and Reality

# Philosophy 101

8.29.13

Appearance and Reality

Galileo on Sensory Qualities

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Galileo or Sensory Qualities

# The Scientific vs. the Manifest Image

the philosopher is confronted...by two pictures of essentially the same order of complexity, each of which purports to be a complete picture of man-in-the-world, and which, after separate scrutiny, he must fuse into one vision. Let me refer to these two perspectives, respectively, as the manifest and the scientific images of man-in-the-world.(Wilfred Sellars, Philosophy and the Scientific Image of Man)

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# The Scientific vs. the Manifest Image

Contrast two ways of thinking about the world:

The Manifest Image: The world of perceptible things as it appears to us in our everyday experience

The Scientific Image: The world of unperceivable things and the laws governing them which we postulate in our scientific theories to explain the world as it appears to us

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### Galileo – "Natural Philosopher"



Figure: Galileo Galilei (February 15, 1564 – January 8, 1642)

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# Galileo's First Argument

Now I say that whenever I conceive any material or corporeal substance, I immediately feel the need to think of it as bounded, and as having this or that shape; as being large or small in relation to other things, and in some specific place at any given time; as being in motion or at rest; as touching or not touching some other body; and as being one in number, or few, or many. From these conditions I cannot separate such a substance by any stretch of my imagination. But that it must be white or red, bitter or sweet, noisy or silent, and of sweet or foul odor, my mind does not feel compelled to bring in as necessary accompaniments (Assayer, 274)

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# Galileo's First Argument

...Hence I think that tastes, odors, colors, and so on are no more than mere names so far as the object in which we place them is concerned, and that they reside only in the consciousness. Hence if the living creature were removed, all these qualities would be wiped away and annihilated. (Assayer, 274)

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### Argument Extraction

- What's the conclusion of the argument?
- What support does the conclusion have?
- What material is essential to the argument and what is extraneous?
- Is the argument valid?
- Is the argument sound?

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### **Argument Extraction**

What's the conclusion of the argument?

Hence I think that tastes, odors, colors, and so on are no more than mere names so far as the object in which we place them is concerned, and that they reside only in the consciousness. Hence if the living creature were removed, all these qualities would be wiped away and annihilated.

- sensory qualities are "no more than mere names" that "reside only in consciousness".
- if there were no conscious beings, no sensory qualities would exist.

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## **Argument Extraction**

What support does the conclusion have?

whenever I conceive any material or corporeal substance. I immediately feel the need to think of it as bounded, and as having this or that shape; as being large or small in relation to other things, and in some specific place at any given time; as being in motion or at rest; as touching or not touching some other body; and as being one in number, or few, or many. From these conditions I cannot separate such a substance by any stretch of my imagination. But that it must be white or red, bitter or sweet, noisy or silent, and of sweet or foul odor, my mind does not feel compelled to bring in as necessary accompaniments

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#### **Argument Extraction**

- What material is essential to the argument and what is extraneous?
- Is the argument valid?
- Is the argument sound?

# The Conceivability Argument

- Thinking of a material object requires thinking of it as having a particular set of qualities (i.e. size, shape, location, motion, etc.)
- 2 Thinking of a material object does not require thinking of it as having specific sensory qualities (e.g. color, taste, smell, sound)
- 3 The only qualities possessed by a material object are those which we must attribute to it in thought
- ④ ∴ Sensory qualities are not qualities of material objects, but rather features of our consciousness of those objects — i.e. "sensations" [from 2, 3]
- ⑤ ∴ If there were no conscious beings there would be no sensory qualities (e.g. colors, tastes, smells, etc.). [from 4]

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# The Conceivability Argument

#### Questions

- What justifies the endorsement of premise (3) The only qualities we need attribute to a material being are those which we must attribute to it in thought?
- What does Galileo mean when he says that we are "required" to think of material beings in a particular way?
  - required for the scientific or causal explanation of why material beings are the way that they are
  - conceptual requirements of our thinking of material beings (e.g. being extended → being located)

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# The Conceivability Argument

#### Galileo's Scientific Rationalism

The fundamental features of the physical world may be determined by examining the fundamental features of our concepts used to think about the world

- the fundamentally explanatory features of the physical world are captured by mathematics
- mathematical knowledge is acquired purely by reason, not by experience

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# The Statue Argument

- 1 Tickling a statue and tickling a human being both involve the same causal forces (i.e. the tickling motion)
- Only the human being feels the tickling motion
- 3 ∴ The tickling feeling is only a sensation in the mind and not a property of the motion (or hand) causing it

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## Relativity Arguments

Since the same bodies are sweet to some men, and bitter to others, it may reasonably be inferred that they are neither sweet nor bitter in their own nature, and absolutely speaking. The modern philosophers, though they are no sceptics...teach that all these qualities are perceptions of our mind, and do not exist in the objects of our senses. (Bayle's Dictionnaire, 1730)

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### Relativity Arguments

- The very same physical object may appear to have one sensory quality (e.g. sweetness) to one person and its opposite to another.
- No physical object can have opposing properties at the same time
- 3 ... Physical objects do not have the sensory qualities we naïvely attribute to them