

Idealism & perceptual variation

For the last two weeks we have been discussing the strengths and weaknesses of two competing views of human beings and our relation to the world.

According to (interactionist) **dualism**, we are immaterial things - minds, or souls - which nonetheless manage to interact with a material world. As we saw, Descartes provides a powerful argument for the view that human beings are immaterial things, but the dualist has some trouble explaining how an immaterial thing and a material world could causally interact.

According to **materialism**, we are material things - like tables and chairs, or other animals. The materialist, unlike the dualist, has no trouble explaining the possibility of causal interaction between material things and persons, since persons just are one sort of material thing. But, as we saw last week, the materialist has some difficulty in giving a plausible story about the nature of persons, and also faces the problem of finding a response to Descartes' argument.

At this point, one might find the following thought attractive: perhaps the problems faced by the dualist and the materialist are caused by one view that they hold in common: **the view that matter, thought of as something independent of our minds, exists**. The problems for the materialist result from their believing in nothing other than matter; and the problems for the dualist result from their having to explain how immaterial souls could relate to matter. Maybe the right view, then, is that there is no such thing. This is **idealism**.

Idealism should strike you as an extremely radical view. Today, one common view of the world begins with the existence of material things, and asks: "Is there anything else?" The idealist thinks that this is confused; all that exists are immaterial minds; nothing exists which is not a mind or some mental phenomenon.

Idealism has, perhaps surprisingly from our vantage point, been a fairly popular view in the history of philosophy. And traditionally it has been supported by two very different kinds of arguments. The first set of arguments focus on certain facts about perception; the second set of arguments tries to show that the very idea of matter leads to paradox. We will be focusing on the first sort of argument today, and the second sort of argument in our next class.

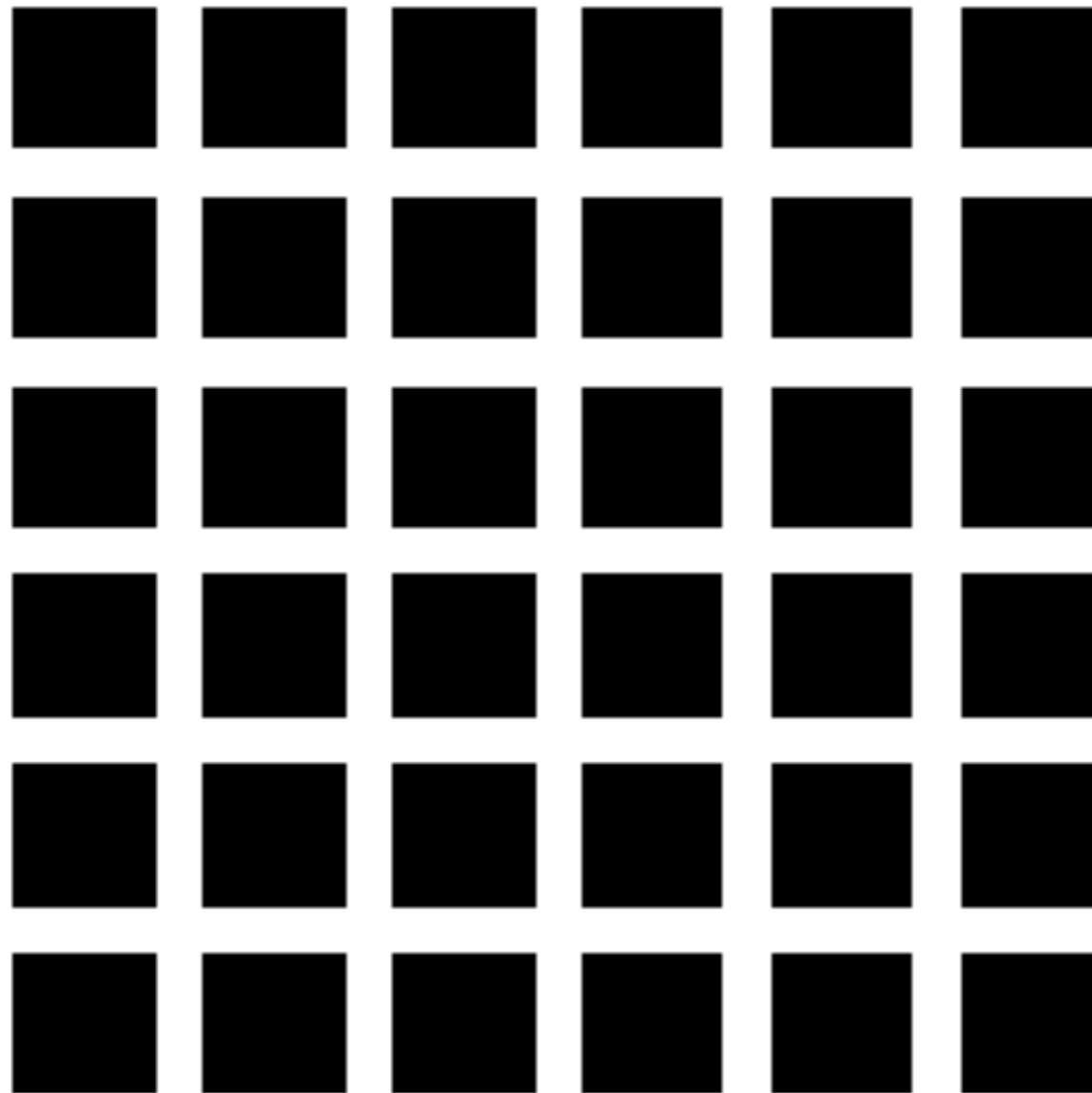
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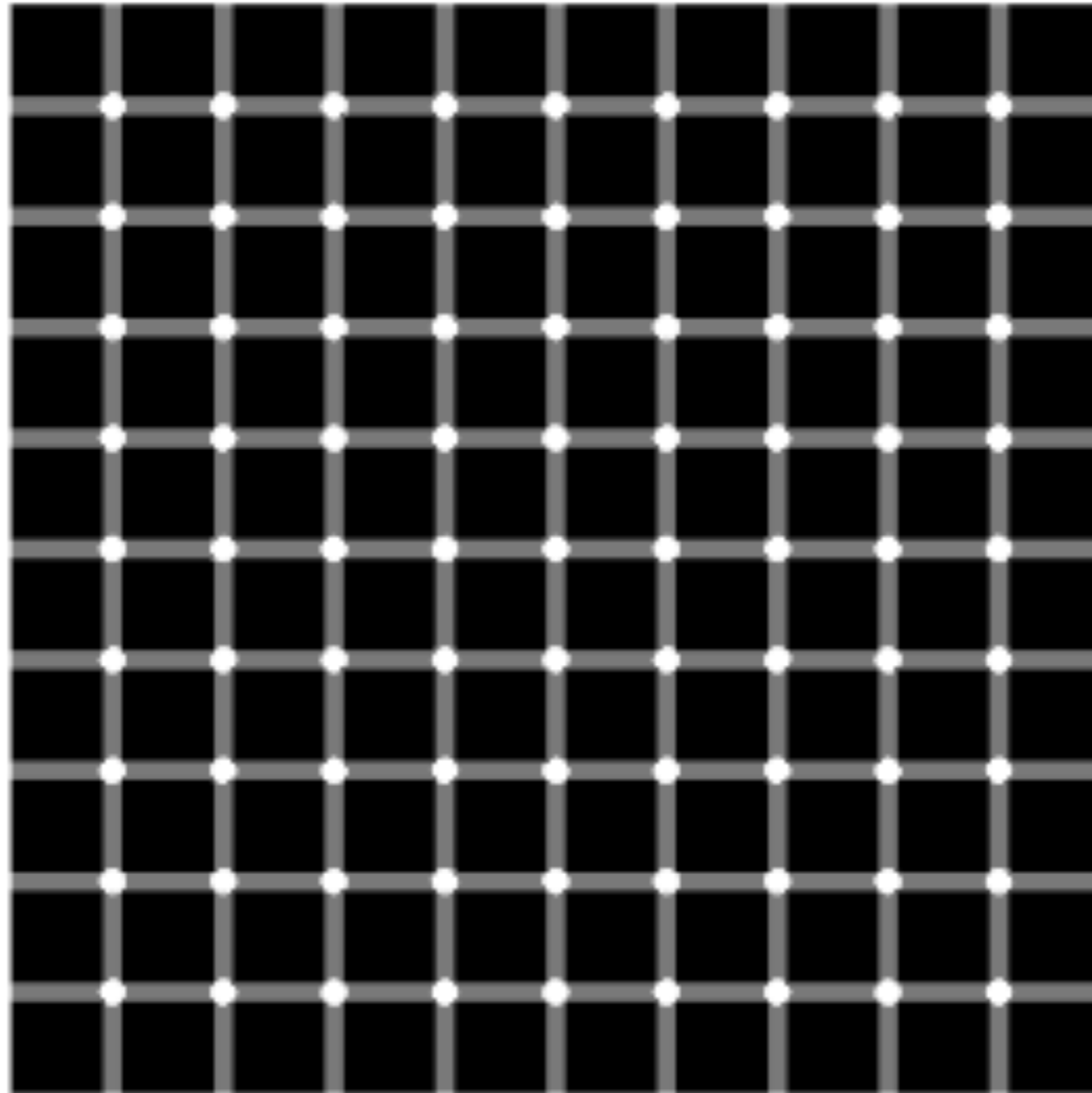
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Consider, for example, the following grid illusion.



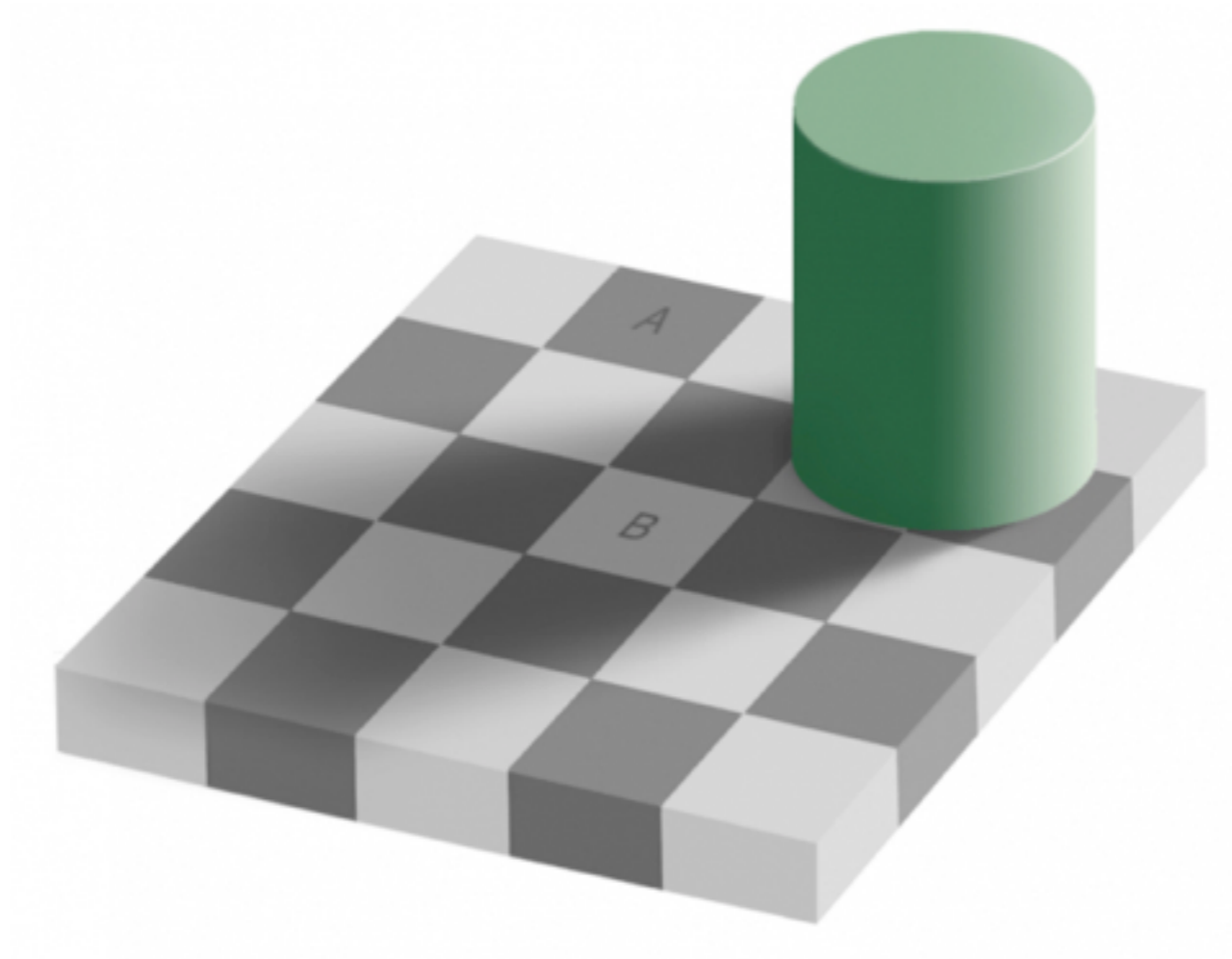
The Hermann grid illusion

Or the following more dramatic variant:



Schrauf, M., Lingelbach, B., Wist, E.R. (1997)
The scintillating grid illusion. *Vision Research*,
37, 1033-1038

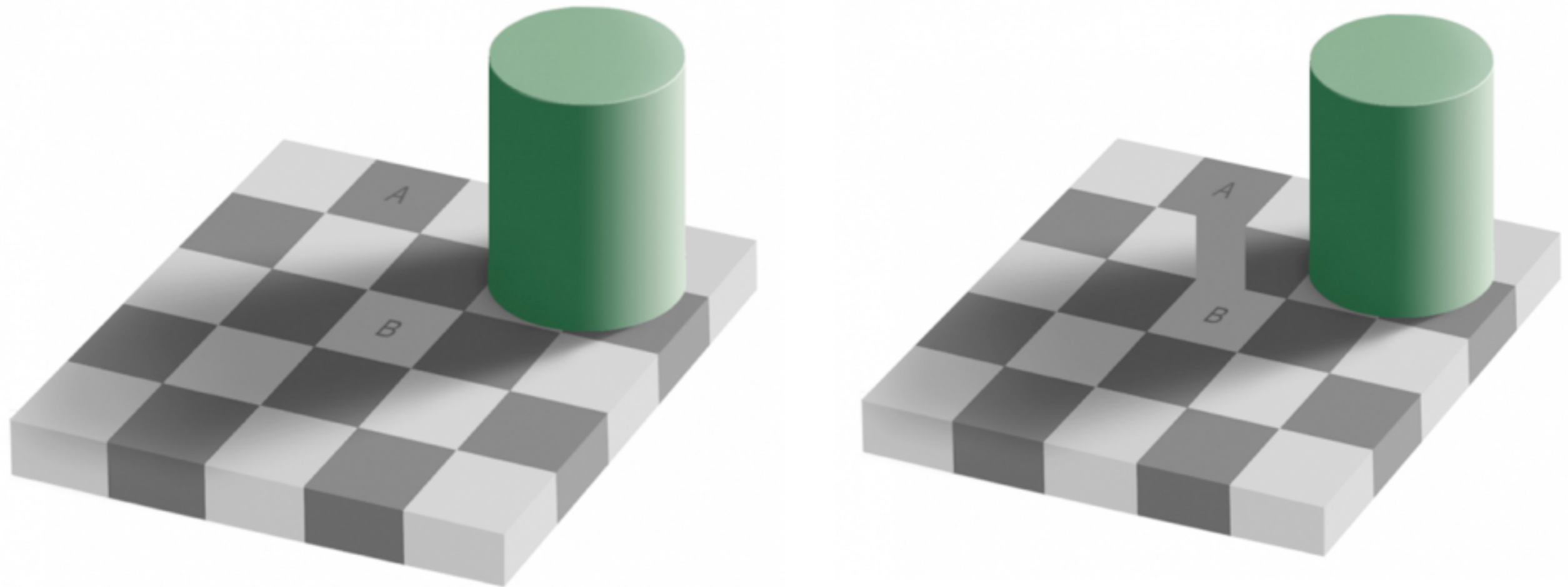
Introducing colors other than black and white leads to surprising contrast effects.



Look at the squares on which the “A” and “B” are printed. To most people, the A square looks darker than the B square.

But this is an illusion, as connecting the squares shows.

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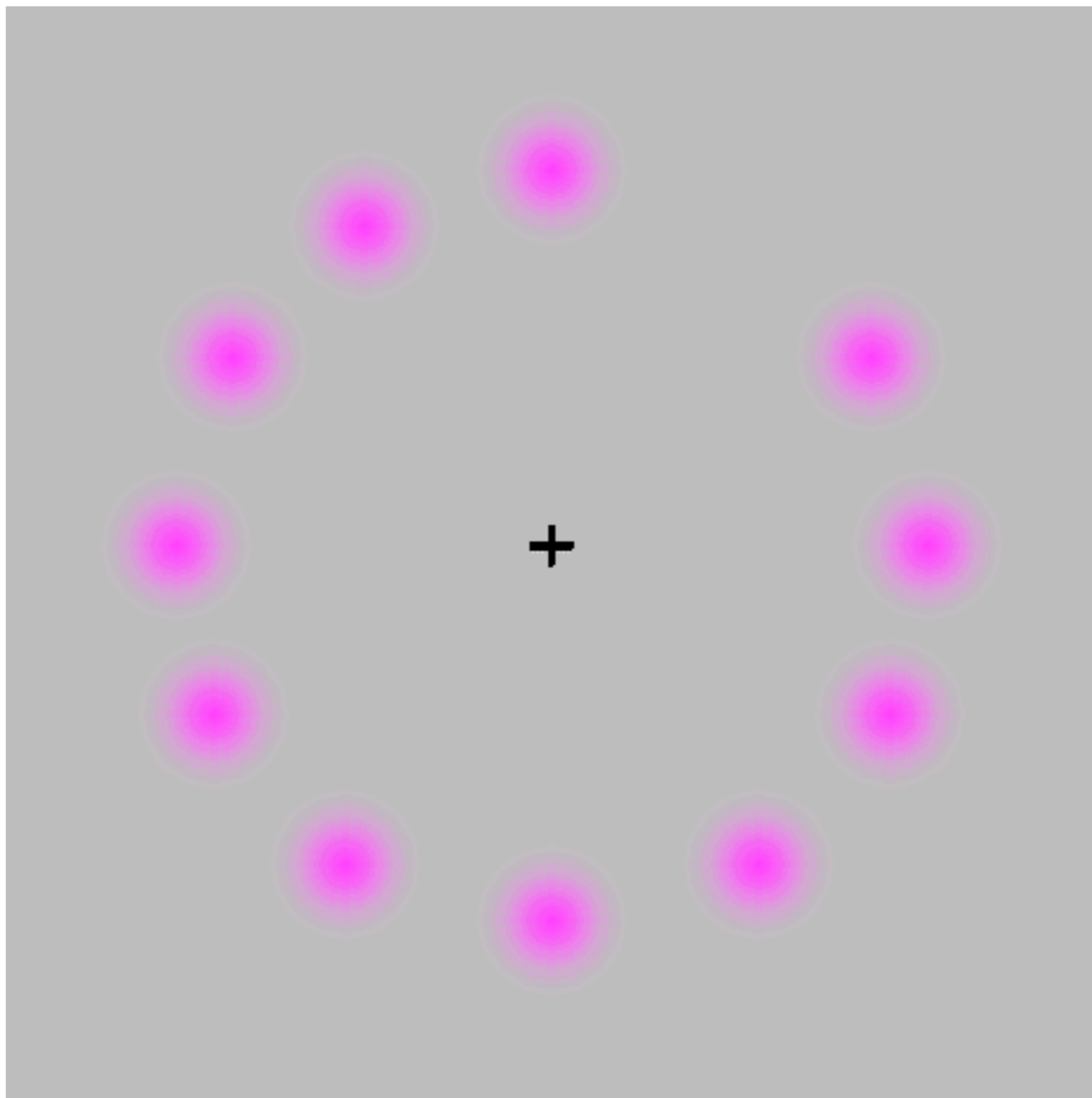


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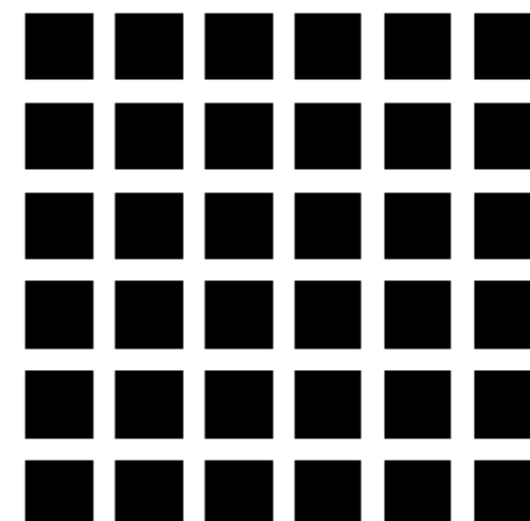
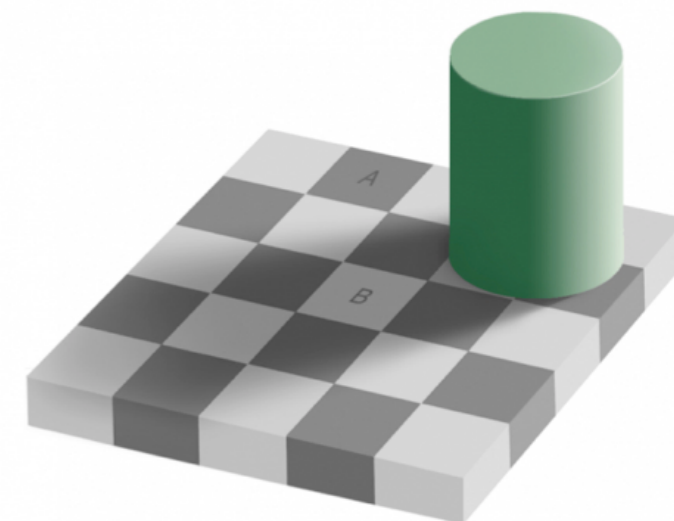
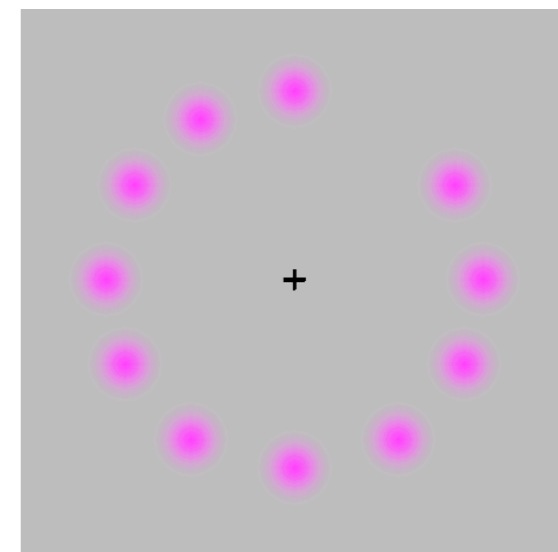
This is enough - more than enough, probably - to convince you that sometimes things can appear to have colors which they don't, in fact have.

Ordinarily, though, we don't take cases like these to show that objects don't have colors at all - rather, we take them to show that there is a distinction between real and apparent color: a distinction between the color that something really has, and the color that it seems to have for a particular observer on a particular occasion.



George Berkeley - perhaps the most important defender of idealism in the history of philosophy - thought that this ordinary view of color experience was based on a mistake. Close attention to visual phenomena, Berkeley thought, can show us that this distinction between real and apparent color is a mistake: if we think of material objects as things which exist independently of the mind, there can be no such thing as the real color of a material object. Our aim in what follows will be to understand, first, why Berkeley thought this and, second, why he thought that this could form the basis of an argument for idealism.

Berkeley was an Irish Anglican priest who lived from 1685 until 1753. Berkeley's most important philosophical works - including his central defense of idealism - were written in his mid-twenties. He also made fundamental contributions to science and mathematics, including an influential work on the science of visual experience and a criticism of the early expositions of the calculus in Newton and Leibniz.



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Berkeley's discussion of the nature of color is given in the form of a dialogue between Hylas (the name is derived from the Greek for "matter") and Philonous ("lover of mind").

Their debate is framed as a debate about the nature of sensible things - "those which are immediately perceived by sense." Philonous then poses the central question:

Philonous: Doth the reality of sensible things consist in being perceived? or is it something distinct from their being perceived, and that bears no relation to the mind?

Hylas: To exist is one thing, to be perceived another.

The initial question, then is whether sensible things - the immediate objects of senses like sight and touch - exist independently of being perceived. Philonous, the idealist (and the spokesman for Berkeley's own view) says not, whereas Hylas, the anti-idealist, thinks that the things we sense can exist independently of the mind.

The topic soon turns from sensible things in general to **sensible qualities** - the properties that we can immediately sense things to have. The question is whether things possess sensible qualities independent of the mind, or not. (We'll return to the question of how this is related to the existence of sensible things.)

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The first sensible quality which falls under discussion are the sensible qualities detected by taste - for example, sweetness and bitterness.

Philonous: ... that which at other times seems sweet, shall to a distempered palate appear bitter. And nothing can be plainer, than that divers persons perceive different tastes in the same food, since that which one man delights in, another abhors. And how could this be, if the taste was something really inherent in the food?

Hylas: I acknowledge I know not how.

Philonous is here focusing on certain facts about the relativity of taste perception: that one food can taste sweet to one person, but not to another. Philonous clearly seems to be correct about this; for example, recent studies have shown a particular variability in the ability to taste bitterness. It turns out that people vary widely in their sense of the bitterness of foods which contain a certain chemical - among which are brussels sprouts and stout beer. Philonous is then asking: given that some people taste these foods as bitter and others not, how can it make sense to say that they really are, in themselves, bitter or not? His implicit conclusion is that sensible qualities associated with taste are dependent on the perceiver. That is, taste qualities are subjective in the following sense:

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Philonous then convinces Hylas that other sensible qualities - like smells - are also subjective, in this sense, before turning to the central case of colors:

Philonous: ... I hope you will make no difficulty to acknowledge the same of colors.

Hylas: Pardon me; the case of colours is very different. Can anything be plainer, than that we see them on the objects?

Philonous: The objects you speak of are, I suppose, corporeal objects existing without the mind.

Hylas: They are.

Philonous: And have true and real colours inhering in them?

Hylas: Each visible object hath that colour which we see in it.

This first suggestion of Hylas - that every object really has the color we perceive it to have - is easily refuted, based on the sorts of illusions we considered at the beginning:

Philonous: .. are then the beautiful red and purple we see on yonder clouds, really in them?

One might as well ask whether, for example, the points of intersection in the first grid we showed really have the color we see them to have.

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It is at this point that Hylas appeals to the distinction which we mentioned earlier:

Hylas: I must own, Philonous, those colors are not really in the clouds as they seem to be at this distance. They are only apparent colors.

Philonous: Apparent you call them? How shall we distinguish these apparent colours from real?

Hylas: Very easily. Those are thought to be apparent, which, appearing only at a distance, vanish upon a nearer approach.

It is important to distinguish two aspects of Hylas' view here. First, he is suggesting that we distinguish between real and apparent colors in terms of the conditions under which the object is viewed: objects show their real colors when viewed in certain conditions, but not otherwise. Second, he is suggesting a particular view of what those conditions are: close up.

Philonous then moves immediately to attack the second part of Hylas' view.

Philonous: Is the nearest and exactest survey made by the help of a microscope, or by the naked eye?

Hylas: By a microscope, doubtless.

Philonous: But a microscope often delivers colours in an object different from those perceived by the unassisted sight. ... I think it may evidently be concluded from your own concessions, that all the colors we see with our naked eyes, are only apparent as those on the clouds ...

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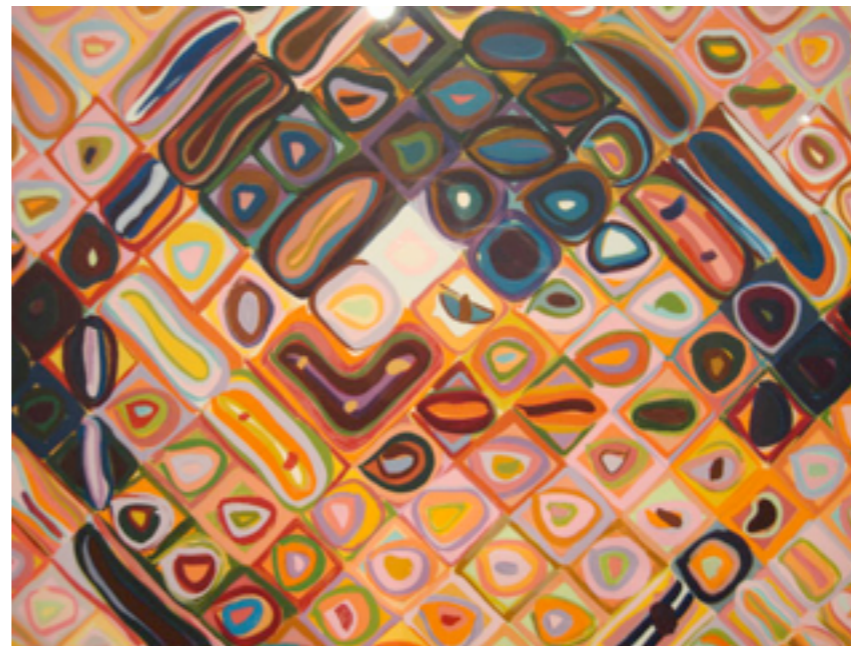
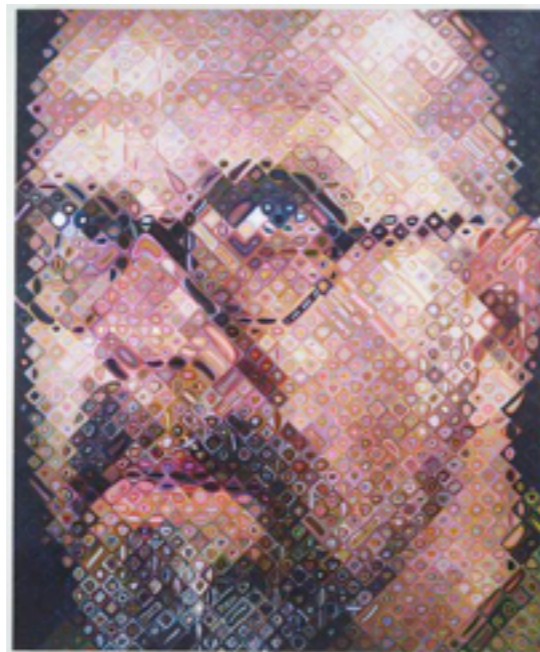
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To make this point we don't even need to think about microscopes; just think about a mosaic, or certain paintings:

Chuck Close,
Self-portrait
(2000)



Detail of the
right eye

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This line of reasoning seems to show that, for example, for all we know apples are not red and that snow is not white; these are surprising conclusions.

Another worry about Hylas' view here is that it is not obvious that there is such a thing as **the** closest view of an object - for any magnification, can't we imagine a greater one? And, if so, there may be, on Hylas' view, no such thing as the real color of an object - which is just the view for which Philonous is arguing.

One might think here, though, that the problem is less with the real/apparent color distinction than with the particular way in which Hylas draws that distinction. Why not say that, for example, the real colors of things are the colors that they seem to have to a human being with normal color vision in normal conditions - for example, in normal daylight, illuminated at 90 degrees (so that the light is shining directly on the object, rather than from the side)?

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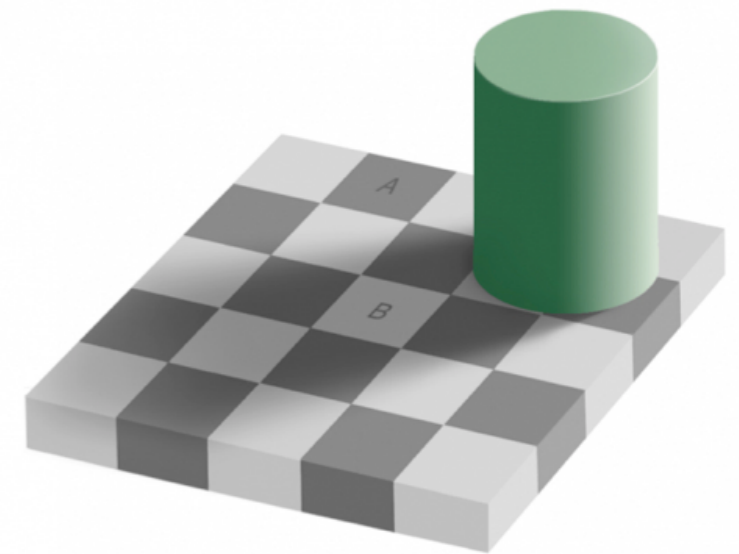
This way of distinguishing real from apparent colors runs into two lines of object. The first is that, no matter how we specify the normal conditions, we will leave some things out. For example, given the above definition, rainbows are invisible under normal conditions - but surely still have real colors. Or consider bioluminescent fish, or other objects which intuitively only reveal their true colors in other sorts of viewing conditions.

Another problem about normal conditions has to do with color contrast. As one of the examples with which we began shows, the color something appears to have depends in part on the colors with which it is juxtaposed. So when we are trying to find the real colors of things, should we put them next to other colors? And, if so, which ones?

One might think that we can see the real colors of things if we **eliminate** color contrast: if we, for example, view the color through a tube which eliminates surrounding colors from the field of vision. This has the striking consequence that nothing is really brown, since perception of brown depends essentially on contrast. (Brown things viewed without contrast look yellow or orange.)

There are also problems with the idea of a human being with normal color vision, because it is not clear that there is such a thing. Psychological studies involving matching tests - when subjects are asked to adjust the colors of two screens by turning knobs until the two screens look the same to them - show that color perception varies by gender, race, and age. So are, for example, people of one race normal perceivers, but not others? This is hard to believe.

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But if this distinction is in trouble, and if, as our illusions seem to show, objects at least sometimes seem to have colors that they don't really have, colors are **all** only apparent, as Hylas concedes. But Hylas thinks that we can grant this without giving up on the idea that some qualities of material objects are really in those objects, independently of being perceived:

Hylas: I frankly own, Philonous, that it is in vain to stand out any longer. Colours, sounds, tastes, in a word, all those termed secondary qualities, have certainly no existence without the mind. But by this acknowledgement I must not be supposed to derogate any thing from the reality of matter ... For the clearer understanding of this, you must know sensible qualities are divided by philosophers into primary and secondary. The former are extension, figure, solidity ... And these they hold really exist in bodies.

Hylas is conceding that colors, tastes, smells, and the like are all subjective, in the above sense. But this does not show that the existence of sensible objects is dependent on their being sensed; and this is because there are some sensible qualities - such as shape and size - which are **primary qualities** - which are really in material objects, and hence not subjective.

So Hylas is offering a reply based on the following distinction:

Sensible qualities	
Primary qualities	Secondary qualities
Extension Shape Solidity	Color Smell Taste

His idea is that while secondary qualities are subjective, primary qualities are not; and for this reason we can think of material things as existing without the mind and having, independently of their being perceived, certain primary qualities.

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Philonous' first argument is that primary qualities are open to the same arguments from perceptual relativity as secondary qualities. Can't an object appear to have a different size, or different shape, based on the magnification or angle from which it is viewed?

One might, as in the case of color, reply by saying that the true size and shape of an object is determined by how it appears under certain viewing conditions - under those conditions, objects reveal their true sizes and shapes. But then we get the same kinds of problems we got above - problems specifying the conditions under which true size and shape is revealed.

One might then reply by denying that the primary qualities of matter can be sensed in perceptual experience at all. But then, Berkeley objects, we are removing material objects entirely from the realm of sense perception, since we are denying that we can perceive any properties that these objects really have. But then why believe in material objects at all, if we can have no perceptual experiences of them?

Philonous' second objection is that the proposed view of matter, as having in itself primary but not secondary qualities, is simply incoherent:

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Philonous: Can you even separate the ideas of extension and motion, from the ideas of all those qualities which they who make the distinction term secondary? ... try if you can [to] frame the idea of any figure, abstracted from all particularities of size, or even from other sensible qualities. ... Since ... it is impossible even for the mind to disunite the ideas of extension and motion from all other sensible qualities, doth it not follow, that where the one exist, there necessarily the other exist likewise? ... Consequently the very same arguments which you admitted, as conclusive against the secondary qualities, are without any further application of force against the primary too.

Philonous is asking us to try to imagine an object which has extension - and so occupies a certain amount of space - but which simply lacks secondary qualities, like color.

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He thinks that, once we try to do this, we will see that we are being asked to imagine something impossible - not just that it is impossible for us to imagine it, but that it is impossible that there be such a thing. His idea is that there is a contradiction in the idea of there being something with extension but no color at all.

If he is right about this, then, as he says, it follows that “where the one exist, the other exist likewise” - that is, **an object can have primary qualities if and only if it can have secondary qualities.**

But we already know that objects’ having secondary qualities is dependent on their being perceived; so, if they can’t have primary qualities without having secondary qualities, then it follows that material objects can’t have primary qualities like extension, shape, and solidity without being perceived either.

But this seems to lead by a short argument to idealism: the view that the existence of matter is itself dependent upon our perceptions. Remember the question with which we began:

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It seems very plausible that a thing - like a material object - can’t exist without having some properties. But if a material object can’t have primary or secondary qualities without being perceived - and if there are no properties of material objects besides the sort listed as primary or secondary - it follows that a material object can’t exist without being perceived.

And if this is true, then Philonous is right, and Hylas is wrong: it is not true that, for material objects, existence is one thing, and being perceived another; rather, as Berkeley’s idealist slogan puts it: to be is to be perceived.

All of this raises a question: if Hylas is wrong, then how should we think about material objects? Philonous does not exactly deny the existence of matter; rather, he denies the existence of matter if we take it to be something independent of our perception of it. We can still sensibly talk about “material things” like tables and chairs; but all we are really talking about are our perceptions.

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Indeed, as Philonous thinks of it, the idealist is, ultimately, the defender of common sense:

Philonous: I am of a vulgar cast, simple enough to believe my senses, and leave things as I find them. To be plain, it is my opinion that the real things are those very things I see and feel ... These I know, and finding they answer all the necessities and purposes of life, have no reason to be solicitous of any other unknown beings. A piece of sensible bread, for instance, would stay my stomach better than ten thousand times as much of that insensible, unintelligible, real bread you speak of. It is likewise my opinion, that colours and other sensible qualities are on the objects. I cannot for my life help thinking that snow is white and fire hot. You indeed, who by “snow” and “fire” mean certain external, unperceived, unperceiving substances, are in the right to deny whiteness or heat to be affections inherent in them. But I, who understand by those words the things I see and feel, am obliged to think like other folks.

According to Berkeley, idealism is not some crazy philosophical view; rather, it is the view we arrive at by taking seriously our common sense opinions that snow is white, and fire is hot. The crazy philosophical view is rather that the view which requires us to give up our ordinary beliefs about snow and fire in favor of belief in a mind-independent material world of dubious coherence for which we have no sensory evidence.