

## Announcements and Such

- *Genesis*: “Watcher of the Skies” from *Foxtrot*
- Sections meet this week **in their permanent location**
  - **Permanent section locations are posted on web**
  - You should have received 2 emails re sections
  - The Thursday 3-4 section meets in **235 Dwinelle**
- Final course roster will be set this week (everyone?)
- First Chunk of Audi is online <122/audi\_1.pdf>
- **No Lecture on Tuesday!**
- Today: Perception III (of III)
  - Brief review, then the final perception readings...

## Review from Last Time I

- The Naive, direct realist has no way to handle cases of illusion & hallucination
- Sense-Datum (SD) theory is an alternative, *indirect* form of realism
- **SD**: objects cause *mental representations*, (sense-data) which we *directly* perceive
- These sense-data can *misrepresent* the external physical objects that cause them
- When such misrepresentation happens, we suffer from *perceptual illusion*
- **SD**: in hallucination, there are still sense-data present, but no object causing them

## Digression on Misrepresentation I

- How is misrepresentation even *possible*, from a causal/realist point of view?
- Fred Dretske has a nice paper on this issue (it’s called “*Misrepresentation*”)
  - He discusses *magnetosomes* — tiny organisms that live in the ocean.
  - In their “normal” environment/niche, the amount of oxygen in the water tends to increase as one goes due north
  - They evolved magnetic-field detectors to help them move toward oxygen-rich
  - A sudden change in their environment caused these systems to *misrepresent*

## Digression on Misrepresentation II

- One could tell a similar story about the perceptual systems of human beings
- Plausibly, they are designed to produce representations (with a certain degree of accuracy) in certain environments
- When subjected to a radically abnormal or unusual environment/scene, one’s perceptual system may *misrepresent*
- Last time, we saw various compelling and persistent visual illusions.
- Perhaps we’re like magnetosomes...
- Our normal environments/niches haven’t presented us with such “weird” scenes

## Review from Last Time II

- The *argument from hallucination* (AFH) is used to motivate SD-theory.
- AFH: genuine & hallucinatory experience are *intrinsically indistinguishable*.  
∴ they must have *the same objects* (SD)
- The AFH is *unsound*:
  - There need not be *any* object of Halluc.
  - *Even if* there is, why should they be *the same type* as in *genuine* perception?
  - And, why should both be *mental/internal*?
- AFH does have intuitive appeal — G&H experiences do “*feel*” like the same types

## Adverbial Theories I

- So, the SD-story faces serious problems.
- But, SD offers a *challenge* to other (putative) accounts of hallucination
- What *else* might we say about hallucinatory experience?
- *Adverbial* theories offer an alternative.
- Instead of postulating a *mediating representation*, an adverbial theorist can simply speak of being “appeared to *F*-ly”
- They can say (*e.g.*) that the cup “appears elliptically” to *S*, without positing something that appears *and is* elliptical.

## Adverbial Theories II

- The adverbial theory is consistent with *direct realism* — we see *objects* (*o*) *directly*, but we see them *in certain ways*.
- Sometimes *o* (*directly*) causes us to see it *as it really is*, and sometimes it does not.
- So, adverbial theories *need not* postulate any *mediating representation* of *o*
- But, how do they handle *hallucination*?
- Recall, theories of appearing (*e.g.*, SD) posit *something* (SD) that *is seen as F*.
- The adverbial theory *need not* do this. It can simply talk about an “*F-like*” visual experience (one having *no object* at all).

## Adverbial Theories III

- Isn't there something lacking in the adverbial story about hallucination?
- After all, Hallucinations can “*feel*” *just like* genuine cases of perception.
- Doesn't the SD-approach provide a *better explanation* of this than the adverbialist?
- Perhaps these questions rest on a presupposition: that hallucination cases *are* cases of *perception*. Is that right?
- An adverbialist could distinguish *perceptual* vs. *sensory* experiences
- Idea: Hallucinations *seem perceptual*, but they are (*merely*) *sensory* experiences.

## Adverbial vs Sense-Datum I

- All perceptual experiences are sensory experiences, and — *normally* — sensory experiences are genuinely perceptual.
- In hallucinations, we might say that we have *non-perceptual sensory experience*.
- This distinction helps the adverbialist to defuse the explanatoriness worries
  - But, isn't it still a bit odd to say that *nothing at all* is seen in a hallucination?
- The adverbial theory has an advantage: *ontological economy/simplicity*.
- Why posit a new entity that we otherwise would not countenance in our ontology?

## Adverbial vs Sense-Datum II

- Moreover, there are serious metaphysical questions to answer concerning SD.
  - What kind of entities *are* sense-data?
  - They're supposed to be "mental", but they're rather odd mental entities
  - Most mental entities can be given a plausible neuro-physiological basis
  - But, SDs have *color* and *shape, etc.*, which are not found in the brain
  - Also, *how many sense-data are there?* Do they change? Is there an objective, scientific way to verify their nature?

## Phenomenalism I

- The theories we've discussed so far are all *realist* theories, which presuppose *external/physical* objects of perception
- Phenomenalism is *anti-realist* — it denies the existence of *mind-independent o's*
- This is a *direct/idealist* view: perceivers *directly* perceive objects, but objects *are constituted by* collections of *sense-data*
- Several questions arise here:
  - What about "unperceived objects"?
  - What about hallucination?
  - What about causal/physical laws?

## Phenomenalism II

- Berkeley said that unperceived objects persist *via* being perceived by *God*.
  - Presumably, the mind of God also imposes the causal/lawlike order
  - Hallucinations differ by "instability" or lacking in *multi-modal* perceptibility
- Mill: objects are "permanent *possibilities* of sensation" (and  $\therefore$  persist unperceived)
  - The laws of nature *are* just laws governing *possible* sensations
  - Hallucinations lack a certain kind of "possibility/expectation profile"

## Phenomenalism III

- Phenomenalism *seems* more *parsimonious* than our previous theories
  - It *seems* to need only perceivers & sense-data (in fact, *metaphysically, only sense-data!*)
  - But, it needs to wheel-in something like “permanent possibilities of experience” to go proxy for “persisting/external *o*’s”
  - Nobody defends this view anymore, but there are interesting lessons to learn:
    - No matter how vividly/stably/multi-modally I experience the colors, shapes, textures, *etc.*, appropriate to a book, it does not follow that I *see* one. It’s possible that I’m just hallucinating one or seeing something else *as* a book.

## Indirect Seeing & Delayed Perception I

- Intuitively, we can see things *indirectly* (e.g., w/*mirrors, microscopes, telescopes, etc.*)
- Some (intuitively) *indirect* seeing will involve “prosthetics”, but others will not
- In order to see in any of these ways, we must have the right kind of *causal dependence* (*functional dependence*)
- In unaided perception, our experiences change *as a function of* changes in the object. This must also happen here.
- We can’t require *perfect correspondence* (this would rule-out *most* perception)
- *How much* correspondence is needed?

## Indirect Seeing & Delayed Perception II

- First: faraway objects, like stars. Do we see such things *as they are* or can we really only see them *as they used to be*?
- What if it exploded eons ago? Intuitively, we’re not seeing it as it is in such cases.
  - SD: we have (and are perceiving) a sense-datum produced by *o as it was*.
  - Adverbial: we are sensing “starly” in the way we would if we received the relevant visual stimuli at the time the star produces them
- But, there is *always* a lag like this. So, can we ever *know* that *o is F by seeing*?
- We’ll return to this key question later...

## Indirect Seeing & Delayed Perception III

- Intuitively, seeing requires responding visually to stimuli that causally affect your eyes. But, does it require *light*?
- Perhaps not. Here’s Audi’s example:
  - Suppose you could step into a pitch-dark room and have the experiences you would have if it were fully lighted. The room would thus look to you just as it would if fully lighted, and you could find any unobscured object by looking around for it. Would this not show that you can see in the dark?
- Not if you’re hallucinating. What if you’re not? Still, we seem to need more than merely getting “visual information” *via some* causal process tracing back to *o*...

## Indirect Seeing & Delayed Perception IV

- We can push this even further by asking whether *eyes* are necessary for sight.
  - Suppose Emma has lost her eyes in an accident, but a camera is later connected to her brain in the way her eyes were. When she points it in a given direction in good light, she has just the visual sensations, say of color and shape, that she would have had by looking with her eyes.
- This sounds like seeing to me. Emma has something *functionally equivalent* to eyes, and this seems enough for seeing.
- Is *even this* necessary? What about “blind sight”, which is documented in the psychological literature? Is that *seeing*?

## Indirect Seeing & Delayed Perception V

- It seems that, at least, there has to be *visual experience* for there to be *seeing*.
- Intuitively, it's not enough for there to be *some* causal process generating knowledge of visual *properties*.
- After all, we can learn about visual properties in various *non-seeing* ways.
- Nonetheless, we can still ask whether there needs to be *conscious awareness* of visual experience in order to have seeing.
- *Blindsighters* are *not consciously aware* of any visual experience, but that doesn't *necessarily* mean they aren't *seeing*.

## Consciousness and Perceptual Experience I

- Several people have asked about whether *S* must be *consciously aware* of aspects of her visual experience in order to *see*.
- *Blindsight* is an extreme & puzzling case.
- But, there are plenty of mundane cases.
- Consider a chameleon (situated in a maximally stealthy scene). Do we *see* it?
- Well, plenty of *visual information about* the chameleon comes into our eyes.
- And, maybe some (or a lot) of that visual information makes its way into “*visual experience*”. But, we're not *aware* of it.

## Consciousness and Perceptual Experience II

- Some (Dretske) would say that we *do* see the chameleon. And, in *a sense*, we do.
- Surely, we don't see the chameleon *as anything* (much less *to be* anything). So, one wonders about this “seeing's *import*.”
- If “information about *o* is *in there*”, but we can't *access* it, what's “seeing's *value*?”
- *Change blindness* is an interesting case.
- In change blindness examples, people are not *aware* of a change to a visual scene — until they *attend* to the change.
- This suggests that *conscious awareness* is an important component of *seeing*.



## The Contents of Visual Experience I

- Some philosophers claim that we can *see* things that are (intuitively) *non-visual*
  - *E.g.*, some have argued that we can *see* one object *causing* another to move.
- It has also been argued that what we *see* depends on our background knowledge
  - *E.g.*, someone who knows English *sees something different* when looking at this page than someone who doesn't
- This raises questions about the *content* of visual experience, and also about the degree of “cognition” involved in *seeing*
- What about *limitations* of perception?

## The Contents of Visual Experience II

- Intuitively, our perceptual systems have certain inherent (physical) *limitations*
- Even Dretske wouldn't want to say that we see (unaided) *ultraviolet* features of *o*
- Also, we don't *hear* (unaided) objects making sounds of super-high frequency
- But, that information, too, is “coming in”
- Similarly, it stands to reason that there are limitations arising from “processing” that happens *beyond* the retina, *etc.*
- Why not think of (some) illusions, and perhaps the chameleon case in *this* way?