Philosophy 355: Contemporary Philosophy Fall 2008 Tuesdays and Thursdays, 9am - 10:15am Hamilton College Russell Marcus rmarcus1@hamilton.edu

Class 1 - Introduction and Descartes

I. Introduction

Hand out syllabus. Show website. Hand out presentation assignment. Hand out paper assignment. Show Jim Pryor's website. Hand out course bibliography.

II. Neuroscience and consciousness

The central question in the philosophy of mind is to determine the nature of mind. What is a mind?

The thing that thinks? The brain? The software of the brain?

We will start this term by looking at these three distinct answers.

We will then look specifically at the problem of consciousness.

According to Chalmers, there are (at least) two problems of consciousness.

The easy problem involves determining the functions of the brain.

Neuroscience is essential for solving the easy problem.

For example, if we want to know about how we focus our attention on, say, the tree outside the window, we have to know about perceptual systems, about attention spans and phenomena like staring. An understanding of the brain, and the rest of the body, will be part of any decent scientific or philosophical explanation about attention and focus.

The hard problem involves determining the nature of experience.

The hard problem arises from recognizing that figuring out the neural correlates of consciousness does not suffice for explaining what it is to be conscious.

The fact that consciousness involves experience, rather than function, makes the problem elusive, or even intractable.

The question for us, in the first half of this course, is whether cognitive neuroscience can tell us anything about who we are.

On the one hand, it seems sort of obvious that a complete description of our bodies will suffice to explain who we are.

On the other hand, the nature of conscious awareness seems to resist physical explanation.

If we had physical explanations of consciousness, then, at least in theory, we could construct machines that think (and not just by procreating!)

But the idea that a physical machine could think is uncomfortable, for many of us. Consider:

"Not until a machine can write a sonnet or compose a concerto because of thoughts and emotions felt, and not by the chance fall of symbols, could we agree that machine equals brain, that is, not only write it but know that it had written it. No mechanism could feel (and not merely signal, an easy contrivance) pleasure at its successes, grief when its valves fuse, be warmed by flattery, be made miserable by its mistakes, be charmed by sex, be angry or depressed when it cannot get what it wants. (Turing, "Computing Machinery and Intelligence," *Mind*, 1950; quoting Professor Jefferson's Lister Oration for 1949.)

## III. Dualism

We shall start with the thing that thinks, or thought itself. Consciousness, according to Descartes, is the mark of the mental.

"By the term 'thought', I understand everything which we are aware of as happening within us, in so far as we have awareness of it...." (*Principles* I.9)

And thinking can be further characterized: doubting, understanding, affirming... (MII, AT 28)

As Descartes observes, none of these conscious, thinking processes seem to be physical. It's not the case that no one thinks that consciousness is physical. Take, for example, the eliminative materialists we will discuss this term. They talk as if experience is completely explicable in neural terms.

For instance, both [Paul] and Pat [Churchland] like to speculate about a day when whole chunks of English, especially the bits that constitute folk psychology, are replaced by scientific words that call a thing by its proper name rather than some outworn metaphor. Surely this will happen, they think, and as people learn to speak differently they will learn to experience differently, and sooner or later even their most private introspections will be affected. Already Paul feels pain differently than he used to: when he cuts himself shaving now he feels not "pain" but something more complicated-first the sharp, superficial A-delta-fibre pain, and then, a couple of seconds later, the sickening, deeper feeling of C-fibre pain that lingers. The new words, far from being reductive or dry, have enhanced his sensations, he feels, as an oenophile's complex vocabulary enhances the taste of wine. Paul and Pat, realizing that the revolutionary neuroscience they dream of is still in its infancy, are nonetheless already preparing themselves for this future, making the appropriate adjustments in their everyday conversation. One afternoon recently, Paul says, he was home making dinner when Pat burst in the door, having come straight from a frustrating faculty meeting. "She said, 'Paul, don't speak to me, my serotonin levels have hit bottom, my brain is awash in glucocorticoids, my blood vessels are full of adrenaline, and if it weren't for my endogenous opiates I'd have driven the car into a tree on the way home. My dopamine levels need lifting. Pour me a Chardonnay, and I'll be down in a minute." Paul and Pat have noticed that it is not just they who talk this way-their students now talk of psychopharmacology as comfortably as of food. (From the New Yorker profile of the Churchlands, February 12, 2007; available on the course website.)

Bodies, the Churchlands agree, appear to be mere machines, perhaps mere information processors. So, our choices are these: we can accept that the mind is separate from the body, and that consciousness is not a physical phenomenon; or we can accept that there are no minds, as we traditionally conceive them.

There is no pain, there are stimulations of C-fibers and A-delta-fibers.

People are not exhausted, their brains are awash in glucocorticoids.

The Churchland program has us accepting that pain is c-fiber stimulation.

But, it seems possible, at least, that we could have c-fiber stimulation without having pain.

If we can have c-fiber stimulation without having pain, then pain can not be identical to c-fiber

stimulation, and the physical explanation of consciousness appears doomed.

Unless we accept something like the Churchland's program, we seem to have two distinct substances: a body and a mind.

At least, that was the way it looked to Descartes.

In the Principles, he says that every substance has one essential characteristic.

The mind is essentially a thinking thing, and bodies are essentially extended (Principles I.53).

In fact, our bodies are no different in kind from those of the higher animals.

We have similar sense organs, and brain structures, for example.

In the *Discourse*, Descartes further characterizes the distinction between bodies/machines/animals and minds on the basis of language use and behavioral plasticity (Part V, AT56-7).

If the mind is essentially thinking, and the body is essentially extended, the mind and the body are clearly distinct things.

So, we have Descartes's master argument for dualism:

- 1. I have a clear and distinct understanding of my mind, independent of my body.
- 2. I have a clear and distinct understanding of my body, independent of my mind.
- 3. Whatever I can clearly and distinctly conceive of as separate, can be separated by God, and so are really distinct.
- So, my mind is distinct from my body.

IV. Arnauld's objection - Is our knowledge of the mind complete?

[Note: we skipped this section, and most of the next one, in class. We can return to these topics on Tuesday, if you wish.]

From Fourth Objections (Arnauld, 201-3): Our clear and distinct idea of ourselves might not be complete.

Suppose someone knows for certain that the angle in a semi-circle is a right angle, and hence that the triangle formed by this angle and the diameter of the circle is right-angled. In spite of this, he may doubt, or not yet have grasped for certain, that the square on the hypotenuse is equal to the squares on the other two sides. Indeed he may even deny this if he is misled by some fallacy. But now, if he uses the same argument as that proposed by our illustrious author, he may appear to have confirmation of his false belief, as follows: "I clearly and distinctly perceive," he may say, "that the triangle is right-angled. But I doubt that the square on the hypotenuse is equal to the squares on the other two sides. Therefore it does not belong to the essence of the triangle that the square on its hypotenuse is equal to the squares on the

## other sides."

Even if I deny that the square on the hypotenuse is equal to the square on the other two sides, I still remain sure that the triangle is right-angled, and my mind retains the clear and distinct knowledge that one if its angles is a right angle. I clearly and distinctly understand that this triangle is right-angled, without understanding that the square on the hypotenuse is equal to the squares on the other sides.

I do not see any possible reply here, except that the person in this example does not clearly and distinctly perceive that the triangle is right-angled. But how is my perception of the nature of my mind any clearer than his perception of the nature of the triangle? He is just as certain that the triangle in the semi-circle has one right angle as I am certain that I exist because I am thinking.

Now although the man in the example clearly and distinctly knows that the triangle is right angled, he is wrong in thinking that the aforesaid relationship between the squares on the sides does not belong to the nature of the triangle. Similarly, although I clearly and distinctly know my nature to be something that thinks, may I, too, not perhaps be wrong in thinking that nothing else belongs to my nature apart from the fact that I am a thinking thing? Perhaps the fact that I am an extended thing may also belong to my nature.

## Descartes's Response (224-225, 227):

First of all, though a triangle can perhaps be taken concretely as a substance having a triangular shape, it is certain that the property of having the square on the hypotenuse equal to the squares on the other sides is not a substance. So neither the triangle nor the property can be understood as a complete thing in the way in which mind and body can be so understood. Nor can either item be called a 'thing' in the sense in which I said, "It is enough that I can understand one thing (that is, a complete thing) apart from another," etc. This is clear from the passage which comes next: "Besides I find in myself faculties," etc. I did not say that these faculties were *things*, but carefully distinguished them from things or substances.

Secondly, although we can clearly and distinctly understand that a triangle in a semi-circle is right-angled without being aware that the square on the hypotenuse is equal to the squares on the other two sides, we cannot have a clear understanding of a triangle having the square on its hypotenuse equal to the squares on the other sides without at the same time being aware that it is right-angled. And yet we can clearly and distinctly perceive the mind without the body and the body without the mind.

Thirdly, although it is possible to have a concept of a triangle inscribed in a semi-circle which does not include the fact that the square on the hypotenuse is equal to the squares on the other sides, it is not possible to have a concept of the triangle such that no ratio at all is understood to hold between the square on the hypotenuse and the squares on the other sides. Hence, though we may be unaware of what that ratio is, we cannot say that any given ratio does not hold unless we clearly understand that it does not belong to the triangle; and where the ratio is one of equality, this can never be understood. Yet the concept of body includes nothing at all which belongs to the mind, and the concept of mind includes nothing at all which belongs to the body.

So although I said, "It is enough that I can clearly and distinctly understand one thing apart from another," etc., one cannot go on to argue, "Yet I clearly and distinctly understand that this triangle is right-angled without understanding that the square on the hypotenuse," etc. There are three reasons for this. First, the ratio between the square on the hypotenuse and the squares on the other sides is not a complete thing. Secondly, we do not clearly understand the ratio to be equal except in the case of a rightangled triangle. And thirdly, there is no way in which the triangle can be distinctly understood if the ratio which obtains between the square on the hypotenuse and the squares on the other sides is said not to hold.

It is true that the triangle is intelligible even though we do not think of the ratio which obtains between the square on the hypotenuse and the squares on the other sides. But it is not intelligible that

this ratio should be denied of the triangle. In the case of the mind, by contrast, not only do we understand it to exist without the body, but, what is more, all the attributes which belong to a body can be denied of it. For it is of the nature of substances that they should mutually exclude one another.

## V. On Arnauld and Descartes

Descartes initially presents three arguments. The first is lame, and I skip it.

In the second, Descartes concedes that we can understand that the triangle is right-angled without understanding that the Pythagorean theorem holds, but claims that we can not understand that the Pythagorean theorem holds without understanding that the triangle is right-angled.

This claim appears false.

The Pythagorean theorem is just a general case of a more general theorem, the Law of Cosines. In any triangle, ABC:

 $c^2 = a^2 + b^2 - 2ab \cos C$ 

Let us say that we are given the measurements of three sides of a triangle (e.g. 5, 12, and 13) and told to solve for the measure of angle C.

We could notice that the three terms other terms drop out, leaving cos C=0.

From this, we might derive that C is a right angle.

But, before we do so, we need not recognize that fact.

In his third response, Descartes argues that there must be some relation holding among the sides. Since we do not know what that relationship is, in the situation we are considering, we can not be said to have a clear and distinct understanding of the triangle.

But, what evidence could justify his claim that we have complete knowledge of the mind?

Descartes says that we can know, just by introspection, that the body is inessential to the mind, since I can understand, in some special way, the mind, without the body.

Arnauld's point is that we must wonder if the way that we know the mind is insufficient to rule out an essential link to the body.

Descartes thinks that our knowledge of the mind is complete, so that his argument for the mind/body distinction succeeds.

Arnauld wonders if our knowledge of the mind is incomplete.

Compare:

- 1. I have a clear and distinct understanding of Clark Kent, as someone who can not fly.
- 2. I have a clear and distinct understanding of Superman, as someone who can fly.
- 3. Whatever I can clearly and distinctly conceive of as separate, can be separated by God, and so are really distinct.
- So, Clark Kent is not Superman.

The conclusion of the Superman argument is clearly false.

But, the form of the argument is the same as the form of Descartes' argument.

In the Superman argument, we do not have a complete understanding of Superman or Clark Kent. So, Arnauld is wondering if the same might be true about our understanding of our minds.

Descartes has to respond by finding a difference between the two arguments such that the Superman argument can be unsound while the mind/body argument remains sound.

Late in his objection, Arnauld mentions that we can think of a line in abstract, without attributing breadth or depth to it, even though in the material world every extension has breadth and depth.

Similarly, we might think of the mind as independent of the body, while in reality every mind must have a body.

Arnauld's point is that if our knowledge of the mind as independent of the body is not complete, then Descartes' argument fails.

Lastly, Descartes later provides a fourth response to the triangle argument.

If we assert that something is a right triangle, while deny that the Pythagorean theorem holds of it, then we are contradicting ourselves.

But, if we assert that something is a mind, while denying that it has a body, no contradiction has been made.

Like the third response, this seems apt.

But, consider what someone who thought that the mind is a brain would say.

She would say that we have committed a contradiction, even though we do not know it.

VI. Moving on

On Tuesday, we will look to some of the projects which attempt to make our knowledge of the brain/body more complete, and so account for conscious experience.

Even during Descartes's time, there were materialists, like Hobbes and Gassendi, who denied the existence of a non-physical mind.

But their accounts of thought were far too thin to be plausible.

For example, Hobbes thought that memory was explained in terms of inert particles, stimulated by experience and continuing to move in the brain.

The first significant anti-dualist project belonged to the behaviorists, in the early twentieth century. Behaviorism came in several varieties.

We will look at the psychological behaviorists (Skinner) and the positivists (Hempel).