# Lecture Notes on *Meditation Six*G. J. Mattey February 22, 2011

"They apply to philosophy to furnish them with reasons for the belief of those things which all of mankind have believed, but without giving any reason of it," Thomas Reid, *An Inquiry into the Human Mind*, Chapter 1 (1764).

"There always remains this scandal to philosophy and human reason in general: that we have to accept merely on *faith* the existence of things outside us . . . and that if it occurs to someone to doubt their existence, we have no satisfactory proof with which to oppose him." Immanuel Kant, *Critique of Pure Reason*, second edition Preface, Bxxxix (1787).

The title of Meditation Six (M6) is "The existence of material things, and the real distinction between mind and body." The two main objectives of M6 are to provide a proof that material things exist and to provide a proof that the mind and the body are really distinct from each other.

In the Synopsis, there is a rather lengthy paragraph describing what is going on in M6. The following topics are listed:

- The distinction between the intellect and the imagination.
- The real distinction between the mind and the body.
- The close joining of mind and body so as to make up "a kind of unit."
- A survey "of all the errors which commonly come from the senses," and a prescription for how they can be avoided.
- "All the arguments which enable the existence of material things to be inferred" (AT VII 15, CSM II 11).

The arguments are said to be beneficial not because they prove what no sane person would deny (i.e., that material things exist), but because they are "not as solid or as transparent as the arguments which lead us to the knowledge of our own minds and of God," which are "the most certain and evident of all possible objects of knowledge for the human intellect" (AT VII 16, CSM II 11). This inequity between the two kinds of objects of knowledge is "the one thing that I set myself to prove in these Meditations" (AT VII 16, CSM II 11).

So the ontological task remaining for Descartes is to prove that material things exist alongside himself and God, who have already been proved to exist in M2 and M3, respectively. A first step has already been made, in that Descartes has proved that material things can exist. The reason is that the nature of material things has already been discovered in M5: the attributes of material things are continuous quantities, which in turn are the objects of pure mathematics. The objects of pure mathematics are perceived clearly and distinctly. Moreover, whatever can be perceived clearly and distinctly can be created by God. Thus, it is possible that God has created material things; that is, it is possible that material things exist. "For there is no doubt that God is capable of creating everything that I am capable of perceiving in this manner; and I have never judged that something could not be created by him except on the grounds that there would be a contradiction in my perceiving it distinctly" (AT VII 71, CSM II 50). Presumably, these beliefs are deliverances of the light of nature.

The possibility of the existence of material things does not imply that material things exist in the way that the possibility of the existence of God implies that God exists. Some other reason is needed to allow Descartes to draw the conclusion that material things exist. He states that the conclusion "is also suggested by the faculty of imagination, which I am aware of using when I turn my mind to material things" (AT VII 71, CSM II 50). The suggestion is based on attending to "what imagination is," and the finding is that "it seems to be nothing else but an application of the cognitive faculty to a body which is intimately present to it, and therefore exists" (AT VII 72, CSM II 50). So the argument would be that if the imagination is what it seems to be, then it follows that material things exist.

Because this proof makes an appeal to the imagination, which does not figure into the proofs of the existence of himself or of God, Descartes must explain the nature of the imagination and how it is distinct from the intellect. In M2, he had listed among the things that belong to him the fact that "imagining many things even involuntarily" is something he does (AT VII 28, CSM II 19). Later in M2, Descartes concluded that bodies are not "strictly perceived" by "the faculty of imagination" (AT VII 34, CSM II 22).

#### The Distinction between the Intellect and the Imagination

The act which "I call imagining" involves a mental "seeing" of things "as if they were present before me" (AT VII 72, CSM II 50). Imagining often follows the intellectual thought of a thing, but while the thought of a thing may be clear, the imaginative "seeing" is often obscure. This claim is illustrated by the example of the thought of a chiliagon (regular thousand-sided plane figure), which is perfectly understood but when imagined is only a constructed "confused representation of some figure," which at any rate is assuredly not a chiliagon (AT VII 72, CSM II, 50).

In some cases, the imagination is able to produce an image corresponding to what is understood by the intellect. A case in point is the idea of a pentagon, which results from "applying my mind's eye to its five sides and the area contained within them" (AT VII 72, CSM II 51). The key difference between understanding a pentagon and imagining it is that the latter act "requires a peculiar effort of the mind which is not required for understanding" (AT VII 72-73, CSM II 51). This difference in effort "clearly shows the difference between imagination and pure understanding" (AT VII 73, CSM II 51).

The difference between understanding and imagination goes much deeper than the clarity of their perceptions or the efforts required to produce them. Descartes thinks that unlike the understanding, the power of imagining "is not a necessary constituent of my own essence, that is, of the essence of my mind" (AT VII 73, CSM II 51). The reason the imagination is not essential is that Descartes would remain the same individual that he is even if he had no imagination at all.

This claim is not given any justification, but rather is said to be "undoubtedly" the case. If the imagination is not essential to himself, then "it seems to follow that it depends on something distinct from himself" (AT VII 73, CSM II 51). For this to follow, there would have to be a general principle that what is not essential to a thing does not depend entirely on that thing for its existence, and so the imagination depends at least in part on something other than himself. Such a principle might be

thought to be obvious, due to the light of nature.

#### **Proof of the Existence of Material Things**

The first reason to believe that material things exists is a "probable conjecture," rather than a "necessary inference" (AT VII 73, CSM II 51). The conjecture is an inference to the best explanation of the way in which the imagination and understanding are distinct. The explanation is that Descartes has a body to which he (a mind or thinking thing) is "so joined [to a body] that it can apply itself to contemplate it, as it were, whenever it pleases" (AT VII 73, CSM II 51). If the understanding works by turning itself toward the mind and an idea in it, while the imagination works by turning itself to the body and "looks at something in the body which conforms to an idea in the mind or perceived by the senses," then there is an easy explanation of how the imagination operates, given that bodies exist. And since "no other equally suitable way of explaining imagination comes to mind," Descartes is able to make the probable conjecture that bodies exist. On the other hand, he is not able to make a necessary inference because the premise for this inference would have to be "the distinct idea of corporeal nature which I find in my imagination," and it is possible that he have such an idea while no bodies exist (AT VII 73, CSM II 51).

Now Descartes goes on to consider a second basis of an inference to the existence of bodies. So far, he has compared the ideas of the understanding with what is imagined. He can also consider ideas not originating in the understanding, "colors, sounds, tastes, pain, and so on," which are imagined but not as distinctly as the ideas of the understanding are imagined (AT VII 74, CSM II 51). These things are best perceived by the senses, and it seems that it is from the senses that the imagination received them (aided by memory). Since it is the senses which are the original sources of this material for the understanding, Descartes turns to "sensory perception" itself to see whether it can provide a conclusive reason to believe that material things exist. (Recall from M2, that "sensory perception" is being aware of bodily things as if through the senses, or seeming to hear, feel, and be warmed (AT VII 29, CSM II 19).)

Before entering into the task, Descartes rehearses the beliefs he formerly had, why he thought they were true, and why he came to doubt them. "And finally I will consider what I should now believe about them" (AT VII 72, CSM II 51).

The beliefs Descartes formerly had from "sensory perception" were these:

- He had a body which was part of himself, or even was his whole self.
- His body was situated among other bodies, which he could regard favorably or unfavorably.
- The favorable effects of bodies were judged to be so on the basis of sensations of pleasure.
- The unfavorable effects of bodies were judged to be so on the basis of sensations of pain.
- He had sensations of appetite.
  - o Hunger.
  - o Thirst.
- He had physical propensities toward emotions.

- Cheerfulness
- o Sadness.
- o Anger.
- He had sensations of qualities of bodies other than those of extension, shape and movement, which allowed him to distinguish bodies from one another.
  - Hardness
  - o Heat.
  - o Light.
  - o Colors.
  - o Smell.

Given the fact that he has these ideas of "all these qualities which presented themselves to my thought" and the fact that they are only immediate objects of sensory awareness, "it was not unreasonable for me to think that the items which I was perceiving through the senses were things quite distinct from my thought, namely bodies which produced the ideas" (AT VII 75, CSM II 53).

What made this reasonable was several factors:

- The ideas come without my consent.
  - They must be present to my sense organs.
  - I could not avoid having awareness of them when they are so present.
- The ideas are more lively and vivid (even distinct, in their own way) than other ideas.
  - That I form in meditating.
  - That I find impressed on the memory.

Given these reasons, it "seemed impossible that they should have come from within me; so the only alternative was that they came from other things" (AT VII 75, CSM II 52). (Recall that this is the way Descartes had been thinking prior to meditating.)

A second conclusion Descartes drew was that the things of which he had knowledge through sensory awareness resembled the ideas themselves, since these things were the sole source of this knowledge. And because the ideas of the senses came first, and all his other ideas had sensible elements mixed in with them, he concluded with the scholastics that all that was in his intellect was first in his perception.

These considerations apply to bodies generally. There are further considerations regarding the body which "by some special right I called 'mine'" (AT VII 76, CSM II 52). He believed with "some justification" that this body belonged to him, more than any other body belonged to him.

- I could be separated from other bodies, but not from it.
- I felt all my appetites and emotions in my body and from my body.
- I was aware of painful or pleasurable feelings ("ticklings") in this body but not in others.

There still was, however, a gap in his explanation for his belief that a singular body belonged to him.

For even if Descartes associated the feelings with one body among others, he could not explain why a feeling was associated with an appetite or an emotion. Why should a tickling sensation stimulate delight, or why should a feeling in his stomach stimulate a desire to eat? His only reason was that "nature taught me so" (AT VII 76, CSM II 53). The gap consists in his inability to produce a mechanism that would connect the feeling and the appetite or emotion. (This gap would be filled in his later *Passions of the Soul*.) So he had no arguments to make the connections and only had the belief that he was taught by nature, "for I had already made up my mind that this is how things were" (AT VII 76, CSM II 53).

Having canvassed his former beliefs about bodies and judged the strength of the reasons why he held them, Descartes launches into a reprise of the skeptical problems brought forth in M1.

He first appeals to various experiences that he has had.

- External objects that looked one way from a distance looked differently close-up.
- A tower looks round from a distance but square when nearby.
  - A statue on a pediment looks small from the ground but enormous from close-up.
- Internal feelings falsely represent the state of one's own body.
- One can feel a pain in an amputated limb.

These specific experiences which lead to doubt are then supplemented by two general reasons for undermining his faith in his senses.

The first reason is that he can conceive of every waking sensory experience he has had as being had when he is asleep. He does not believe that his sleeping experiences are due to bodies outside him, and so, "I did not see why I should be any more inclined to believe this of what I think I perceive while awake" (AT VII 77, CSM II 53).

The second reason is that, given that in M1 he is at least pretending not to know the origin of his being in God, he could not "rule out the possibility that my natural constitution made me prone to error even in matters which seems to me most true" (AT VII 77, CSM II 53). In the case of sensory experience, his earlier reasons for confidence in their veracity are easily refuted.

What he was taught by nature should not be trusted, since he "apparently had natural impulses towards many things which reason told me to avoid" (AT VII 77, CSM II 53). This undermines the main source of his belief. As for the two arguments for the existence of bodies, they can be shown to be inconclusive. The first was that I have sensory experiences whether I want to or not. The problem here is that "I might perhaps have a faculty not yet known to me which produced them." (This possibility had been raised in M3, and it was used to the same end.)

This is the nadir of his doubt, and now he begins the rebuilding process, stating that while he should not "heedlessly accept everything I seem to have acquired from the senses," he should at the same time not call everything about it into doubt. Here begins the proof of the existence of material things.

But before the proof begins, Descartes draws a very momentous conclusion in its own right: that he is "really distinct" from his body and "can exist without it" (AT VII 78, CSM II 54). We will deal with this argument in the next section, as its conclusion is not integral to the argument for the existence of material things.

Returning to the knowledge of himself that he had discovered in M2, Descartes states that "I find in myself faculties for certain special modes of thinking, namely imagination and sensory perception" (AT VII 78, CSM II 54). As noted above, he does not regard these faculties as essential to him, but on the other hand, they have to inhere in some intellectual substance, since they both involve in their "essential definition" an "intellectual act." So, there is a merely "modal" distinction between myself and these modes of thinking. Other faculties such as changing positions, taking on various shapes, etc. are also only modally distinct from some substance, but such a substance must be corporeal or extended, and not intellectual. I can clearly and distinctly conceive of extension without conceiving of some intellectual act.

Descartes now turns to the faculty of sensory perception. He recognizes that it is passive, in that it is "a faculty for receiving and recognizing the ideas of sensible objects" (AT VII 79, CSM II 55). But a passive faculty cannot be activated (so to speak) unless it is acted upon by "an active faculty." Such an active faculty might be located in one of several places.

- In me.
- In something else.
  - o A body.
  - o God.
  - Some other creature more noble than a body.

The first possibility is eliminated, on the grounds that:

- The active faculty clearly "presupposes no intellectual act on my part."
- The ideas are produced "without my cooperation and often even against my will" (AT VII 79, CSM II 55).

At this point, to eliminate all but body from the second range of possibilities, Descartes employs the same causal principle used to prove the existence of God in M3. Any faculty which produces a sensory perception in me must be a substance (now known to be distinct from me) "which contains either formally or eminently all the reality which exists objectively in the ideas produced by this faculty" (AT VII 79, CSM II 55). A body contains formally everything found objectively in an idea of sensory perception. So it is capable of being the cause of my idea. God or a creature nobler than body (presumably an angel) would contain eminently (in a higher form) all the reality found in the idea, so they are capable as well of being the cause of my idea.

The possibility of a more eminent cause than body is ruled out on the grounds that if such a substance were the cause, God would be a deceiver. The reason is twofold:

- God has given me no faculty to detect such an eminent cause.
- God "has given me a great propensity to believe that they are produced by corporeal things" (AT VII 80, CSM II 55).

Since God is no deceiver, no more eminent being than a body is the cause of the idea, and so by elimination, a body is the cause. Thus, bodies exist.

#### The Separate Existence of Mind and Body

At AT VII 78, CSM II 54, Descartes gives the argument for the separate existence of mind and body. If I clearly and distinctly understand two things as different from each other, they are distinct, since God could have made them distinct. I understand myself and bodies to be different, so they are distinct. Specifically, I am thinking and non-extended, and bodies are unthinking and extended, though the two may be very closely joined. (The mind/body union is discussed further at AT VII 81, CSM II 56).

In the Objections and Replies, Descartes defends himself against several attacks on the claim that mind and body are distinct. The most salient objection is that he could have overlooked something in the nature of mind which makes it inseparable from the body. Arnauld raises this point in the Fourth Objections. One could know a triangle is right-angled without knowing that the square of the hypotenuse is equal to the square of the sides (AT VII 200, CSM II 141). In response, Descartes shows some specific disanalogies. But his main response is that he has a *complete* knowledge of the mind which excludes its being extended. Complete knowledge of the mind is knowing it as a complete thing (AT VII 221, CSM II 156), and he can know the mind as a complete thing without assuming the existence of body, as was shown in M2. This was not concluded in M2 because God's existence had not yet been established, and so the exaggerated doubt that things in reality do not correspond to our perception of them had not yet been dispelled. [Presumably this would be because he hasn't proved that we do not have a faculty of error.]

At AT VII 81, CSM II 56, Descartes calls it a "teaching of nature" that he is closely joined with a body, as it were "intermingled" with it, and forming a unit with it. (We will refer to this as the "diffusion" model of the relation of the mind to the body.) Descartes contrasts his relation to his body with that of a pilot in a ship. If his mind were like a pilot, he would know only intellectually, as it were at a distance, what is going on in his body, just as a pilot knows by sight what is going on in the ship. He would not be feeling what happens in his body.

At AT VII 85-86, CSM II 59, Descartes contrasts the indivisibility of the mind with the divisibility of bodies. Upon considering the mind as a thinking thing, he understands it to be "something quite single and complete." This leads to a paradox. The whole mind is thought to be united to the whole body, yet when one part of the body is detached, the whole mind remains. The fact that the mind has several faculties does not mean that it can be divided. This reinforces the claim that "the mind is completely different from the body."

Another apparent problem is the fact that (as described below) observation shows that sensations come

from the brain or one part of the brain. The mind does not directly detect the motions which transmit information to the brain: an explanation which Descartes seems to endorse. (This will be called the "single-point-of-contact" model of the mind/body relation.) So in a sense, the mind is in the brain like a pilot is in a ship.

The biggest controversy over the mind/body relation in the Objections and Replies is with Gassendi, who asks many probing questions that seem hard to answer. Both the diffusion model and the single-point-of-contact model have their difficulties. The former seems incompatible with the non-extended nature of the mind. The latter raises the question of where and how interaction can take place.

Descartes does little more than to deny that these are problems. For example, "Even though the mind is united to the whole body, it does not follow that it is extended throughout the body, since it is not in its nature to be extended, but only to think" (AT VII 388-9, CSM II 266).

In the tenth item of the Sixth Objections, the objectors note that they "cannot get it out of their minds that matter could think" (AT VII 440, CSM II 296-7). Descartes traces this inability to judgments made in our early life and our attachment to the body. We attach to corporeal things what belongs to the mind [and so we conclude that bodies can think]. An example of this is an analogy with gravity. There is a lot going on in this analogy, but the key point is that gravity provides a model for the alleged fact that the whole mind is in the whole body. We can treat gravity as being diffused throughout the body, or as being contained at a single point from which a body is hung.

In a letter to Elisabeth, Descartes complains that we conceive of the action of the mind on the body on the model of the action of a body on a body: "So I think that we have hitherto confused the notion of the soul's power to act on the body with the power one body has to act on another" (AT III 667, May 21, 1643, CSMK 219). In the next letter, he makes a concession that looks strong, but perhaps may not be so.

Your Highness observes that it is easier to attribute matter and extension to the soul than to attribute to it the capacity to move and be moved by the body without having such matter and extension. I beg her to feel free to attribute this matter and extension to the soul because that is simply to conceive it as united to the body. And once she has formed a proper conception of this and experienced it in herself, it will be easy for her to consider that the matter she has attributed to the thought is not thought itself, and the extension of this matter is of a different nature from the extension of the thought, because the former has a determinate location, such that it thereby excludes all other bodily extension, which is not the case with the latter. And so Your Highness will easily be able to return to the knowledge of the distinction between the soul and the body in spite of having conceived their union (AT III 694-5, June 28, 1643, CSMK 228).

In this response, Descartes is allowing that 'extension' can be predicated of the soul because this only means that the soul is united to the body. We get some possible elucidation of this position in a letter to Henry More of February 5, 1649 (AT V 267-279, CSMK 360-367). More has noted that God is everywhere, and so is extended. Descartes grants that God (or angels, beings without bodies) can be

said to be "in a sense" extended.

However, nothing in what we commonly take as extended belongs to such a being. We think of an extended being as something that can be imagined. The imagination can distinguish parts which have a determinate size and shape, distinct from one another, and transferable from place to place. What cannot be imagined is that they occupy the same place at the same time. But none of these things apply to God or to our mind, which can be apprehended by the intellect only, and not by the imagination. We cannot conceive of ourselves as being distinguished into parts with determinate sizes and shapes. Yet we can conceive of "the human mind and God and several angels" being in the same place at once. "So we clearly conclude that no incorporeal substance are in any strict sense extended" (AT V 270, CSMK 361).

On the other hand, these incorporeal substances can be conceived of as acting on extended things, and thus as "sorts of powers of forces" which are not extended. The analogy Descartes gives is that of fire being "in white-hot iron without itself being iron" (AT V 270, CSMK 261). But it is only by analogy that things which do not have parts of determinate size and shape within part can be called extended.

In a later letter of April 15, 1649, Descartes responds to More's claim that despite the fact that God and angels are not tangible and impenetrable, they are "still genuinely extended" (CSMK 372, footnote 2). Descartes quotes More as writing, "I say there is another, equally genuine, extension" (AT V 342, CSMK 372). To this Descartes answers, "At last we are in substantial agreement; there only remains a question of terms, whether this second sort of extension is to be called equally genuine" (AT V 342, CSM II 372).

Now Descartes makes an unexpected distinction, between "extension of substance" and "extension of power." An example of the "extension of power" is that of an angel exercising power "now on a greater and now on a lesser part of corporeal substance" (AT V 342, CSMK 372). As for extension of substance, if there were no bodies, there would be no space, and thus God and an angel would not occupy the same space. So they are not extended as substances. To think that they are extended as substances is to let the imagination predominate over the intellect, converting a mere extension of power into an extension of substance. This is a result of requiring that all substances to be imaginable.

Finally, in a letter to More of August, 1649, Descartes repeats the point made in the April letter. To say that God is extended in power is to say that "that power manifests itself, or can manifest itself, in extended being" (AT V 403, CSMK 381). If God's power manifests itself everywhere, it is certain that "God's presence must be everywhere" (AT V 403, CSMK 381). But God is not there in the way an extended thing is there, which presumably means being divisible into parts with determinate sizes and shapes.

It is clear that the "mind-body union" is not a physical union. What other union can it be? One suggestion is that the union is representational in character. The mind has ideas of the body which represent its state in ways in which none of our ideas can represent other bodies. I feel the pain as if in my foot, but I do not feel pain as if in any other body besides my own. This seems to take care of the problem of the whole soul's being in the whole body, and remaining so after the loss of a bodily part.

Here, the phantom limb phenomenon may actually help Descartes's cause. It supports the rejection of the pilot-in-the-ship metaphor. On the converse side, I can will to move any particular part of my body, and it responds. My command is: move the finger. It is addressed to the finger itself, which I can feel.

Both the transmission of pain signals to the brain and the mechanisms of motion are purely physical. It may well be that the causal efficacy of my mind and my body on one another are *supervenient* on the mechanical states of the intervening parts of the body. That is, without the mechanical activity, the causality would not take place.

## **Knowledge of Bodies**

Returning to the thread of M6, we find that after he has proved that bodies exist, Descartes acknowledges that his "sensory grasp" of the bodies is often "very obscure and confused." But at the same time, corporeal things have all the properties that he clearly understands, which are "all those which, viewed in general terms, are comprised within the subject-matter of pure mathematics" (AT VII 80, CSM II 55).

There are other aspects of body "which are either particular (for example that the sun is of such and such a size or shape), or less clearly understood, such as light or sound or pain, and so on" (AT VII 80, CSM II 55). Most of the rest of M6 is devoted to consideration of these particular or unclear aspects of body. There is, to be sure, a "high degree of doubt and uncertainty involved here," but at the same time there is "a sure hope" that these can be understood, given that God is no deceiver, and the consequent impossibility of there being any falsity in my opinions which cannot be corrected by some other faculty supplied by God" (AT VII 80, CSM II 55-56). The reason for this optimism is two-fold. First, nature in general is an ordered system of things created by God, and second that "by my own nature in particular I understand nothing but the totality of things bestowed on me by God" (AT VII 80, CSM II 56). It is the connection to God which is the link that might enable Descartes to understand particular and more obscure things within nature itself and within his nature.

Descartes claims to be taught by his own (God-given) nature that he has a body, and that certain ideas (pain, hunger, thirst) indicate that something is wrong with it. Because ideas have their origin in the nature God gave him, the connection between the ideas and the body has "some truth in this" (AT VII 80, CSM II 56). The next paragraph describes the superiority of the "diffusion" model of the relation of mind and body to the "point-of-contact" model.

Nature also teaches that there are other bodies in his vicinity, some of which are to be sought out, and others of which are to be avoided. From the variety of sensations (and despite the fact that sensations are not exact likenesses) Descartes infers that there are many differences in bodies. From the agreeableness and disagreeableness of some sensations, he is taught by nature of the helpfulness and harmfulness to the mind-body union ("whole self") of various bodies.

What he has been taught by nature must be contrasted with what is acquired from "a habit of making

ill-considered judgments" (AT VII 82, CSM II 56). Examples are that there is empty space (because nothing there stimulates his senses) and that some of his ideas bear a resemblance to certain qualities (as in the case of his beliefs about heat), and judgments about distant objects.

The distinction between what is "taught by nature" from ill-considered judgments requires a clarification of what is "taught by nature." Descartes distinguishes between what is taught via the natural light (e.g., that what is done cannot be undone), and what is taught by "his nature" bestowed by God, which teaches him to seek what induces pleasure and avoid what induces pain. He is not talking about the natural light here, nor is he concerned about such teachings of nature such as that bodies tend to move downwards. "My sole concern here is with what God has bestowed on me as a combination of mind and body," which is his nature, "in this limited sense" (AT VII 82, CSM II 57).

We tend to think that we are taught certain things by nature, but often these turn out to be preconceived opinions from childhood. I have no natural inclination to believe that a star is no bigger than a flame, for example. All that is perceived is the effect of the two on my eyes. The other two examples are that there is something in a flame that resembles pain, and that there is a void where nothing is perceived. There is no reason to believe these things, but only to believe the more generic claims that there is something in the cause that produces the specific effect. All these cases involve "misusing the order of nature," which has become habitual (AT VII 83, CSM II 57).

The proper (as opposed to misguided) purpose of sensory perception is to inform one as to what is helpful or harmful to the composite. Such information then is "sufficiently" clear and distinct, though not absolutely so. We abuse sensory perceptions when we regard them as "reliable touchstones for judgments about the *essential nature* of bodies outside us," since what they provide is "only very obscure information" (AT VII 83, CSM II 58).

Descartes acknowledges that there is a problem with his account of what he is "taught by nature." In some cases, he is taught wrong. This problem is in addition to the one he has solved in M4, regarding how judgments are false in spite of the goodness of God.

Descartes is "taught by nature" that certain objects are to be pursued or avoided. In some cases, such as when a sweet food is laced with poison, there is no problem, since we are lured by the sweetness of the food, and not by the presence of the poison, "which his nature knows nothing about" (AT VII 84, CSM II 58). The problem here is that we are not omniscient and so cannot detect the poison.

"And yet it is not unusual for us to go wrong even in cases where nature does urge us towards something" (AT VII 84, CSM II 58). A paradigm case is one in which one has dropsy (edema, tissue swelling due to an accumulation of excess interstitial fluid), and one is thirsty but should not drink. Even though he is sick, he should not be deceived by God by being inclined to do what is harmful to him. A sick body still has its nature, in Descartes's sense, yet it seems that this nature is deceptive. (This is contrasted with the sense of "nature" in which a defective thing is "departing from its nature." The latter notion exists only in thought, through relative comparisons of well-functioning of states, as with a well-running clock and a defective clock. But *qua* natural object, a defective clock still functions according to the laws of nature.) Thus, to say that the body with dropsy has a disordered

nature is to use an extraneous label that depends on my thought of how the body should behave. But regarding the composite of mind and body, the claim that drinking would be beneficial would be a true error: "namely that it is thirsty at a time when drink is going to cause it harm" (AT VII 85, CSM II 59).

The origin of the problem is to be traced to the divisibility of the body, as opposed to the indivisibility of the mind. This feature of the mind has already been discussed. Descartes make the "observation" that the mind gets all its information about the body from the brain or some part of it. A given state of the brain sends the same signal to the mind no matter what the state of the rest of the body is, as is established by "countless observations." This allows for the same brain-state to be produced by the nerves in different ways. A motion occurring anywhere along a nerve can produce the same state, just as the same tug at the end of a cord can be produced by pulling it at any point away from the end.

The final "observation" is that only one unique sensation in the mind is produced by a given state of the brain. Theoretically, a number of different sensations might be produced by the brain-state, but only one of them will be the best, that is one which "is most especially and most frequently conducive to the preservation of the healthy man." The sensations naturally generated in our minds are seen by experience to be in fact the best, according to this criterion. So, Descartes concludes, everything in them "testifies to the power and goodness of God" (AT VII 87-8, CSM II 60). His problem is solved.

An example is a pain signal "as occurring from the foot" is received from a violent agitation of the foot. When it is received, the mind is stimulated "to do its best to get rid of the cause of the pain, which it takes to be harmful to the foot" (AT VII 88, CSM II 60).

God could have made us in a different way, perhaps making us so as to be aware by the sensation of the motion of the foot itself. But it is better that we perceive pain as having come from the foot, for this stimulates us to action. "There is nothing else which would have been so conducive to the continued well-being of the body" (AT VII 88, CSM II 61). This is brought out in the example of thirst. It is the sensation of thirst which is the most useful thing, because it indicates to us the need to drink in order to stay healthy.

So, given that the body is composite, and that every motion in the brain produces the same sensation in the mind, it is natural that the senses will be deceptive. It is better that the sensations mislead some time than that they do all of the time.

Because I know that the senses give mostly accurate reports about the body, I can correct the errors to which my nature is liable. I can use more than one sense, my memory, and my intellect to correct errors. The latter is especially relevant because it now understands the cause of error. "Accordingly, I should not have any further fears about the falsity of what my senses tell me every day" (AT VII 89, CSM II 61).

### **Dreaming Doubt**

As a result of his knowledge of the causes of his errors, "the exaggerated doubts of the last few days should be dismissed as laughable" (AT VII 89, CSM II 91). The "principal reason for doubt" is "my

inability to distinguish between being asleep and being awake" (AT VII 89, CSM II 91). Descartes now "notices" a great difference between the two, in that there is no linkage in memory of dreams as there is in waking life. When I am awake, if an anomaly occurs, such as someone suddenly appearing and disappearing immediately, "so that I could not see where he had come from or where he had gone to," I would judge it to be "a ghost, or a vision created in my brain" like those found in my sleep (AT VII 90, CSM II 62). Hobbes objects that a dreamer may dream that he makes a connection between the content of his dreams and the rest of his life (AT VII 195, CSM II 137). In that case, the dreamer would not be able to tell that he is dreaming. Descartes's response is that this alleged connection will be exposed as mistaken when the dreamer awakes, because "a dreamer cannot really connect his dreams with the ideas of past events, though he may dream that he does" (AT VII 195, CSM II 137).

When I (really) see distinctly where and when things come from and go, and I can make a seamless connection between them and the rest of my life, I am quite certain that I am awake when I encounter them. I can banish even the slightest doubt if I use all my resources (senses, memory, intellect) to check, and I get no conflicting information from them. I am completely free from error in that God is no deceiver. (This last point is emphasized in the reply to Hobbes at AT VII 196, CSM II 137, where Descartes says that an atheist would not know that he is awake.)

[Note on citations. Citations from Descartes are given first with the volume and page from the Adam and Tannery edition of Descartes's works (*Œuvres*), which are given in the margins of the Cottingham, Stoothoff and Murdoch translations, *The Philosophical Writings of Descartes*. The citation 'CSM' with volume and page numbers are to the translation. 'CSMK' makes reference to the third volume, of which Anthony Kenny was a co-editor. Thanks to Chuck Watson for pointing out some errors in the original version of these notes.]