an after-image I see a patch which lacks some of the properties which most patches have.*

(b) Psychologists do not like talking of after-images being somewhere. They prefer to say that after-images appear or have localisation here or there. They also say that after-images are projected on this or that. But if this location is invented to avoid the problem of localisation, it will not do—normally, something has to be somewhere to be projected. They do not, of course, want to deny that we see our after-images on the wall (say); and if we like, we can say that they are there. But—that is what we want to stress in this note—we must not forget that after-images are not very like other patches that are on walls. And this is what psychologists want to bring out too.

Pedantic people who think that everything ought to be somewhere (not just appear somewhere) place the after-images in the mind. But this is just to deny that they really are on the wall; it is another way of making the same point. Why should everything (not: why should every thing) be somewhere?

Others say that after-images are in a visual two-dimensional field. This is all right for seeing with closed eyes; but do we ever see such a field with open eyes? Some say they do, and perhaps they do; others certainly never do.

University of Göteborg.

TRACTATUS 6.3751*

By EDWIN B. ALLAIRE

CONSIDER the sentence 'this is red and this is green'. Call it A. Assume that in A the two occurrences of 'this' refer to the same colour spot. In the *Tractatus* Wittgenstein claimed that A is contradictory. The claim has provoked varying reactions. Urmson argues¹ that the individuals of the *Tractatus* are rudimentary Aristotelian substances. Accordingly, though he acknowledges the role which the truth-table explication of logical truth plays in this work, he tends to minimize its importance. For this Bergmann takes him to task,² insisting, not unfairly, that he thus fails to appreciate a difficulty which the claim

* I am obliged to Prof. Gustav Bergmann who has read the manuscript and made many helpful suggestions.

¹ J. O. Urmson, *Philosophical Analysis* (London: 1956), pp. 57–59.

² Gustav Bergmann, "The Revolt Against Logical Atomism", *The Philosophical Quarterly*, VII (1957), pp. 323–339 and VIII (1958), pp. 1–14. Cf. pp. 338–39.