

# Class Four: The Metaphysics of Virtual Reality

Philosophy and Science Fiction - Ryan Simonelli

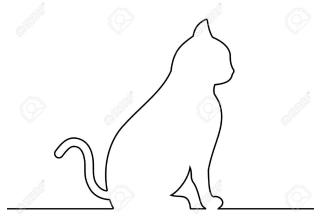
October 10, 2022

## 1 Skeptical Hypotheses Reconsidered

- **The Form of a Skeptical Argument:** Recall from two weeks ago the general form of a skeptical argument, where  $p$  is some common-sense proposition about the world and  $S$  is a skeptical scenario:
  1. If, for all I know,  $p$  is false, then I don't know  $p$ .
  2. If I'm in  $S$ , then  $p$  is false.
  3. For all I know, I'm in  $S$ .
  4. So, for all I know,  $p$  is false.
  5. So, I don't know  $p$ .
- **A Skeptical Argument:** Substituting for Chalmers's example, we get the following skeptical argument:
  1. If, for all I know, it's false that I'm sitting at a desk, then I don't know I'm sitting at a desk.
  2. If I'm in a matrix, then it's false that I'm sitting at a desk.
  3. For all I know, I'm in a matrix.
  4. So, for all I know, it's false that I'm sitting at a desk.
  5. So, I don't know that I'm sitting at a desk.
- **Chalmers's Proposal:** "[T]he hypothesis that I'm in the matrix is not a skeptical hypothesis." That is, premise (2) of the above argument is false.
- **Virtual Objects:** Let us call something that you can perceive, which resembles a physical object, but whose reality is ultimately constituted by an underlying computational structures and processes—bits of computer code—a *virtual* object.
  - **Note:** Chalmers will want to say that the chair is still "physical," but what "physical" ends up meaning, for Chalmers, won't imply non-virtual.
- **The Basic Anti-Skeptical Idea:** If the beliefs of someone in the Matrix are about virtual objects, rather than non-virtual ones, then, since there *are* virtual objects in the Matrix, the beliefs of someone in the Matrix are not going to be massively false. If I'm in the matrix, I'm still sitting on a chair, it's just a virtual chair, rather than a non-virtual one.

## 2 Some Background: Putnam and Davidson

- **Putnam's Thought Experiment:** Consider two cases:
  - **Case One:** An ant, crawling along a patch of sand, makes a path that, by pure chance, resembles a cat:



Would we say that the ant has drawn a picture *of* a cat, a picture that *depicts* a cat? Presumably not—its trail just resembles a cat just as a cloud may resemble a cat.

- **Case Two:** An intelligent ant which has seen some cats intentionally crawls in a path that resembles one of these things that it had seen. In that case, clearly, we would say that it *has* drawn a picture of a cat.
- **What's the Difference?:** There are many differences of course, but one critical difference is the *causal role of cats* in determining the shape in the sand. The second shape, but not the first, has been made in *response* to cats.
  - \* **Note:** This is, in the basic kinds of cases, a *necessary* condition for something's being a representation or depiction of a cat, not a *sufficient* one.
    - If a cat falls in the sand, and makes an outline of itself, clearly a cat has played a causal role in the formation of the outline, but this doesn't make it the case that the outline is a depiction of a cat.
- **The Point Applied to Words:** The word "cat" means what it does—indeed, can be said to have a meaning at all—only because grasping its use necessarily involves being disposed to use it in response to certain sorts of objects, namely, cats.
  - If Polly the parrot, simply mimicking a sound she has heard, squawks out "cat," she is not saying that a cat is present.
- **Davidson on Putnam's Point:** "[T]he basic connection [of "reference" or "aboutness"] between words and things, or thoughts and things, is established [. . .] by causal interactions between people and parts and aspects of the world. The dispositions to react differentially to objects and events thus set up are central to the correct interpretation of a person's thoughts and speech. If this were not the case, we would have no way of discovering what, others think, or what they mean by their words."
- **Davidson on Skepticism:** "If words and thoughts are, in the most basic cases, necessarily about the sorts of objects and events that commonly cause them, there is no room for Cartesian doubts about the independent existence of such objects and events."
- **Reconsidering Moore's Proof in this Light:** Recall again G.E. Moore's "proof" of the external world that started with the premise "Here's a hand," and consider the following dialogue (from a paper I wrote a while ago called "Pointing Out Skeptic's Mistake"):
 

SKEPTIC: The external world does not exist!  
 BELIEVER: Ok, have a seat on that couch across from me and I'll try to change your mind.  
 SKEPTIC: (Sits down.) So, let me hear your argument.  
 BELIEVER: (holds out one hand in between them.) *Here is a hand!*  
 SKEPTIC: Oh, no! I won't fall for that one! You're simply begging the question.  
 BELIEVER: Am I? So, I see my hand right now, and I presume you see my hand as well. It's right there in front of our faces.  
 SKEPTIC: No, but if my argument is right, we could both be deceived, and it could be the case that you don't have any hands.  
 BELIEVER: Ok, if you don't want to call this thing that I am holding out a "hand," that's just fine with me. But "hand" seems like a perfectly suitable word for this thing, and that's what we've been calling these things throughout the years.

SKEPTIC: But that's not an argument!

BELIEVER: Nope. It's better than an argument. It's a hand!

- **Carrying the Lesson Over to the Matrix Scenario:** The things to which people in the Matrix are responsive in uttering "cat" are not *cats*—not, at least, if, by "cat," we mean specifically *non-virtual* cats—since there are no non-virtual cats in the Matrix (and, we may suppose, cats are extinct outside of the Matrix). What "cat" means, when it is used in the Matrix—the set of things that it refers to—are not (non-virtual) cats but whatever it is in the Matrix to which (virtual) people in the Matrix are responding when they utter "cat." Thus, if we're in the Matrix, and my brother says "I have a cat named Poppy," what he says is true.
- **Putnam's Mistaken Conclusion:** Putnam concludes that, because envatted brains could have no causal contact with the vats in which they're envatted or the brains themselves, all they could think about are virtual vats, and so they couldn't think the true thought about themselves *I'm a brain in a vat*. This is a mistake.
  - We need not have *direct* causal contact with everything in order to be able to think about such things.
    - \* Consider theoretical posits in science, posited to explain the features of the things we do have direct causal contact, but with which we don't have any direct causal contact ourselves.

### 3 The Metaphysics of Virtual Objects

- **Chalmers Five Senses of "Reality":** In his new book, *Reality+*, Chalmers distinguishes five distinct but overlapping ways of thinking about what it is for something to be real, five senses of the term "real."
  - **Existence or Actuality:** Sometimes, when we say that something's "real," we mean that it *exists* as opposed to being merely *fictional* or that it's *actual* as opposed to merely *possible*.
    - \* Presumably, this is the sense of "reality" we mainly have in mind when we say "Santa Clause is not real" or "Bigfoot is real."
  - **Causal Powers/Law-Governedness/Nomological Stability:** At least for physical objects, one crucial criterion of reality is that they have causal powers—they can *do* things, have *effects* on other physical objects—where what they do and what happens is determined by the laws that they're bound by as physical objects.
    - \* A crucial element of this sense of reality is the *stability* of behavior as determined by laws.
      - Consider the virtual objects in the "Construct," the simulation where training programs are loaded. Such objects pop in and out of existence as needed, and this contributes to our sense that they aren't real. On the other hand, the objects in the Matrix are stable in that they obey physical laws without hitch.
  - **Mind-Independence:** Philip K. Dick defined reality as "that which, when you stop believing in it, doesn't go away." The general idea is to tie reality—or, at least, a particularly robust sense of reality—to something's being *mind independent* such that its existence doesn't depend on our believing in it, thinking about it, experiencing it, etc.
    - \* Contrast with Morpheus's proposal that in response to the question "How do you define 'real'?" "If you're talking about what you can feel, what you can smell, what you can taste and see, then 'real' is simply electrical signals interpreted by your brain." Given the criterion of mind-independence, it's not enough that you have experience—there must also be things independent of those experiences that are what they are whether or not you're experiencing them.

- \* *Intersubjectivity* is one relatively weak form of mind-independence—independence of someone’s *particular* mind—but, according to this criterion of reality, full-blown reality requires independence of *everyone’s* mind.
- **Non-Illusoriness:** If something seems to be a certain way, but that’s an illusion—so it isn’t actually that way—it’s not really that way. (I don’t think this is really a separate sense of “real” and is just consequence of the first sense, existence or actuality.)
- **Genuineness:** A wooden duck decoy might actually exist, have causal powers and be bound by the laws of physics, be mind-independent, and not be an illusion. Still, it’s not a *real duck*. That’s because it’s a fake—it’s not genuine. Sometimes, when we say that something’s “real,” this is what we mean.
  - \* From ordinary language philosopher J.L. Austin. Also pursued by O.K. Bouwsma.
- **Chalmers’s Claim:** The virtual objects that exist in the Matrix can be said to be “real” in *all* of these senses.
- **Physical vs. Terminally Physical (my terminology):**
  - **Physical:** For ordinary macroscopic objects, extended in space in persisting through time, casting a shadow, having mass, obeying the laws of Newtonian physics, etc. For microscopic objects, obeying the laws of quantum physics, etc.
  - **Terminally Physical:** Physical, and not constituted by any underlying non-physical processes.
  - **The Status of Virtual Objects:** Virtual objects, such as virtual cats, are *physical* in the sense just defined, but since they’re constituted by underlying *computational* processes, they’re not *terminally* physical.
- **Other Properties Potentially Had by Virtual Objects:**
  - **Practically Significant:** Chalmers does not mention this as a criterion of reality, but it seems clear that one of the things that figures in our conception of virtual objects as real is that they are *practically significant* to the people who spend time in virtual worlds.
    - \* Once again, contrast the Matrix and the Construct.
    - \* We don’t need to consider something as immersive as the Matrix to get this point. Consider “Second Life,” where people have virtual homes with virtual objects that are practically significant to them.
  - **Living:** By the same considerations that we said virtual objects are physical, we can say that virtual cats are *biological* in the sense of being composed of cells, having metabolic processes occur within them, and so on. Insofar as this is so, it seems correct to say that virtual cats are *living*.
  - **Conscious?:** Plausibly, just as virtual cats are clearly living, we might be inclined to say that virtual people (even ones who don’t have external envatted brains) are *conscious*. Chalmers is officially agnostic on this issue. We will come back to it in more detail in Part Three of the course.

## 4 Other Features of the Matrix Scenario in Particular

- **The Creation Hypothesis:** (What we regard as) the physical universe was created by beings outside of that universe.
  - Believed by many who think that God created the universe.
  - Not a skeptical hypothesis.
- **The Mind-Body Hypothesis:** Our mental life is the product of an object that is outside of (what we regard as) the physical universe, which receives its inputs from and sends its outputs to processes in (what we regard as) the physical universe.
  - The key idea of Cartesian dualism.
  - Also not a skeptical hypothesis.