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THE INTROSPECTIVE EYE: INTROSPECTION AS OBSERVATION

City University of New York

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THE INTROSPECTIVE EYE:
INTROSPECTION AS OBSERVATION

by
KAILA OBSTFELD

A dissertation submitted to the Graduate
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CHAPTER I

LOCKE'S CAUSAL THEORY OF REFLECTION

It is commonly supposed that were the man in the street ever to introspect he would most likely do it on those occasions when he is impelled to determine the true state of his feelings. For example, is his inability to get along with his boss actually due to personal antipathy or could it be jealousy of her meteoric rise in the firm? Presumably the answer will be found via the examination of his feelings, an examination consisting of introspection, of some sort of "looking within." Besides descriptions of situations likely to lead to introspection, this notion of "looking within" vague and undetailed as it is, is about all we can expect from the everyday concept of introspection. We are interested in getting a better grip on what sort of looking within is involved in introspection. It cannot be a literal looking for one's optical system is not needed. What is suggested is that it is more or less along the lines of looking that introspection is to be understood or, in other words, that our understanding of introspection will be enhanced by modelling it on observation insofar as that can be done.

Introduction

The basic problem to be discussed in this essay is to determine whether introspection is a variety of observation. We will be investigating whether there are any features of the concepts of introspection or observation which militate against subsuming the former under the latter. The investigation will proceed by way of the presentation of a theory of introspection conceived as a type of observation followed by a defense of this theory against criticism.

The first step towards a solution of this problem consists of an examination of Locke's theory of introspection. Locke's account has been chosen in part because of the seminal role his theories have played in the development of modern psychology and in part because of his explicit portrayal of introspection as a form of observation. For what Locke does is model introspection upon sensation -- a paradigm case of observation. As the parallels that Locke draws between introspection and sensation are traced, a feature will come to light which has not been fully appreciated by other commentators on Locke. Introspection will be found to have causal characteristics. And it will be shown that it is only within the context of introspection's causal role that we gain a proper perspective on various alternative accounts of Locke's view of introspection. In the chapters which follow, the defense of an observation model of introspection will be strengthened once the failure to acknowledge

introspection's causal features is repaired.

Once Locke's notion of introspection is explained, we will go on to investigate the seriousness of the discrepancies obtaining between introspection and observation. The second chapter is devoted to an investigation of introspection's supposed failure to produce descriptions of the mental on par with the descriptions of physical phenomena yielded by sensation. The failure will be traced to the supposed conflict between characterizing mental phenomena as private (i.e. inaccessible) and referring to such phenomena, a conflict which is expressed by Wittgenstein's private language argument. Efforts will be made to reinstate descriptions of the mental. These efforts will involve abandoning privacy (as inaccessibility) as characteristic of the mental in favor of consciousness and incorporating behavior into the concept of the mental. The causal relations in which mental phenomena participate will be employed to cement consciousness and behavior into a unified concept of the mental.

As a result of adopting consciousness as distinctive of mental phenomena, a host of other problems with regarding introspection as a variety of sense observation arises. In the process of examining these difficulties in chapter 3, the major obstacle in the way of construing introspection as analogous to sense observation will be identified with introspection's problematic status as a two-term relation. The

various reasons for rejecting the presumption of the existence of two entities in introspection (as there are two entities involved in sense observation) will be seen to derive from designating consciousness as necessary for the mental.

The last step in our investigation involves circumventing the difficulties raised in the third chapter. Compromise will be the order of the day. The commitment to observation as a two-term relationship will be relaxed by adopting a special form of sense observation -- kinesthesia -- proprioception -- as our exemplary model. Moreover, ordinary introspection's claim to be a form of observation will be relinquished. In its stead, we will turn to a more technical version of introspection -- the concept of which will be garnered from the experimental uses of introspection -- as a suitable adherent of a kinesthetic-proprioceptive model of observation. The adaptability of introspection to the requirements of a kinesthetic-proprioceptive model of observation will be examined and the causal features of the former will be used to reinforce positive results from the examination.

1. Locke's Notion of Sensation

Clearly, the choice of theory to explain how introspection may be modeled on observation will be crucial in determining the viability of a concept of introspection regarded as a species of observation. Some theories may be less conducive to a favorable outcome than others. However,

the selection of Locke's account of introspection as the representative theory has been determined less by considerations of success than by the peculiar historical position held by Locke's philosophy. Locke, along with Descartes and Leibniz, has been acknowledged as having a "seminal influence" upon the development of modern psychology. Indeed, Locke was the "spiritual head" of the British school of empiricism and associationism which "...had a great effect upon German act psychology, upon systematic British psychology, and upon James in America, but it is most peculiarly the philosophical parent of experimental psychology."¹ Given the special historical position of Locke's views, his thoughts on introspection are of particular interest. There is every reason to suppose that Locke's notion of introspection served as a springboard for subsequent attempts to understand introspection in terms of observation.

Locke does not use the term "introspection." Instead he uses "reflection." That Locke's "reflection" is equivalent to "introspection" becomes evident when we realize that Locke's use of "reflection" was part of a tradition whereby "this function (of reflection) was conceived metaphorically as a turning back of the mind upon itself, as distinguished from its direct action in apprehending external things."² Locke,

¹Edwin G. Boring, A History of Experimental Psychology, 2nd ed. (New York: Appleton-Century-Crofts, 1950), Chapter IX especially pp. 168-169.

²James Gibson, Locke's Theory of Knowledge and Its Historical Relations (Cambridge: At the University Press, 1968), p. 56. Subsequent references to this text will be given by "Gibson, 1968."

then, was not original in his use of an observational model of introspection. The importance of his contribution lies in the influence it had.

Before its adoption as a method of investigation by experimental psychology, introspection "...was employed by philosophers long before psychology made extensive use of it. When the great empiricists and associationists of the British school concentrated on the study of the human mind, they used introspection and showed how it could be employed to the advantage of psychology. Scientific psychology, born in this philosophical tradition, inherited the practice of introspection."³ The influence of Locke's account of reflection may perhaps be traced in the very use of the term "introspection." That "introspection" signifies "looking within" constitutes *prima facie* evidence that our concept of introspection is that of a type of observation. Moreover, when criticisms are directed against introspection, it is generally against introspection understood as a form of observation. And, quite often, the criticism is leveled against Locke's specific account of introspection (or what the critic takes to be Locke's account of introspection). For example, when Ryle sets out to show that introspection, as well as consciousness, is wrongly conceived because it has no objects, it is Locke's

³Henryk Misiak, History of Psychology (New York: Grune and Stratton, 1966), pp. 46-47.

view of introspection which is cited as a prime offender:

This model was employed again by Locke when he described the deliberate observational scrutiny which a mind can from time to time turn upon its current states and processes. He called this supposed inner perception 'reflexion' (our 'introspection'), borrowing the word 'reflexion' from the familiar optical phenomenon of the reflection of faces in mirrors. The mind can 'see' or 'look at' its own operations in the 'light' given off by themselves.⁴

Or, to take another instance, when structural psychologists were urging the adoption of a scientific introspection in place of the inaccurate and uncontrolled philosophical introspection, it was Locke's legacy of reflection that they had in mind to replace.⁵

Locke's views on reflection may or may not be the best way to further the cause of understanding introspection in terms of observation, but it seems to be the one we've inherited. Besides, Locke's account has the distinct advantage of yielding more detail (relatively speaking) concerning introspection as a form of observation than other accounts. And it is due to Locke's analogy between reflection and sensation that this benefit accrues to his theory of reflection.

⁴Gilbert Ryle, The Concept of Mind (New York: Barnes and Noble, 1967), p. 159.

⁵Echoes of Locke's "reflection" may be found in the remark that "there is a great deal of error in the introspection of the precritical, pre-experimental period; but the error is due to the fact that the introspection was not a direct observation, but essentially a reflective interpretation in terms of some philosophical system" by E.B. Titchener, "Prolegomena to a Study of Introspection," American Journal of Psychology, 23 (1912): 435.

Locke's stated object in An Essay Concerning Human Understanding is to provide an account of knowledge. In the first book he goes to great lengths to show how unreasonable it is to suppose that people are born into the world burdened with knowledge. Instead, he claims that human knowledge is the fruit of our experience of the world. The second book of the Essay is an investigation of experience. "Reflection" crops up in the context of an inquiry into how we are able to have experiences.

When reflection is first mentioned, it is in the same breath as sensation. The first bit of information which Locke grants us about reflection is that it shares the same role that sensation plays in the acquisition of knowledge. From certain preliminary remarks --- viz.,

Our observation, employed either about external sensible objects, or about the internal operations of our minds perceived and reflected on by ourselves, is that which supplies our understanding with all the materials of thinking. These two are the fountains, from whence all the ideas we have, or can naturally have, do spring⁶

and

because these very operations of the mind about ideas received from sensation are themselves, when reflected on, another source of our knowledge, which I call reflection, and therefore fit to be considered in this place after the simple ideas of sensation (II, 11, 14) --

we are made aware that this role is that of a source of

⁶John Locke, An Essay Concerning Human Understanding, ed. John W. Yolton, 2 Vols. (London: J.M. Dent & Sons, New York; Dutton, Everyman's Library, 1971) Book II, Chapter 1, section 2. Hereafter, references to Locke's Essay will be given by book, chapter, section.

experience (and hence, of knowledge).

The primary object of this essay is to explore what it is that reflection, conceived in terms of fulfilling a certain role, amounts to. Whatever the final picture of reflection will be, considerations of the concept of sensation will pervade it. Thus, our approach to "reflection" will be dictated by the way in which Locke has introduced that concept: "Reflection" will be contrasted with "sensation." Just as important as the parallels which may be drawn between these two concepts, will be those respects whereby "sensation" and "reflection" diverge from one another. This picture of "reflection" will not only be based on Locke's explicit comments about reflection and about the relationship between reflection and sensation, it will further rely on that information ostensibly concerning sensation alone, which we may reasonably judge (from hints thrown out by Locke) also to be illuminating for the concept of reflection.

Sources come in many guises: let's use Locke's symbol of a fountain (for both reflection and sensation) to illustrate the particular ambiguities hovering about Locke's concept of source. Three elements may be isolated which severally or in combination can lay claim to be entitled a fountain. We have the water running underground; the mechanical contrivance which produces the jets of water; and lastly, the jets of water themselves. It will be argued that, for Locke, reflection is like a fountain primarily in the sense of a

mechanical contrivance. A fountain, in this way of speaking, is a device which causally interacts -- via laws of pressure, gravity and what have you -- with the underground stream to produce an upsurge of water. The implication is that reflection, too, is a sort of causal mechanism.

There is no disagreement over reflection's role as one of the sources of ideas and, ultimately, of knowledge in Locke's Essay. When we comb the literature for further details on how Locke has reflection fulfill its function, we find the accounts differ considerably. Locke defines "reflection" as "...that notice which the mind takes of its own operations, and the manner of them, by reason whereof there comes to be ideas of these operations in the understanding" (II, 1, 4). For Aaron, reflection, by this definition, merely amounts to a species of awareness or consciousness. What distinguishes reflection from awareness in general is its objects: reflection is our awareness of our own mind's operations.⁷ Gibson, on the other hand, finds that Locke has defined reflection in terms of attention. Since Gibson takes Locke to hold that the performance of any operation of the mind entails that we be aware of what we are doing, all that is left for the notice which constitutes reflection to do is to fill in the details of our activity. Thus, "a special act of 'notice' or attention is,

⁷R. I. Aaron, John Locke (London: Oxford University Press, 1955), pp. 130-133. References to this text will be given by "Aaron, 1955."

however, required to enable us to form definite ideas of specific operations, and it is this which constitutes reflection" (Gibson, 1968, p. 57).

The above accounts focus on various important features of Locke's notion of reflection. Nevertheless, they do the notion less than justice inasmuch as they fail to acknowledge the causal role played by reflection in Locke's epistemology. These accounts cannot be fully appreciated except against the background of reflection's causal features. In what follows, we will show how Locke's account of reflection lends itself to the interpretation of reflection's role as a causal one. Nowhere does Locke explicitly identify reflection as a causal mechanism. In the following pages, it will be shown that reflection's causal nature may be reasonably deduced from what Locke does actually say in the Essay. Then, some suggestions will be offered concerning the relation between reflection as a causal process and reflection as awareness and attention, respectively.

As previously mentioned, Locke insists that all our knowledge derives from our experiences. And, all our experiences come in the form of ideas. "Knowledge then seems to (Locke) to be nothing but the perception of the connexion and agreement, or disagreement and repugnancy of any of our ideas" (IV, 1, 2).

Ideas are evidently crucial to Locke's epistemology. We would do well at this point to digress for a moment to explore some of the ambiguities surrounding Locke's use of the term "idea."

Locke mostly uses "idea" in either of two ways.⁸ Sometimes, Locke seems to understand by "ideas" actual (though mental) existents, "Doppelgänger," as it were, of things in the material world (and, possibly, the mental world, too). This notion of idea is made explicit in Locke's comment that "...since the things the mind contemplates are none of them, besides itself, present to the understanding, it is necessary that something else, as a sign or representation of the thing it considers, should be present to it; and these are ideas" (IV, 21, 4).

At other times, the way Locke deals with ideas is to treat them as concepts. "Idea," he claims, "...serves best to stand for whatever is the object of the understanding..." (I, 1, 8). To have an idea of something is to understand what that thing is.

To have an idea...is to know what a thing is; to use Locke's own cases, to have the ideas of whiteness, hardness, man, army, etc. is to know what whiteness is (or what it is for a thing to be white), what hardness is (or what it is for a thing to be hard), what a man is (or what it is for something to be a man), and what an army is (or what it is for something to be an army).⁹

"Idea" may be used just to signify some mental existent. At times, Locke's use of "idea" will only make

⁸Locke also uses "idea" to apply to the mind's operations, intentional objects and primary qualities. We will not discuss these uses in an effort to avoid entanglement with problems peripheral to our understanding of reflection.

⁹Charles Landesman, "Locke's Theory of Meaning," Journal of the History of Philosophy, 14 (1976): 28.

sense if regarded as a concept. Often enough, though, Locke's use of "idea" will comprehend both uses. However ideas may be understood -- whether as mental entities and/or as concepts -- the notions of sensation and reflection deepen our understanding of ideas insofar as they answer the question, "what causes us to have ideas?"

Let us first see how "sensation" answers the above question. There are five parts of the body designated by Locke as the "senses": the eyes, ears, nose and palate and those bodily parts involved in tactile contacts. The circumstances under which sensation occurs is the interaction of one or more of our senses with an external, material body. What the senses do is "convey" (simple) ideas (of the material body) to the mind. "And thus we come by these ideas we have of yellow, white, heat, cold, soft, hard, bitter, sweet, and all those which we call sensible qualities..." (II, 1, 3).

A causal interaction is one where, for instance, "...several particulars, both qualities and substances, begin to exist, and that they receive this their existence from the due application and operation of some other being" (emphasis added) (II, 26, 1). In fleshing out Locke's notion of the senses "conveying" ideas, it becomes clear that sensation is a causal interaction. Locke explicitly identifies external bodies as causes which have simple ideas as effects when he concedes that "positive" ideas -- ideas which are of

some quality (e.g. , the idea of black) -- may arise from the absence of some property in the material body (e.g., the absence of reflecting light):

thus the ideas of heat and cold, light and darkness, white and black, motion and rest, are equally clear and positive ideas in the mind, though perhaps some of the causes which produce them are barely privations in those subjects from whence our senses derive those ideas (II, 7, 2).

Furthermore, Locke uses the cause and effect status of material bodies and simple ideas, respectively, in his explanation of the foolhardiness of assuming that simple ideas accurately resemble the material objects which cause them. "The bulk, figure, number, situation, and motion or rest ..." (II, 8, 23) -- the so-called "primary qualities" -- are qualities which, Locke argues, actually exist in material bodies. We may be confident that the ideas caused by these qualities are exactly similar to their cause.¹⁰ Secondary qualities -- colors, odors, sounds, scents, etc. -- on the other hand, are not per se present in material bodies. Rather, they are attributed to a material body only when that material body contains some appropriate configuration of primary qualities which will, upon the association of that body with the proper sense organ, introduce a change in us; to wit, it will produce in us an idea of some secondary quality. The secondary qualities of objects boil down to powers, i.e. the power of a material body to produce ideas

¹⁰Whether this confidence is warranted or not and what the resemblance between ideas of primary qualities and primary qualities amounts to are issues which will have to remain unresolved in this discussion.

of secondary qualities in us by virtue of the primary qualities that it possesses. Given this analysis of secondary qualities, we cannot suppose ideas of secondary qualities to resemble actual qualities of material bodies.

Primary qualities and powers dwell within matter or material substance. Matter is unknown to us. All we can infer concerning material substance is that it is the "residence" or "underlying support" of qualities and powers. Matter becomes a cause in the sense that the powers it contains are activated to produce effects (as happens when sensation occurs).¹¹

Finally, even if Locke hadn't explicitly labeled the participants in sensation "cause" and "effect," the causal nature of sensation would still be immediately apparent. What Locke's detailed explanation of how the senses convey ideas boils down to is an account of the transference of motion (or of "impulses"). The transference of motion is commonly used as a paradigm case of causal interaction. And the transference of motion, according to Locke, is the only conceivable way to understand the interaction of the senses with external material bodies (II, 8, 11). The movements of material bodies induce movement in the senses. Motion in sense organs and nerves is transmitted to the brain whereupon the ideas produced are noted by the mind (II, 3, 1

¹¹"Power being the source from whence all action proceeds, the substances wherein these powers are, when they exert this power into act, are called causes..." (II, 22, 11).

and II, 9, 3). At this point, we should beware of assuming that the stage at which ideas are noted by the mind necessarily constitutes a discontinuity in the causal process of sensation. To account for the failure of sensation despite the presence of appropriate causal precedents in our bodies and the environment, Locke locates the breakdown in the mechanical process of imprinting. He claims that the absence of sensation is due to the failure of the idea to be imprinted on the mind (II, 9, 4). Even if "imprinting" functions only as a metaphor for the mind's notice, it is significant that it is a mechanical metaphor which is employed. As the motion varies, so are different ideas produced. By means of this last principle, Locke can make sense of the production of positive ideas from "privative causes" (II, 8, 4).

The ideas of sensation are "simple," i.e., each idea is homogeneous and unanalyzable. The mind is passive with respect to the simple ideas of sensation. It cannot refuse to take notice of them once they are produced (II, 1, 25). Furthermore, the mind can neither change nor create these ideas independently of the process of sensation. Given the causal nexus binding the mind with simple ideas, the passivity of the mind regarding its simple ideas is only to be expected. It is by means of this passivity that the necessity inherent in a causal production of simple ideas becomes manifest.¹²

¹²"...Wherever thought is wholly wanting or the power to act or forbear according to the direction of thought, there necessity takes place" (II, 21, 13).

Simple ideas are the "atoms," so to speak, with which all our knowledge is built. What this means is that the mind may be said to be active with respect to simple ideas inasmuch as it compares, repeats or combines them into "complex ideas." The mind may also act on these simple ideas by contemplating them, reasoning with them, remembering them, etc. The latter are the actions or "operations" of the mind. The operations of the mind on simple ideas of sensation initially provide the occasions for reflection to occur.

It may be thought by some that, in expending so much effort to exhibit the causal nature of sensation, we are belaboring the obvious. Another end, however, is being served thereby. We are displaying the various locutions that Locke employs to indicate causality, e.g. "power" signifies the ability of something to introduce change in something else, "substance" indicates a cause which is only known by means of its effects, and so on. As we shall presently see, these concepts will be important for analyzing reflection in terms of causality. With this in mind, we are ready for the unfolding of the second part of our story: the role of reflection in the acquisition of knowledge.

2. Locke's Notion of Reflection

Reflection is very much like sensation. They are both senses. By denominating reflection as a sense, Locke is probably indicating that reflection (like sensation) is also a causal process (besides being the product of a causal process).

The reason Locke gives for qualifying his assimilation of reflection to sensation is the difference between their respective domains. Sensation embraces the external world; reflection involves the internal world. In other words, the initial causes in the process of reflection exist within each of us. The originating causes are our mind's operations, or, "...the operations of our own minds within us, as it is employed about the ideas it has got..." (II, 1, 4). Thus, reflection "...might properly enough be called internal sense" (II, 1, 4). Locke uses the metaphor of vision to express this insight into reflection. However, reflection is not just like seeing, it is like seeing one-self (I, 1, 1 and II, 1, 8).

Examples of the mind's operations "...are perception, thinking, doubting, believing, reasoning, willing, and all the different actings of our own minds..." (II, 1, 4). We don't need reflection to perform these operations. Reflection is necessary for us to become aware of them, though.

The mind's operations directly work with ideas. Before reflection, what happens to ideas provides the only clue to the mind's operations. The mind itself is never evident. Its (the mind's) sole contribution to our understanding of the mind's operations is to be the repository, the support, for these operations of the mind and ideas. In other words, mind is substance. It is, therefore, as unknowable as material

substance (II, 23, 5 and 23). Were it not for the intervention of reflection, the mind's operations would also be unknown. When discussing the two primary activities of the mind -- thinking and volition -- Locke assigns them to the mental faculties of the understanding and the will, respectively. This classification does not count as an explanation. Faculties are nothing but powers (II, 6, 2). It will be remembered that the presence of powers is inferred from changes in simple ideas of sensation.¹³ Talk about the faculty for some action ends up as being little more than talking about that which gives rise to such ideas.¹⁴ We do not mean to imply that the mind's operations are necessarily reducible to a series of ideas. It is just that, without reflection, such ideas are all that we apprehend.

It's as though an unreflected operation of the mind were a slide show on writing where all that's shown are the changes in the formation of letters and words. Each slide depicts another stage in the progress of that formation. The agent, even the hand guiding the writing implement, remains

¹³Actually, we need not limit ourselves to simple ideas. Changes in complex ideas, constructed from the simple ideas of sensation, can also perform this service of indicating the presence of powers. But, this is by the way.

¹⁴"...the will or power of volition is conversant about nothing but that particular determination of the mind whereby, barely by a thought, the mind endeavours to give rise, continuation, or stop to any action...in its power (II, 21, 30).

invisible. While these visual changes are part of the activity of writing, they're not the whole. If these changes were all we had to go on, we couldn't be sure that the activity behind those changes was definitely writing. For instance, consider the finite number series,

1, 2, 4, 8.

As it stands, it does not pinpoint the activity that generated those numbers. The activity might have been that of doubling; equally well, it might have been addition. We cannot dismiss the possibility of there being some activity other than writing which accounts for the results depicted in the slides.

This same problem can crop up for the mind's operations unsubjected to reflection. Let us turn our attention to the activity of comparing. As understood by Locke,

the comparing them one with another, in respect of extent, degrees, time, place or any other circumstances, is another operation of the mind about its ideas, and is that upon which depends all that large tribe of ideas comprehended under relation... (II, 11, 4).

Suppose I compare two ideas that I have of X with the consequence that I am struck by the self-identity of X.¹⁵ We might represent the resultant succession of ideas as

X, X, X = X.

Unfortunately, this same series can serve to represent the ideas issuing from the activity of discerning between two

¹⁵"...and in this consists identity, when the ideas it is attributed to, vary not at all from what they were at that moment wherein we consider their former existence and to which we compare the present." (II, 27, 1).

ideas of X since Locke allows "...this clear discerning faculty of the mind whereby it perceives two ideas to be the same or different" (II, 11, 1). Although I am the one performing these mental feats, I cannot tell you which I am doing because I am not aware of what I am doing, albeit I am aware of the accomplishments of my mental deeds. Such unconsciousness is hardly characteristic of our daily lives. It would occur only in the absence of reflection. This is not to say that Locke would allow the existence of unreflected operations of the mind. We have entertained the notion of unreflected operations of the mind for the sole purpose of clarifying the contribution of reflection to our conscious life. In order for us to become aware of our mind's operations, we must have ideas of these operations. Reflection provides us with such ideas.

Ideas alone cannot trigger the process of reflection. It takes the mind operating on ideas to do so. We must be careful not to suppose that Locke's use of "the mind's operations" fits neatly into either side of traditional active-passive dichotomy. In this tradition (of which Descartes and Berkeley are examples¹⁶), the mind is denominated active with respect to those events it has the freedom or choice to initiate and passive when that freedom or choice is

¹⁶ René Descartes, "Meditations on First Philosophy," The Philosophical Works of Descartes, Vol. 1, trans. Elizabeth S. Haldane and G.R.T. Ross, (London: Cambridge University Press, 1967) pp. 190-191; George Berkeley, "The Principles of Human Knowledge," sections 25-29 with particular emphasis on the last two sections.

lacking. Locke claims that perception is, at times, passive (II, 9, 1). We have already remarked on the passive nature of sensation. Yet both processes are unconditionally available to reflection (II, 9, 2). Furthermore, the passions (so-called because of the passivity of the subject with respect to them¹⁷) -- pleasure and pain -- are also included among the mind's operations and, hence, among the objects of reflection (II, 1, 4). The upshot of these observations is that we would do better to understand the mind's operations, insofar as reflection is involved, in such a way that the role of freedom and choice is minimized. Since the presence of freedom and choice cannot be counted on to demarcate all operations of the mind in Locke's theory, we will try to avoid identifying those operations in terms of freedom and choice. Instead, the operations of the mind will be regarded as functions of the mind, as various ways in which the mind works. These include what may be considered the mind's activities -- i.e., the functions of the mind over which the agent has voluntary control: "The term operations here I use in a large sense, as comprehending not barely the actions of the mind about its ideas, but some sort of passions arising sometimes from them, such as is the satisfaction or uneasiness arising from any thought" (II, 1, 4).

¹⁷ Descartes, op. cit., p. 188.

The status of mind as substance should further loosen whatever constraints we might feel about describing the mind's operation on ideas as the first cause and effect link in the causal chain which constitutes reflection. Not only is substance a cause inasmuch as it exerts its powers but "...the simple ideas which are introduced into any subject by the exerting of that power are called effects" (II, 22, 11). By denominating mind as substance, Locke is letting us know that the mind's ability to operate earns it the title "cause." Presumably, the mind's operations are the effects.

Oddly enough, motion as the medium of causal efficacy, so crucial for sensation, is not irrelevant for mental processes. Locke attributes the ability to communicate motion to both body and mind (II, 23, 29). For material substance, motion is initiated by the movement of bodily parts whereas, for mind, it is thought that originates movement (II, 23, 17). Moreover, Locke willingly attributes spatial location and, consequently, motion to mind (II, 23, 19). Due to our suspicion that Locke's willingness to grant place to the mind has a great deal to do with the normal union of the man with the person,¹⁸ reluctance to take these remarks of Locke's at their face value is understandable.

¹⁸This suspicion is shared by Aaron, op. cit., p. 144. The union of the man with the person may also account for Locke's readiness to model reflection upon sensation (thereby allowing a causal account for both processes). Also see II, 23, 20 and II, 23, 21.

Understanding reflection in terms of consciousness is a natural reading of Locke and, that being the case, there might be an unwillingness on the part of the reader to accept reflection's role to be a causal one, too. Given Locke's willingness to attribute spatial features to the mind, a causal account of reflection gains plausibility inasmuch as causal relations are quite appropriately applied to spatio-temporal events.

Beyond indicating that the mind and its operations are the originating causes, Locke provides no further details concerning the intermediary stages of reflection. Indeed, the status of these initial causes are somewhat problematic -- as will be discussed in the third and fourth chapters. Nonetheless, his discussion of reflection's final product bolsters the conviction that the entire reflective process is, somehow, a causal chain. This is because it can be shown that regarding the results of reflection as effects is an eminently reasonable reading of Locke's views.

The necessity of simple ideas of sensation for the construction of complex ideas via the mind's operations has already been noted. Simple ideas are also necessary for reflection to occur since, without them, the mind would have nothing to work with. Despite this common requirement, reflection must not be lumped together with the mind's operations. The reason is that reflection begins with simple ideas and ends in simple ideas -- not complex ones. By contrast, engaging in the operations of the mind produces complex ideas. Reflection and sensation together are the sole suppliers of our stock of

simple ideas.

These simple ideas, the materials of all our knowledge, are suggested and furnished to the mind only by those two ways above mentioned, viz. sensation and reflection when the understanding is once stored with these simple ideas it has the power to repeat, compare, and unite them, even to an almost infinite variety, and so can make at pleasure new ideas (II, 2, 2).

And, as explained earlier (pp. 13-15), simple ideas are effects. Given the proper causal circumstances, the appearance of certain simple ideas is inevitable. Believing that something is the case, when accompanied by reflection, produces the awareness of the belief.

Via reflection, we are endowed with the simple ideas of our mind's operations on other ideas, (i.e., the mind's operations form the content of the former simple ideas). Sensation grants us the idea of red, we see red. Perhaps we point and say, "red." When our minds work to combine our simple ideas, e.g., to abstract and compare them, we realize (upon seeing the red shoe), "the shoe is red."

To take another example, consider the activity of believing. Locke gives us no reason to suppose that reflection is needed to reveal the content of the belief. Just believing would be sufficient for us to know what we believe. My believing that the shoe is red may be expressed by my statement "the shoe is red." Had I judged the shoe to be red, the same proposition, "the shoe is red," could be used to express my judgment. In the absence of reflection, the same ideas indiscriminately cover a multitude of the mind's operations.

With reflection, our experiences (i.e. the ideas we have) are augmented. Reflection provides us with the idea of seeing. Thereby, not only do we see, we are aware that we see (and may proudly announce, "I see red" or "I see that the shoe is red"). I can say "I believe that the shoe is red" when I so believe. Should I make a judgment about the color of the shoe, I can declare, "I judge that the shoe is red."

What reflection adds to our slide show on writing is the hand and the pencil. When the slides are projected, we see the hand guiding the pencil to form letters and words and we are sensibly assured that the latter are being written even though the person that the hand belongs to is off-screen. Now, slides may distort reality. Similarly, it is possible that the ideas of reflection may not resemble the operation since Locke doesn't explicitly tell us whether the ideas of reflection are comparable to ideas of primary qualities or to ideas of secondary qualities in terms of their resemblance to those entities which form their content. However, just as ideas of sensation represent material existents, ideas of reflection will represent their respective operations of the mind. As long as we suspend judgment concerning the resemblance between ideas of reflection and their respective operations of the mind, we can endorse Locke's dictum that "no man can be wholly ignorant of what he does when he thinks" (II, 1, 20). All inquiries concerning the mind's operations should be referred to one's own simple ideas of reflection.

What they do not reveal remains concealed: the ideas of reflection render it evident that we perform all sorts of operations of the mind; they don't tell us how (II, 23, 25).

3. Reflection Distinguished from Consciousness

Aaron was hardly the first to conflate Locke's notion of reflection with awareness or consciousness. Among the earliest records of the failure to distinguish between consciousness and reflection, we find Reid's accusation that Locke himself conflates consciousness with reflection.¹⁹ This misconstrual of reflection has persisted down to contemporary accounts of Locke's views. In the words of one historian, reflection is "our awareness of the operations of our own minds."²⁰

Classifying reflection with consciousness does not, by itself, constitute a distortion of Locke's views. Rather, it is the grounds for the classification which determine whether a mistake has been made. If one were to identify reflection with consciousness for the reason that the two are not distinct (except as the former is a species of the latter), then serious error has arisen. This is not to say that Locke does not make certain remarks which, taken at face value, encourage this confusion. Reflection has heretofore been considered as the only avenue by which the mind's operations may

¹⁹Thomas Reid, Essays on the Intellectual Powers of Man, (Cambridge, Mass.: MIT Press, 1964), p. 57.

²⁰Edna Heidbreder, Seven Psychologists, (New York: Appleton-Century-Crofts, 1933), p. 42.

become manifest. Yet, there are various statements made by Locke which suggest that consciousness has taken over tasks normally reserved for reflection: in the discussion on personal identity, the point that consciousness goes hand-in-hand with thinking is reiterated time and again (II, 1, 17 and 18; II, 27, 9). Pain and pleasure, formerly denominated as the sole discoveries of reflection, suddenly owe their existence to consciousness (II, 1, 11). Nearly all the same elements for confusion with consciousness are present in sensation. It is the evidence of consciousness that clinches the positive status of an idea of sensation despite the absence of a correspondingly positive property in the external object:

Concerning the simple ideas of sensation, it is to be considered that whatsoever is so constituted in nature as to be able, by affecting our senses, to cause any perception in the mind, doth thereby produce in the understanding a simple idea; which, whatever be the external cause of it, when it comes to be taken notice of by our discerning faculty, it is by the mind looked on and considered there to be a real positive idea in the understanding... (II, 8, 1).

Without consciousness, Locke denies the possibility of sensation:

This is certain; that whatever alterations are made in the body, if they reach not the mind; whatever impressions are made on the outward parts, if they are not taken notice of within, there is no perception (II, 9, 3).

Yet, we don't readily assimilate sensation to consciousness. Because sensation (mental) traffics with the external (material) world, we experience no difficulty keeping the two -- ideas of sensation, and the source of these ideas

viz. interactions with material objects -- distinct. Inasmuch as reflection and consciousness both function within a mental context, it is no wonder that "consciousness" should appear synonymous with "reflection." Nevertheless, in granting credit for our knowledge of our mind's operations, the contributions of reflection and consciousness should be kept distinct, just as sensation and consciousness are distinguished when it comes to our knowledge of material particulars.

To distinguish between reflection and consciousness as clearly as possible, Locke's notion of consciousness will need further elaboration. A digression into the relationship between consciousness, the self, and personal identity is called for.

It should first be noted that reflection does not reveal the mind. The absence of a human agent in the slide show on writing has already been noted. We may infer the existence of an agent from the evidence presented by the film. Presumably, there is a somebody who is doing the guiding and to whom the hand belongs. Similarly, our encounter with our own minds is veiled in mystery and indirection. The existence and nature of mental substance, qua substance, cannot be experienced directly but must be established by argument

from what is given in experience, i.e. from the simple ideas of the mind's operations provided by reflection.²¹

On the other hand, the inscrutability of mental substance (mind) should not be taken to imply that knowledge of one's self is also a matter of inference or that reflection does not yield knowledge of the self. The mind is not identical with the self. Amplification of these remarks will require investigation of Locke's views on personal identity because that is where the notion of a self becomes prominent.

Locke observes that the self constitutes personal identity.²² By showing that the mind does not comprise the person, Locke implies that the self is not the same as mind. The role of consciousness in determining personal identity is crucial to this argument. Let us trace just how Locke proceeds.

²¹"Besides the complex ideas we have of material sensible substances, of which I have last spoken, by the simple ideas we have taken from those operations of our own minds which we experiment daily in ourselves, as thinking, understanding, willing, knowing and power of beginning motion, etc., co-existing in some substance, we are able to frame the complex idea of an immaterial spirit" (II, 23, 15).

and

"For whilst I know, by seeing or hearing, etc., that there is some corporeal being without me, the object of that sensation, I do more certainly know that there is some spiritual being within me that sees and hears. This, I must be convinced, cannot be the action of bare insensible matter; nor could ever be; without an immaterial thinking being" (II, 23, 15).

²²"For since consciousness always accompanies thinking, and it is that that makes everyone to be what he calls self, and thereby distinguishes himself from all other thinking things: in this alone consists personal identity, i.e., the sameness of a rational being" (II, 27, 9).

First, Locke tries to discourage us from automatically looking to substance to provide us with criteria for identity. Were we solely interested in inanimate objects, the unity (the sameness and continuity) of the constitutive material substance would supply us with criteria for their individuation. The identity of material particulars depends on the mass of (the amount of matter in) the object and its spatio-temporal continuity (II, 27, 3). The case is different for animate material particulars like plants and animals. Their history often includes development, the growth of their constituent parts. The amount of matter in an animate object may vary, yet, we do not suppose its identity to change. This is because the identity of animate matter is taken as consisting in the continuity of the life which quickens it (II, 27, 4). With this view for inspiration, Locke goes on to argue that in the case of persons, the nature of mental substance is also inadequate for providing principles for the individuation of persons.

Locke distinguishes between the person and the man. "Man" indicates the biological category, human. "Person" signifies a minded entity. Normally, the two coincide in one human individual. Those occasions where the union of man and person is disrupted, according to Locke, show how self goes with the person rather than with the man. Lest it be inferred that the self corresponds to the mind, let us admit immediately that the above characterization of "person"

is complete. It is proffered only to highlight the contrast with "man." That job done, we can dismiss that characterization as a tentative first approximation of what constitutes a person.

Why can't the mind be the person? The answer to this question involves a particular view of the mind. To briefly recap what Locke lets us know about the mind: the mind is that which thinks, feels, remembers, sees, hears, etc. As far as can be immediately known, all these mental activities are different varieties of ideas. Locke uses "thinking" as a generic term covering all the ways of having ideas,²³ i.e. covering all those "modes" of thinking where each mode is distinguished by the circumstances under which ideas appear.²⁴ "Thinking" may also indicate the mind's operations when the ideas had are about our mind's operations, that is, when they are ideas of reflection. Accordingly, mind is that which

²³Locke sometimes uses "perceiving" in this way: "To ask at what time a man has first any ideas is to ask when he begins to perceive: having ideas and perception being the same thing. I know it is an opinion that the soul always thinks, and that it has the actual perception of ideas in itself constantly, as long as it exists; and that actual thinking is as inseparable from the soul as actual extension is from the body; which if true, to inquire after the beginning of a man's ideas is the same as to inquire after the beginning of his soul" (II, 1, 9).

²⁴For example, the mode of thinking known as sensation is characterized as an idea which arises from the senses; the mode of thinking known as remembrance is illustrated by an idea of sensation occurring without the participation of the senses. Additional instances are supplied in 11, 19.

has ideas (including ideas of its own operations). While we know about the "thinking" aspect, the "that which" lies beyond our ken.

Since Locke derides the notion of innate ideas and is committed to the position that all our ideas arise from experience, he rejects the definition of mind as that which always thinks (that which always has ideas). His rejection is based upon the claim that thinking is always accompanied by consciousness (II, 1, 10 and 28, 10). At one point it seems as though his claim is empirical (II, 1, 10), as though it's a generalization garnered from our not experiencing ideas of which we are unconscious. The sense of the "always" is logical, however.

Consciousness is logically necessary for thinking. Without consciousness, not only would we not know that we were thinking, we would not be thinking (II, 27, 9). Put another way: consciousness provides the grounds for attributing ideas to anyone (II, 1, 11). In the absence of consciousness, ideas could not be assigned. In sum, we would not think. The lack of consciousness may deliver us from pain; by the same token, we would also be divorced from pleasure and from all our actions. As Locke aptly remarks, unconscious thoughts cannot concern us -- why bother positing them? (II, 1, 14 and 15).

Locke enlarges on the impossibility of sundering consciousness from thinking by pointing out that thinking

unaccompanied by consciousness is as much of a contradiction as an unextended body. It is not substance which is important here. After all, a thought-less mind is not impossible (II, 1, 19). The focus is on that which is intrinsic to the being of a thing. Thinking is not intrinsic to mind the way extension is to matter. Thinking is merely an activity of the mind (II, 1, 10). When the mind engages in that activity, it thinks. Otherwise, not. On the other hand, consciousness is essential to thinking. The mind at rest is unthinking. We know this because we are not conscious of thinking then. "Thus, methinks, every drowsy nod shakes their doctrine, who teach that the soul is always thinking" (II, 1, 13).

In this discussion of consciousness, the nature of consciousness has been ignored in favor of consciousness' role. That lack may now be explained and, in part, remedied. If we had to choose between operations or ideas to classify consciousness, operations would be the preferred category. Otherwise, consciousness would be a meta-idea, an idea which has another idea as its content. This view of consciousness is ruled out by the way Locke characterizes consciousness: Locke equates consciousness most often with perception (see II, 1, 19). But he equates perception with thinking and occasionally consciousness is identified with sensibility: "Our being sensible of it is not necessary to anything but to our thoughts; and to them it is and to them it will always be necessary, until we can think without being conscious of

it" (II, 1, 10). Instead of clarifying the nature of consciousness for us, this plethora of characterizations increases the difficulty of pinpointing consciousness. For example, when consciousness is characterized as perception, one would assume that the objects of perception would include all facets of one's mental life. Yet, "perception" is occasionally used by Locke in place of "sensation" whose objects are material entities (II, 1, 3). The most we can say is that, qua operation, consciousness is a particular mode of mental functioning, a function which is automatically engaged by ideas. Thus, consciousness is not a mental activity -- it is not under the voluntary control of the self. There is little else to say about consciousness except to describe its role. Consciousness leads to knowledge of its contents: "when we see, hear, smell, taste, feel, meditate, or will anything, we know that we do so" (II, 27, 9). What this knowledge consists of with respect to reflection will be discussed in section 6. Besides the knowledge gained, consciousness allows for the individuation of the self. Although Locke is inconsistent on the matter -- sometimes he identifies consciousness with the self -- the position advocated here presents a reasonable interpretation of Locke's views particularly in light of his account of

consciousness and his remarks on how consciousness is used in self-individuation. In describing the person, Locke comments that

this being premised, to find wherein personal identity consists, we must consider what person stands for; which, I think, is a thinking intelligent being that has reason and reflection and can consider itself as itself, the same thinking thing in different times and places; which it does only by that consciousness which is inseparable from thinking and, as it seems to me, essential to it: it being impossible for anyone to perceive without perceiving that he does perceive (II, 27, 9).

Consciousness brings it about that there is a relationship of belonging between a self and ideas. That is why we have been careful not to attribute consciousness to ideas or to thoughts as such. Consciousness has, quite deliberately, be applied to having ideas, to thinking.

As mentioned earlier, Locke defines consciousness as "the perception of what happens in a man's own mind" (II, 1, 19). We have established that, to Locke, ideas are the obvious occurrences in the mind. (The mind's operations become evident insofar as we have ideas of them.) Moreover, among the meanings that Locke credits to "perceiving" is the "having of ideas." Thus modified, we take the aforementioned definition to make consciousness to be little more than the experiencing of ideas. Another way of putting it might be to describe consciousness as the presenting of ideas such that their contents are 'displayed' (so to speak). (We must keep in mind, of course, that presentation is requisite for the existence of

ideas (II, 28, 13).) To judge the truth of these claims, one can only appeal to one's own experiences with ideas. For consciousness is like a private showing to which the public cannot be invited. Consciousness displays, immediately and indubitably, each individual's ideas to himself alone.

What do we find this private display to consist of? Ideas? Not exactly. It consists of ideas in a certain context. Ideas are displayed to oneself. We experience them, so to speak, 'self-consciously.' "For it is by the consciousness it has of its present thoughts and actions that it is self to itself now..." (II, 28, 10). Ideas come experienced, possessed, by an I. Consider how the consciousness of certain sensations of some body will lead one to incorporate that body into oneself:

Cut off a hand, and thereby separate it from that consciousness he had of its heat, cold, and other affections, and it is then no longer a part of that which is himself, any more than the remotest part of matter (II, 27, 11).

This tells us that the self extends only as far as consciousness does. The moral is that consciousness is the criterion for the individuation of the self.

Locke explores a number of possible cases where the continuity of mind and of consciousness is disrupted either severally or in combination (II, 27, 13) in order to hammer home the point that it is consciousness, not mind, which determines personal identity. Most of the cases are fantastic, e.g. reincarnation. The homely realities of sleep

and forgetfulness, though, render doubts about the unity of one's mind credible. Another mind may have been switched for mine while I was unaware. Nonetheless, the unity of one's self will remain unimpaired so long as consciousness testifies to its unity. Even when I am awake and alert, it is possible for my mind to be switched. Still and all, the authority of one's consciousness concerning the unity of one's self (I who think) is such that it also stifles doubts about the unity of one's mind (a thinking thing).

(It)...will be the same self as far as the same consciousness can extend to actions past or to come, and would be by distance of time or change of substance no more two persons than a man be two men by wearing other clothes today than he did yesterday, with a long or short sleep between: the same consciousness uniting those distant actions into the same person, whatever substances contributed to their production (II, 27, 10) (parentheses added).

By relegating self-identity to consciousness, Locke would seem to be substituting one problem with another: the problem of self-identity with the problem of the identity of consciousness. This is mere appearance. By appealing to the sameness of consciousness, we are touching rock bottom. What remains constant in consciousness is the I which comes packaged with my ideas. The I does not come bare; it is not I, simpliciter; it is I, experiencing this, doing that, remembering having experienced this other thing. The I is not identical with consciousness. Consciousness is its criterion -- it is a logical mark of the self.

Consciousness reveals the self: this may explain why the former acts as a criterion of the latter. The

criterion-like status of consciousness is in evidence when the problem of self-individuation becomes a practical matter. According to Locke, consciousness is the basis upon which we select which actions and thoughts to ascribe to which person. Those actions that I am conscious of doing (or of having done) are those actions which I do (or have done). Were we to discard consciousness as the criterion of the person, we could attribute actions to someone who is unconscious of them. Since one reason for being unaware of doing something may be that someone else is doing it, abandoning consciousness as a criterion allows us to assign all actions to any one person:

...but he now having no consciousness of any of the actions either of Nestor or Thersites, does he or can he conceive himself the same person with either of them? Can he be concerned in either of their actions, attribute them to himself, or think them his own, more than the actions of any other men that ever existed? (II, 27, 14).

Furthermore, Locke points out that consciousness is the foundation for the assignment of moral responsibility, i.e. the allocation of reward and punishment. The same person is not blamed for acts committed while insane. Morally speaking, there are two persons and one should not be punished for the deeds of another (II, 27, 20).

This investigation into how consciousness establishes personal identity indicates that, due to the revelatory character of consciousness, our self-knowledge is directly acquired. Reflection contributes to our knowledge of our selves insofar as it enables us to have ideas of a certain

sort, viz., insofar as it endows us with the consciousness of ourselves performing certain operations of the mind. In sum, consciousness reveals the self while reflection is one of the sources of such consciousness.

The different roles played by consciousness and reflection with respect to self-knowledge exemplifies the difference in their roles generally with respect to the acquisition of knowledge concerning one's mind's operations. Both contribute to such latter knowledge, but the manner of their contribution differs. Reflection enables us to have ideas of our mind's operations in that reflection is a causal process which has these ideas as its end-products. Given our previous equation of the "having of ideas" with "consciousness," reflection may be said to be the source of our being conscious of our mind's operations. The purpose -- even the raison d'etre -- of reflection is for us to become aware of our mind's operations. To assimilate reflection into consciousness, however, is to confuse reflection with the having of ideas, to identify reflection with its purpose. This may be a natural thing to do; nonetheless, it is misguided. We want to keep the distinction between the supplier (reflection) and what he supplies (ideas of the mind's operations) sharp. In granting a role to consciousness in the uncovering of the mind's operations (as in the cases of thinking or pain and pleasure), Locke ought not to be taken as implying that consciousness is usurping reflection's role. The two work

in a complementary fashion. Reflection brings it about that we have certain ideas; in consciousness these ideas are displayed. Thus, whenever Locke claims that consciousness reveals the mind's operations, e.g., when he says,

...the other fountain, from which experience furnisheth the understanding with ideas, is the perception of the operations of our own minds within us, as it is employed about the ideas it has got; which operations, when the soul comes to reflect on and consider, do furnish the understanding with another set of ideas which could not be had from things without; and such are perception, thinking, doubting, believing, reasoning, knowing, willing, and all the different actings of our own minds; which we, being conscious of, and observing in ourselves, do from these receive into our understanding as distinct ideas, as we do from bodies affecting our senses (II, 1, 4).

it must be remembered that this happens when consciousness involves our ideas of our mind's operations. Nor should it be forgotten that consciousness can so function only because the intervention of reflection gives rise to such ideas.

4. Reflection Distinguished from Attention

Just as an initial assimilation of reflection with consciousness will de-emphasize the singularity of reflection's function, so will premature definition of reflection as attention obscure the causal nature of reflection's role. For the result of such a hasty maneuver will be the domination of reflection by free will.

Reflection is supposed to be causal in character. As a causal process dictated by necessity, there would seem

to be no room for choice or for improvement in reflection. Yet Locke does seem to impute these features to reflection. Remarking on the effort required for achieving self-knowledge, Locke seems to suggest that the effort arises from setting reflection in train: "the understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself; and it requires art and pains to set it at a distance, and make it its own object" (II, 1, 8). Elsewhere, as additional support for his claim that ideas arise from nowhere but experience, Locke comments on the influence of maturation on our ability to reflect and to have distinct and clear ideas of reflection (II, 1, 8). Reid's account of reflection further confirms our impression that Locke thinks that reflection demands mastering:

the power of reflection upon the operations of their own minds does not appear at all in children. Men must come to some ripeness of understanding before they are capable of it. Of all the powers of the human mind, it seems to be the last that unfolds itself. Most men seem incapable of acquiring it in any considerable degree. Like all our other powers, it is greatly improved by exercise; and until a man has got the habit of attending to the operations of his own mind, he can never have any clear and distinct notions of them nor form any steady judgment concerning them.²⁵

If sensation is to be our guide, reflection should not be something that can be mastered. Careful examination of these comments of Locke's will show that their anomalous

²⁵Reid, op. cit., p. 68.

character is illusory. The key to their elucidation lies in the curious circumstances (illustrated in the Reid quote above) of Locke frequently concluding his remarks on reflection with references to attention and contemplation.²⁶

"...By keeping the idea which is brought in it (the mind), for some time actually in view," that idea is being subjected to our contemplation (II, 10, 1). Attention occurs "...when the ideas that offer themselves ... are taken notice of and, as it were, registered in the memory..." (II, 19, 1). Attention and contemplation are akin inasmuch as they allow an idea to become clear and distinct.²⁷ For our purposes, we can treat attention and contemplation as one.

Contemplation and attention enter into the discussion of reflection by way of the ideas produced by reflection. These ideas are available as material for the mind's operations. More specifically, the ideas of reflection, in their turn, can become objects for our attention (or contemplation) (II, 6, 1). Of course, this feature is not exclusive to ideas of reflection. Attention is also to be paid to the ideas of sensation. Frequently, there will be a number of ideas of sensation competing for our attention: as we attend to one, the others tend to be submerged to a greater or

²⁶II, 1, sections 4, 8, and 24 and II, 6, 1.

²⁷"...If it (the idea) be held there long under attentive consideration, it is contemplation ..." (II, 19, 1).

lesser degree. "How often," in the case of sensation,

...may a man observe in himself that, whilst his mind is intently employed in the contemplation of some objects, and curiously conveying some ideas that are there, it takes no notice of impressions of sounding bodies made upon the organ of hearing, with the same alteration that used to be for the producing the ideas of sound. A sufficient impulse there may be on the organ, but it not reaching the observation of the mind, there follows no perception; and though the motion that used to produce the idea of sound be made in the ear, yet no sound is heard (II, 9, 4).

When the rivalry is between ideas of reflection and ideas of sensation, the former are handicapped. Such rivalry develops early, in our childhood. Our first operations of the mind concern ideas of external objects. The ideas of these operations join with the ideas of the external objects to compete for our attention. The novelty and variety of the external world get us to concentrate our attention on our ideas of the external world, which is to say, on our ideas of sensation. It is only as we get older -- perhaps as we become more jaded, perhaps as we develop our ability to postpone pleasure (Locke doesn't say) -- that ideas of reflection gain a foothold on our attention. The process of reflection has been continuing unabated all the while that we are engaged in operations of the mind (granted the appropriate causal circumstances). The ideas of reflection are present despite our inattention. By our attention, these ideas are brought to the fore and rendered clear and distinct (II, 1, 8).

Ideas are not, in themselves, confused (II, 29, 3). Nor do ideas come entangled with other ideas; "...every idea a man has being visibly what it is and distinct from all other ideas but itself ..." (II, 29, 6). Clearing up confusion in our ideas is not a matter of tidying up the ideas themselves. This is particularly fortunate in the case of the (simple) ideas of reflection and sensation since our passivity insures our lack of control over these processes (of sensation and reflection).²⁸ An idea becomes confused only in a manner of speaking, that is, only when a name is applied to that idea which does not succeed in distinguishing it from other ideas (II, 29, sections 3 and 11). Clearing up confusion in ideas will involve scrutinizing the relationships that idea has with other ideas and endowing it with a name which locates it properly in the web of its relations with those other ideas. By prolonging the appearance of an idea, attention (as well as contemplation) provides us with the opportunity to examine our ideas and carefully note their relationships to each other. Reflection, say, may grant us the ideas of discerning and comparing. Without attention, we might mistakenly suppose that the same name will stand for both ideas. Subjecting these ideas to "attentive consideration" will tell us that they are indeed

²⁸Excepting what we can do in terms of setting up the proper causal circumstances for these processes to occur (e.g. opening our eyes to see) (IV, 13).

distinct from one another and deserve different names.

The same holds for ideas of sensation.

For, though he that contemplates the operations of his mind cannot but have plain and clear ideas of them; yet, unless he turn his thoughts that way and consider them attentively, he will no more have clear and distinct ideas of all the operations of his mind, and all that may be observed therein than he will have all the particular ideas of any landscape, or of the parts and motions of a clock, who will not turn his eyes to it, and with attention heed all parts of it (II, 1, 7).

Bringing attention to bear on our ideas (whether of sensation or of reflection) to assure their clarity and distinctness involves effort on our part. As Locke puts it, "Those who will take the pains to reflect with a little attention on the operations of the understanding, will find the ready assent of the mind to some truths..." (I, 2, 11). (emphasis added). What motivates us in making the effort is the pleasure or pain we receive thereby. Our ideas normally give rise to a certain amount of pleasure or pain which then determines our selection of ideas for contemplation (or attention) (II, 7, 3). Thus is the element of choice introduced into attention (and contemplation) (II, 14, 15). It is not reflection by itself, but reflection accompanied by attention or contemplation, that not only becomes another area for our free will to roam about in, but also becomes indebted to our taste, our stamina, our willingness to persevere for their contribution to the emergence of clear and distinct ideas of reflection (and, hence, to the avoidance of error in speaking of these ideas).

5. Reflection Merged With Consciousness

Having gone to some pains to distinguish reflection and consciousness, we are now ready to say at what point they merge. Reflection and consciousness merge at the same point that sensation and the ideas begot from sensation do. Locke uses "sensation" to apply to the product (the having of simple ideas of sensation) of the causal interaction between material body and observer as well as to the causal interaction itself. Thus Locke notes that "...a distinct idea, which we call sensation ... is, as it were, the actual entrance of any idea into the understanding by the senses" (II, 19, 1). "Sensation" so used apparently signifies our consciousness of the attributes of material objects. Similarly, when Locke defines "reflection" in terms of "...the notice which the mind takes of its own operations..." (II, 1, 4) or when Locke uses "reflect" to mean "think," "reflect" may be understood as our having an idea of a particular sort, viz., having a simple idea gotten via the causal process of reflection. The original use of "reflection," which restricted the application of the term to the means by which consciousness of the mind's operations comes about, has been extended to include the ends as well. "Reflection," when it signifies our consciousness of our mind's operations, has become reflection.²⁹

²⁹Given Locke's propensity to emphasize "idea," it was considered only appropriate to treat "reflection" when considered a variety of idea, in the same way.

The following three examples illustrate how "reflect" is used to mean reflect (as the consciousness of the mind's operations). In the first example,

(1) As contrast to the power that public sentiment has over potential malefactors, Locke asserts that

the penalties that attend the breach of God's laws some, nay, perhaps most men seldom seriously reflect on; and amongst those that do, many, whilst they break the law, entertain thoughts of future reconciliation and making their peace for such breaches (II, 28, 12).

Locke goes on to explain that moral judgments of good and bad are ordinarily formed by appeal to rules set down either by public sentiment, by God, or by the government (II, 28, 13). This constitutes Locke's explanation of the moral ideas of good and bad (II, 28, 14). Analysis of moral ideas in general reveals their constituents to be simple ideas arising from both sensation and reflection. From Locke's analysis of the idea of murder, reflection is seen as contributing ideas of moral agency, "Viz. First, from reflection on the operations of our own minds, we have the ideas of willing, considering, purposing beforehand, malice, or wishing ill to another; and also of life, or perception, and self-motion" (II, 28, 14). Similarly, the moral idea of "the penalties that attend the breach of God's laws" will contain simple ideas of reflection -- most likely those of "willing, considering, purposing beforehand," to say the least. The presence of this latter moral idea accounts for the extended use of "reflect" (as reflect) in conjunction with it.

(2) In an attempt to explain what he means by his references to clarity and obscurity in ideas, Locke observes that

by perception of the mind being most aptly explained by words relating to the sight, we shall best understand what is meant by clear and obscure in our ideas by reflecting on what we call clear and obscure in the objects of sight (II, 29, 2).

This second example involves Locke allowing clarity and obscurity in visual phenomena to become subject to reflection (as consciousness restricted to the mind's operations). A superficial view might take clarity and obscurity to be merely properties of an object and unrelated to our mind's operations. However, discernibility is crucial to denominating visual phenomena as clear or obscure.

Light being that which discovers to us visible objects, we give the name of obscure to that which is not placed in a light sufficient to discover minutely to us the figure and colours which are observable in it, and which, in a better light, would be discernible (II, 29, 2).

Discerning is certainly a mental activity. Therefore, the idea of discerning arises through the good offices of reflection. Via the activity of discerning, reflection becomes a source of clarity and obscurity and so we can legitimately be said to reflect on (or be 'conscious' of) them.

(3) It would seem that, for the last example, the subject matter of reflection is of a different order than the other examples. Locke's inquiry into the nature of truth provides him with an occasion to differentiate between verbal

and mental propositions:

for if we will curiously observe the way our mind takes in thinking and reasoning, we shall find, I suppose, that when we make any proposition within our own thoughts about white or black, sweet or bitter, a triangle or a circle, we can and often do frame in our minds the ideas themselves, without reflecting on the names. But when we would consider or make propositions about the more complex ideas, as of a man, vitriol, fortitude, glory, we usually put the name for the idea: because the ideas these names stand for the most part imperfect, confused, and undetermined, we reflect on the names themselves because they are more clear, certain, and distinct, and readier occur to our thoughts than the pure ideas; and so we make use of these words instead of the ideas themselves, even when we would meditate and reason within ourselves and make tacit mental propositions (IV, 5, 4).

In the third example, Locke talks about reflecting on names rather than ideas: Locke fosters the division between ideas and names with his distinction between mental and verbal propositions. By the same token, he indicates their unity. Mental propositions and verbal propositions are just different classifications of propositions. Likewise, names are just a species of ideas. More specifically, names are a category of sound (Locke seems most interested in the spoken word). Locke emphasizes the status of names as auditory ideas of sensation when he ridicules the position that words can replace other simple ideas (III, 4, 11). The emission and absorption of those sounds which count as names involves more than the process of sensation. Naming involves a multitude of the mind's operations. Using names is a voluntary activity so, at the very least, willing is involved. Though Locke does not include it on his list of

typical operations of the mind, one might also mention the using "these sounds as signs of internal conceptions," as an activity that raises the sounds we make to the level of language (III, 1, sections 1 and 2). The ideas of the above activities will be involved by names. And since reflection provides us with the ideas of these activities, it therefore has a hand in the processing of names.³⁰

Given that "reflection" may occasionally mean consciousness of a certain sort, we can explain how reflection may be conflated with attention. It will be remembered that attention occurs "...when the ideas that offer themselves ... are taken notice of and, as it were, registered in the memory..." (II, 19, 1). "Attention" defined as a variety of noticing may be considered a form of consciousness for consciousness is the mind's notice. When attention is brought to bear on simple ideas gotten via reflection, we are presumably conscious of our mind's operations in a peculiar way, a way that renders them clear and distinct. It has been shown that, on occasion, "reflection" may mean reflection -- the having of ideas or the consciousness of our mind's operations. When "reflection" is used to signify that special consciousness of the mind's operations which leads to clarity and distinctness, then reflection is attention.

³⁰For more examples of the use of reflect, see (IV, 1, sections 4, 7, and 8, and II, 21, 72).

It is only to be expected that the foregoing remarks apply equally well to reflection and contemplation. An unexpected bonus of this approach to "reflection" involves the interlocking of reflection and remembering -- it comes about via a further clarification of the relationship between reflection and the self.

Despite a remark of Locke's which seems to imply that it is possible to reflect on a self, it would be misguided to suppose that the self per se can be an object of reflection or that we may obtain an idea of one's self by way of reflection. The relevant comment crops up in Locke's discussion of the problems besetting the assignment of substantial identity to persons:

But that which seems to make the difficulty is this: that this consciousness being interrupted always by forgetfulness, there being no moment of our lives wherein we have the whole train of all our past actions before our eyes in one view, but even the best memories losing the sight of one part whilst they are viewing another; and we sometimes, and that the greatest part of our lives, not reflecting on our past selves, being intent on our present thoughts ... (II, 27, 10) (emphasis added).

What is of special interest here is that Locke would have us reflect not on the self but on our past self. Memory is therefore involved. Locke insists that consciousness establishes the identity of a person (a self). One's past self can only be connected to the present by consciousness. As noted earlier, consciousness is correlated to ideas. Therefore, a past self is reached by way of ideas revived "with a consciousness that (they were) known or

perceived before." Because we are aware of remembering having done some past act, the self of that past act becomes accessible to our present self. And because of this memory, the identity of our past with our present self is accomplished. Reflection contributes to our awareness of a past self inasmuch as it is the source of our being aware that we are remembering. Consequently, we may be said to reflect on a past self when we are aware of remembering that past self. Here reflection is that form of consciousness which constitutes remembering.

In our discussion of Locke's fountain metaphor, we noted that jets of water are included among the phenomena to which "fountain" applies. Not all jets of water are fountains -- consider geysers. Part of the justification for applying the word "fountain" to aqueous phenomena is their causal antecedents. To qualify as a fountain, the jets of water have to be induced by a particular sort of mechanical device. We have shown that reflection qualifies as a fountain in the sense of a causal mechanism. Our justification for assimilating reflection to consciousness or to attention rests on the involvement of ideas which are produced by the causal mechanism of reflection. Reflection as consciousness or as attention or as memory may also be conceived in terms of a fountain, only, in this case, it would be a fountain in the sense of jets of water.

6. Reflection and Knowledge

Now that we have made it clear that sensation and reflection are sources of experience inasmuch as they are causal processes which terminate in a certain kind of product, viz. simple ideas, we are prepared to be somewhat more explicit about how these two processes become sources of knowledge. Knowledge arises from sensation and reflection because of the ideas produced. Ideas themselves do not constitute knowledge. Rather, it is the perception of the connections between ideas, perception of their agreement and disagreement which forms the content of knowledge. Knowledge, for Locke, is apparently always propositional. He allows that the perception of connections between ideas also involves the affirmation (or denial) of these connections (IV, 5, 5). It is now time to determine the cash value of this view of knowledge with respect to reflection. More specifically, it will be necessary to determine whether the first bit of knowledge gained from reflection concerns our mind's operations simpliciter or whether it concerns our mind's operations as they take objects. This is to say, upon reflection, would I come to know merely that I believe or would I know that I believe that p? The initial move will require greater explicitness about the nature of a simple idea of reflection: is the idea of believing an example of this class of simple ideas, or would the idea of believing that p be more appropriate an example?

When Locke enumerates what we have ideas of as a result of reflection, various types of operations of the mind are cited. Nowhere is there to be found an explicit reference to a particular operation of the mind having one object (or content) rather than another. Yet the mind's operations do not -- cannot -- occur by themselves; they arise by way of ideas which form the working materials -- the subject matter -- of the mind's operations. Since an operation of the mind always involves other ideas as its object, it would not be unreasonable to expect that the idea of the mind's operation would consequently include its object.

On the other hand, reflection does not reveal our ideas. When I believe that p, I am presumably engaging in a mental activity upon the idea of p. It is consciousness which presents the idea of p without intervention from reflection. Reflection's contribution is restricted to the emergence of the idea of believing. This analysis leads to the supposition that the idea of believing that p is actually an "amalgam" of two ideas -- the idea of believing and the idea of p.

Locke's comments on simple ideas weigh the scales in favor of the "amalgam" view. Simple ideas, the products of either the processes of sensation and reflection, are, by virtue of their simplicity, unanalyzable into parts. Moreover, they are homogeneous. These characteristics of simple ideas rule out the likelihood of reflection producing ideas of the mind's operations which take objects

or have content. The idea of an activity of the mind with content is an idea in which act and content may be non-trivially distinguished. The content of a belief -- say, that the shoe is red -- may be found elsewhere than in this particular belief of mine -- in my judgment, perhaps, when I judge that the shoe is red. And my beliefs may concern other matters besides red shoes. Because an operation of the mind may take any number of objects -- have any content, and a certain object or content may be involved in any number of the mind's operations, the idea of a particular operation of the mind, i.e., one with a certain object, must count as a complex, not a simple, idea. Distinctions counterindicate simplicity: "...there is nothing can be plainer to a man than the clear and distinct perception he has of those simple ideas: which, being each in itself uncompounded, contains nothing but one uniform appearance or conception in the mind and is not distinguished into different ideas"(II, 2, 1). Thus the distinction between an operation of the mind and an object rule out considering the idea of a particular operation of the mind a simple one.

Locke's remarks concerning simple ideas of sensation affirm the above account of the simple ideas of reflection. Normally in sensation, we would not experience a particular shape bereft of all other characteristics. We would see a shape of a certain color and size. To the untutored eye, it

might seem that sensation provides the experience of a particular patch whose components are size, color and shape. After reading Locke, a different analysis of sensation's contribution results. Patches are not among Locke's examples of simple ideas of sensation. Different colors, shapes, etc. are. The educated eye sees that sensation provides the idea of a certain shape, the idea of a certain color and the idea of a certain size, which simple ideas combine to form the complex idea of the particular patch.

The simplicity of the ideas of reflection indicates that reflection, when regarded solely as a process giving rise to ideas of reflection would not give rise to knowledge. Knowledge demands a complexity in its subject-matter which reflection cannot fulfill. However, this view of reflection has it operating in a vacuum. While a useful heuristic device for tracing reflection's contributions to our mental life, this view is hardly satisfactory as a representation of reality. Reflection is able to yield knowledge once it is put in its proper context.

Reflection allows our mind's operations to become part of our consciousness. But our consciousness will never be concerned with just the operation in question. By virtue of the mere possession of simple ideas of the mind's operations (though, any idea would do) the mind will be stimulated to perceive these ideas for what they are. "It is the first act of the mind, when it has any sentiments or ideas at all, to

perceive its ideas, and so far as it perceives them, to know each what it is, and thereby also to perceive their difference and that one is not another" (IV, 1, 4). And so we come to know about our simple ideas of the mind's operations. Due to my having an idea of judging, I know that I am experiencing (have the idea of) judging and not experiencing something else.³¹ Because this knowledge arises immediately, without mediation by other ideas, it is intuitive, or self-evident, knowledge. As such, it is infallible.

In addition to provoking a mental act of perception, reflection provides the initial conditions for the connections between ideas to arise. Our apprehension of the connections between ideas -- which is an immediate and infallible perception (Gibson, 1963, pp.124 and 221) -- signals the attainment of knowledge. The undertaking of some operation of the mind is the occasion for a simple idea of reflection to occur. At the same time, engaging in an operation of the mind involves working upon ideas. To the idea operated upon, reflection adds another idea thereby allowing connections between ideas to arise and become the subject of perception and, hence, of knowledge. Suppose my entire field of vision is taken up by yellowness -- all I see is yellow. In the absence of reflection, I would be aware only of yellow: my entire consciousness will

³¹"A man infallibly knows, as soon as ever he has them in his mind, that the ideas he calls white and round are the very ideas they are, and that they are not other ideas which he calls red or square" (IV, 1, 4).

be occupied by the simple idea of yellow. Once reflection takes place, my conscious life becomes complicated: the idea of seeing is introduced. Thanks to reflection, I am aware both of seeing and of yellow -- in other words, the ideas of seeing and of yellow co-exist in my consciousness. The connection of co-existence is available for immediate perception and thus may become intuitively known. As a result, I can come to know of my mind's operation with a certain content -- I can know that I believe that p.

The co-existence of ideas may indicate more than just co-existence in consciousness. Their connection may be rooted in the connection of properties of real substances -- this co-existence of ideas may have a basis in reality. Upon the heels of this realization comes the question of whether it can be known that we are actually engaging in some operation of the mind with a certain object. Here the quest for knowledge goes beyond the knowledge of ideas to knowledge of real existents. Not content with knowing about the idea of believing that p, we finally have to face the question whether we can know that we believe that p. Once again, an answer must await examination of Locke's account of sensation, in this case the examination will concern the relationship between sensation and our knowledge of material existents.

Thus far, the knowledge we have gained is knowledge of connections among ideas only. In the case of sensation, for instance, simple ideas stand in a special relationship

to other material existents. It is only natural to wonder whether there is any knowledge to be gained about those existents, too. The answer is affirmative. Simple ideas (of sensation) are not merely causal intermediaries between material existents and the inquiring mind. Such simple ideas are also taken as representing, as standing for the material particulars to which they have this causal relationship (Aaron, 1944, pp. 101 and 239). In fact, the ordinary man assumes that the characteristics of our ideas characterize the material thing represented by the idea. By virtue of his possession of the idea of a blue violet, he is ready to attribute blueness to the surface of the very flower itself. Locke has no quarrel with this understanding in the case of ideas of primary qualities. Our readiness to attribute motion to some physical ball on account of our having an idea of this ball moving is entirely warranted. According to Locke, ideas of primary qualities resemble the actual properties of physical things. The same does not hold for our ideas of secondary qualities. The ordinary man is mistaken in taking the blueness of the flower content of his idea to characterize an actual flower. Color, or, indeed, any secondary quality, is not a property per se of a physical existent. Instead, our ideas of secondary qualities should be taken to represent (and not resemble) those properties in the physical thing which cause us to have such ideas. As long as we don't insist upon resemblance,

our knowledge of the connections between ideas can amount to knowledge of physical reality since "we can, that is to say, be sure that each of these ideas corresponds to some element or characteristic of the real world" (Gibson, 1968, p. 130). Minimally, that correspondence will be brought about through a causal relationship; optimally, that correspondence will include resemblance.³²

In addition to the knowledge we gain about physical things via our simple ideas, we also get to know that these physical things exist. Simple ideas of sensation, in themselves, do not tell us this. Simple ideas can, at most, tell us about what may exist, about "a possible determination of reality" (Gibson, 1968, p. 133). Except for substance, "...the reality of our knowledge is sufficiently guaranteed if the ideas which it contains can be known to be ideas of possible existents" (Gibson, 1968, pp. 129-130). The simplicity of simple ideas assures us of their reality; the reality of our complex ideas is assured by their internal consistency (Gibson, 1968, pp. 131-132). However, Aaron suggests that the manner of our experiencing the simple ideas of sensation grants us probable knowledge that physical things actually exist. "Sensation carries with it a tang of reality in a way in which imagination does not" (Aaron,

³²At this point, we can ask what right have we to this confidence. Book IV, Chapter 11 represents Locke's attempt to justify his stance.

1955, p. 245). In support of this reading, Aaron quotes Locke: "I ask any one whether he be not invincibly conscious to himself of a different perception when he looks on the sun by day and thinks on it by night" (IV, 2, 14). The knowledge of material existents, then, accompanies our simple ideas (Aaron, 1955, p. 246).

Having specified what information may be gotten from sensation, we can now apply what we have learned to reflection. The relations between the simple ideas of reflection, of course, contribute to our store of knowledge, too. But again in reflection, the simple ideas there produced are intermediaries and what they mediate is our knowledge of our mind's operations. The simple ideas of reflection are causally related (by way of reflection) to our mental operations, but more than that, (if sensation is any guide), they represent the various operations of the mind. Our idea of believing represents our believing. Here, as for simple ideas of sensation, we would expect our tendency to assume a resemblance between our ideas and those things outside our ideas (of which we have ideas) to come into play. As a result, we attribute certain characteristics of our simple ideas of reflection (or, more precisely of their content) to the relevant operation itself. And Locke expresses no qualms about our doing this.

This insouciance on Locke's part may be understood in two ways. The first, adopted by Aaron (1955, p. 130),

suggests that the position that ideas are representational intermediaries is minimally present in Locke's account of reflection; that simple ideas of reflection are given this function without concomitantly influencing our understanding of the mind's operations. "There is no hesitation about accepting the evidence of reflection on its face value" and "thus, though nominally Locke remains representationalist in his explanation of the knowledge we have of our minds, actually he proceeds as if we know ourselves and our operations directly in reflection and as if this knowledge was in all cases exact."

We favor a second interpretation of Locke's insouciance. In this interpretation we note that Locke had full confidence in the resemblance between ideas of primary qualities and the primary qualities of physical things.³³ Then, we suppose that Locke's failure to warn us against assuming resemblance between simple ideas of reflection and the relevant operations of the mind is that he lumps simple ideas of reflection together with our ideas of primary qualities with respect to the legitimacy of assuming their resemblance to the properties of existents.

It has been pointed out by a number of commentators (of whom Berkeley is, perhaps, the most renowned) that the

³³Gibson notes that Locke takes it for granted that the contents of our ideas of primary qualities pertain to an independent reality (1968, p. 172).

connection between the variability of our ideas of secondary qualities and observer variability (i.e., the changes in the observer and in the conditions of observation) is insufficient to distinguish the ideas of secondary qualities from those of primary qualities. Ideas of primary qualities are also subject to observer variability: my idea of a thing's size will vary according to my distance from the thing. We may therefore amend the form that the resemblance between ideas of primary qualities and qualities of physical particulars takes by denominating it as a resemblance which obtains between a determinate and a determinable.³⁴ My idea of a thing's size is an idea of a determinate quality. This idea of mine resembles a property of that thing inasmuch as that thing has size (even though it might not have the particular size indicated by my idea). Whatever Locke's reasons for stipulating the resemblance -- be it the influence of the physics current at the time or of Aristotle's notion of "common sensibles" -- the assertion of a resemblance need not be abandoned because of observer variability.

Resemblance is abandoned in the case of ideas of secondary qualities. Locke remarks that there is a widespread misconception about ideas of secondary qualities, namely, that they resemble qualities of external objects. And that just isn't so. Material things possess only

³⁴J. L. Mackie, Problems from Locke, (Oxford: Clarendon Press, 1976) Chapter 1.

primary qualities. Observer variability for ideas of secondary qualities is less a proof of the existence of this misconception than it is a symptom of the error. We assume, then that Locke does not dwell on the representative function of the ideas of reflection because, presumably, he has no reason to suppose that there is any pervasive error concerning its function as there is for that of ideas of secondary qualities. So we may suppose that simple ideas of reflection resemble the mind's operations which they represent. Although we may well be mistaken about an operation of the mind having the determinate quality that is indicated by the corresponding simple idea of reflection, we may be sure that the mind's operation has the correlative determinable quality. Thus it is that simple ideas allow us to know about our mind's operations. Furthermore, since having an idea of an operation of the mind presumably has that "tang of reality" that is not to be found in imagination, we can also come to (probably) know that our mind's operations exist. The perception of the connection between my idea of believing and my idea of p allows me to know that I believe that p.

In order to express my knowledge of my mind's operation, I will have to have recourse to words which stand for the several ideas involved in that knowledge. For Locke maintains that what a word -- if it's a noun ("name") or a word which lends itself to nominalization -- stands for supplies it (the

word) with meaning. As Locke makes clear in the following paragraph, ideas are the usual candidates for the job of referent ("referent" here should not be understood as "denotation" but rather what a name "stands for").

But all names that are more than empty sounds must signify some idea which is either in the thing to which the name is applied, and then it is positive and is looked on as united to and existing in the thing to which the denomination is given or else it arises from the respect the mind finds in it to something distinct from it, with which it considers it, and then it includes a relation (II, 25, 2).

In fact, Locke maintains that any problems encountered concerning the use of words may be traced to difficulties in attaching words to their corresponding ideas, e.g., when the ideas are too fleeting, or faint, or complex, etc. (II, 29, sections 3, 7 and 8).

Locke admits to one exception to his theory and it is an exception which proves the rule. Locke distinguishes between mental and verbal propositions. Mental propositions are ideas connected to one another as a result of the mind's operations on its ideas, i.e., "...wherein the ideas in our understandings are, without the use of words, put together or separated by the mind perceiving or judging of their agreement or disagreement" (IV 5, 5). Verbal propositions are the linguistic counterparts of ideas so connected. The task of indicating the relationships that propositions as well as ideas have with one another is assigned to particles (e.g., conjunctions and propositions). Particles are "...words to show what connexion, restriction, distinction,

opposition, emphasis, etc., he gives to each respective part of his discourse" (III, 9, 2). For example, "but" in All animals have sense; but a dog is an animal: here it signifies little more but that the proposition is joined to the former, as the minor of a syllogism" (emphasis not added) (III, 8, 5). Along with propositions, these relationships are the outcome of the mind's operations. By indicating just how ideas are connected, particles and words for affirmation and denial are the expressions of our mind's operations. These words do not refer to those operations: indeed, they do not refer at all (III, 8). Rather, they get their meaning from their function, in the case of particles, from their function as connectors. Thus, in explaining the meaning of "but," Locke provides examples demonstrating its use. Should we desire to speak about our mind's operations, however, we will have to resort to terms which get their meaning from their reference to ideas of reflection. For instance, a term such as "believe" is meaningful when it refers to the appropriate reflection, i.e. the idea of believing. And to talk about my believing that p, I will have to use not only "believe" but also that term which stands for my idea of p³⁵ and these terms will have to be so arranged (with appropriate connectors, and so on) that their connections mirrors the connection among the ideas which goes to

³⁵ and my idea of my self (the existence of which self is immediately apparent whenever I have ideas).

make up my knowledge that I believe that p. The end result is a verbal proposition expressing knowledge of one's mental activity.

The final pay-off of the account of Locke's views on reflection consists of our ability to answer the question with which the discussion began. "Reflection" answers the question "what causes us to be aware of our mind's operations (i.e., to have ideas of them)?" The reply to "what are the conditions which allow us to talk about those operations of our mind?" is, in part, "reflection." And reflection (including reflection as consciousness) is the beginning of our response to the query, "how do we know about our mind's operations?" Looking back over this discussion, we realize that it is the first question which engages the major portion of our interest.

On one reading of Locke the explanation of our knowledge of our mind's operations is to be found in our awareness of those operations gained from the specialized mode of consciousness known as reflection. However, in the presentation of Locke's theory of reflection offered in these pages, we have instead emphasized that part of Locke's theory which gives prominence to the process which finally leads to the awareness of the mind's operations, a process also called reflection. This latter process is given short shrift in Locke's account. Its character -- even its presence -- had to be deduced from the analogy which Locke draws between sensation and reflection. Additional evidence -- namely,

the simplicity of the resultant ideas of reflection and sensation and the substantial nature of the mind -- encouraged the identification of the basis of the analogy with the causal nature of both processes. Most of our attention in this chapter was focussed on marshalling the evidence for such a "causal" interpretation of Locke's view of reflection. By the causal character of reflection is meant that the initial cause is the mind and its operations which, given favorable circumstances (e.g., practice, maturity, a certain level of attention) necessarily has as its effect the awareness of those operations. Moreover it was found that regarding reflection as a causal mechanism was not inconsistent with regarding it as a variety of consciousness.

The emphasis we have placed on the causal character of reflection was motivated by three considerations. First, given the example set by sensation, it is not unreasonable for an account of observation to include some reference to the causal process involved. Second, it was felt that if reflection constitutes an explanation of the emergence of some portion of self-knowledge, then that task is only nominally fulfilled by designating reflection as a variety of consciousness. That designation leads to the next logical step in the inquiry; we want to know how it is that we become conscious of our mind's operations (we want to know how we come to reflect). Explaining reflection in causal terms

satisfied that inquiry. The causal account of reflection enhances the account of it as consciousness. The answer to our first question provides the underpinning for our answer to the second question. The third reason for the emphasis on the causal nature of reflection will become evident in the following chapters. Reflection as consciousness is beleaguered by problems, only some of which may be successfully dissolved. Regarding reflection in a causal light adds another string to our bow in the defense of an observational account of reflection (or introspection).

CHAPTER II

THE PRIVATE LANGUAGE ARGUMENT AND THE POSSIBILITY OF INTROSPECTIVE DESCRIPTIONS

Locke's theory of reflection -- or, to use a more modern term -- of introspection -- gives rise to two conclusions. One is that the raison d'etre for positing introspection at all is to provide an explanation of how we come by our knowledge of our mental functions. The paradigm for such an explanation is provided by sensation's role in the account of our knowledge of material (physical) phenomena. The second conclusion is that, figuratively speaking, the recipe for introspection largely involves taking sensation and transferring it to the mental realm with suitable adjustments for the change in locale. Two questions are associated with these conclusions: Can there be introspection as so conceived? Can introspection as so conceived fulfill the purpose assigned it? Due to the suspicion that teleological considerations dictated the ontological commitment, the second question will be dealt with first in this chapter.

The purpose of sensation is to provide a means whereby we can find out about physical objects. In other

words, sensation may be considered a means for pursuing an inquiry into the nature of physical objects. Such an investigation is expected to yield descriptions of physical objects. Using sensation as a model, we expect the results of introspection to be descriptions too, albeit descriptions of mental phenomena. Furthermore, these results are presumed to issue forth from introspection inasmuch as introspection, too, is used to investigate mental phenomena. Obstacles to the fulfillment of these expectations concerning introspection arise once the attempt is made to be somewhat more precise about what distinguishes mental from non-mental phenomena. We will find that as various considerations combine to induce us to characterize the mental in terms of the feature of privacy, other considerations arise -- i.e., the so-called private language argument -- which dissuade us from defining the mental in this way. The private language argument tries to show that a certain concept of the mental interferes with describing the mental. Because of the connection between identification and verification alleged in the private language argument, additional difficulties arise. There will also be problems with regarding introspection as an investigative tool. In order to avoid these problems and, at the same time, accommodate those considerations leading us to entertain privacy as distinctive of the mental in the first place, an alternative characterization of the mental will be posed which will be based on a conception of consciousness.

1. The Private Language Argument

Before we proceed to discuss these matters, certain terminological considerations will have to be cleared up. Following Locke's usage, "sensation" has been applied to the relationship obtaining between a physical object and the observing subject leading to knowledge of the physical object as well as to the "simple idea begot by sensation" -- i.e., the experience had by the observing subject as a result of his sensuous relationship with the physical object. From now on, "sensation" will be restricted to the latter application. "Sense observation" will be used to signify the above mentioned sensuous relationship. With this in mind, we can characterize our current concern as determining whether indeed our expectations are doomed to disappointment if we expect descriptions of mental phenomena to issue from introspection just as descriptions of physical phenomena issue from sense observation.

It is a commonplace of the history of science that a major advance in the pursuit of scientific knowledge occurred when attempts to describe the world were grounded in observation of the ways in which the world operated. Aristotle's contention that heavy objects will fall more rapidly than light objects is a famous example of error committed when observation is not the basis of such description.¹ Had

¹Gerald Holton, Introduction to Concepts and Theories in Physical Science (Reading, Mass.: Addison-Wesley Publishing Co., 1952), p. 18.

Aristotle only looked and measured he would have known the truth. The role that science granted observation is one that is attributed to observation outside scientific endeavors, too. As an example of the analysis of the everyday concept of causality, we need only turn to Wittgenstein's (who was a staunch exponent of everyday notions) remarks on the subject. He talks about observing a series of events for the purpose of establishing their causal connection.² He also notes how observation of human behavior (relative to underlying interests) can also establish conclusions (PI, pp.179-180). Generally speaking, Wittgenstein offers as typical examples of observation a number of instances where information is gathered in order to support conclusions describing physical objects or events involving physical objects. The involvement of the physical indicates that the type of observation involved is sense observation. On the basis of these examples, "when do we say that anyone is observing? Roughly: when he puts himself in a favourable position to receive certain impressions in order (for example) to describe what they tell him" (PI, p. 187). Notice that the descriptions supported by sense observation are not descriptions of sensations -- they are descriptions of physical objects (or events involving the latter). We are not reading off the characteristics of sensations and extrapolating them to the physical object which caused us to have the sensations.

By analogy with sense observation, the role of

²Ludwig Wittgenstein, Philosophical Investigations, trans. G.E.M. Anscombe, (New York: The Macmillan Co., 1968), section 160. Hereafter, references to this text will be given as "PI" followed by the relevant numbered paragraph. When references are made to paragraphs without numbers, page numbers will be given instead.

introspection should be that of an investigative tool -- in the sense of an information-gathering process supportive of statements describing mental phenomena. The role is defined here in terms of the purpose served, i.e. as support for certain kinds of description. The analogy with sense observation will suffer to the extent that introspection cannot fulfill such a role. Our first step will be to assess the claim that introspection cannot yield descriptions. Our second step will consist of investigating introspection's ability to provide support.

The obstacle in the path of introspection's providing descriptions lies in the connection between describing and referring. It would be well to be clear about that connection: Language may be used to talk about itself and it may be used to talk about what is outside language. It is the latter use which dominates our discourse. One of the fundamental functions of language is to relate to extra-linguistic entities.

Suppose we begin with some entity that we want to talk about. Having at our disposal a fairly sophisticated language, we are able to find a word which is related to the entity in question so that by using the word, we succeed in making clear that we are talking about that entity.³ The entity is being mentioned. The word is being used to refer to that entity. A paradigm case of referring is the use of

³William Alston, "Theories of Meaning," Theory of Meaning, ed. Adrienne & Keith Lehrer, (Englewood Cliffs, N.J.: Prentice Halls, 1970), p. 24.

proper names. In using the name, we are designating the particular individual for which the name stands. The proper name represents the bearer of the name without necessarily revealing anything about the bearer (e.g., his qualities, nature, situation, or whatever).

This situation seems to call for an existing particular to be the subject-matter of discourse. But discourse need not be limited in this way. Language would still be used to talk about what is outside itself when the discourse concerns, say, classes of things or non-existent things. In using a common noun like "closet," it is not any particular individual which is involved but the members of the class of things to which the term "closet" may be applied. "Closet" may be said to denote, rather than refer to, the members of the class of closets.⁴ The connection between language and what language is being used to talk about may be accomplished through other relationships too, e.g. via connotation. They are mentioned only to illustrate that in a narrow sense of "refer," reference is merely one relationship among several that language may have to what it is being used to talk about when it is being used to talk about something.

"Refer" may also be used in a wider sense. Roughly speaking, a word may be considered to be used referringly in a discourse if it is used to make clear what that discourse is about. Referring would occur when, by the use of some

⁴ Alston, ibid, pp. 25-26.

linguistic term, some thing has been mentioned -- and we know what to direct our attention to. Notice that this wider sense commits us to nothing concerning the nature or ontological status of the subject-matter. Thus, denotation could be considered one variety of reference. Common nouns could be regarded as having a referring use, in so far as they may be used to mention classes of things.

In this wider sense of "refer," descriptions may be said to presuppose reference. Descriptions are bits of language that reveal information about the subject-matter under discussion. In distinguishing description from narration, one popular dictionary has the following to say about the former: "To describe is to convey an image or impression in words designed to reveal the appearance, nature, attributes, etc. of the thing described. The word applies primarily to what exists in space (by extension, to what occurs in time) and often implies the vividness of personal observation to describe a scene, a sensation, a character."⁵ Or, in the words of Wittgenstein, "a description is a representation of a distribution in a space (in that of time, for instance)" (PI, p. 187). In The Shorter Oxford English Dictionary, "description" is "the action of setting forth in words by mentioning characteristics; verbal representation or portraiture."

Characterizing description in terms of representation

⁵American College Dictionary

serves to emphasize the involvement of reference. How can words reliably represent something other than themselves if they fail to refer to it? Indeed, to describe anything, we have to make explicit what it is we are describing. If we adopt "X is Ø" as a schema for a description where "Ø" is some descriptive phrase and "X" is a variable term replaceable by some phrase referring to the object described, then replacing "Ø" by some descriptive phrase - e.g., "first seen at dawn" -- while concomitantly leaving the variable unspecified results only in a possible candidate for use as a description. "X is first seen at dawn" does not, as is, describe anything yet. Some reference to what is being described must be made.

In a description of anything, we augment our mention of that thing by furnishing additional information about it. We can use "star" to mention the class of celestial bodies to which that term is commonly applied. Let "star" be used to replace "X" in "X is first seen at dawn." The description as that which is first seen at dawn provides further information about the referent of "star." In fact, in this case, the additional information is such that with the entire description, we manage to refer to a particular member of the class of 'stars.' Without the initial mention, however the augmentation could hardly have occurred. Moreover, the accuracy of a description is measured against what it is describing. If all mention of the thing described is omitted, the description will not be verifiable. Description -- and

its verification -- depends on reference.

Theories of semantics have been proposed which pick reference as the major determinant of significance (cf. Wittgenstein's Tractatus Logico-Philosophicus). Some even go so far as to identify the referent with the meaning of the word. Wittgenstein, in his later writings, argued that such theories were too limited in their account of meaning. First-person mental statements like "I am in pain" (and concepts of the mental such as "understanding," "belief," etc.) were among the counterexamples offered in disparagement of these theories. Wittgenstein pointed out certain peculiar features of these statements, e.g., their incorrigibility, for one, which he found to be inadequately accounted for by theories of semantics which concentrated exclusively on the reference of the constituent words and on the descriptive function of the statement. This position was illustrated in his private language argument. Among the implications which may be drawn from Wittgenstein's discussion is one which concerns us most nearly -- i.e., that we cannot talk about what we introspect, that introspection cannot yield descriptions. This claim rests on the alleged incompatibility between describing and the subject-matter to be described, viz., mental phenomena.⁶ That feature of mental

⁶For our purposes, "mental phenomenon," "mental state," "mental experience," will be considered synonymous. The only distinction we will make is for mental activities which will be regarded as a species of mental phenomena. The term "object" (as in "mental object" or "physical object") will be restricted in use to those occasions when an intentional object is meant or in contrast with "subject" to mean an accusative.

phenomena which purportedly gives rise to the incompatibility is their privacy. Before proceeding with the argument, more needs to be said about privacy.

Privacy enters into the picture of the mental by way of the demand for a distinguishing mark for the mental and by way of certain claims commonly made about the mental. As far as we are concerned, the need for a distinguishing mark for the mental arises from our need to protect introspection from the encroachment of sense observation. Physical objects become accessible by means of sense observation. Should mental phenomena be a subset of the class of physical phenomena,⁷ sense observation should suffice to provide access to the mental. Introspection would become superfluous. Our attempts to advance introspection as a viable process, at times indispensably involved in determining what mental description to apply to oneself, will be forwarded if we can show how the mental can be considered non-physical. We would then be free of the need to erect a barrier hindering sense observation from poaching upon some mental preserves. While we are unable to produce an argument compelling belief in the inappropriateness of subsuming the mental under the physical, we hope to show such belief to be eminently reasonable. What is required is a characterization of the mental which excludes the physical.

⁷See David Rosenthal, "Mentality and Neutrality," The Journal of Philosophy (July 15, 1976): 386-415 for arguments in favor of this view.

Traditional characterizations of the mental point to such features as its non-spatiality, its intentionality, or its introspectibility. Belief in a gulf separating mental from physical phenomena is undermined by the inadequacies of these features in distinguishing the mental from the physical.⁸ Some of the characterizations turn out to be too broad and to include what would ordinarily be consigned to the physical realm. Thus, the non-spatiality of mental phenomena is shared by such physical phenomena as mass and weight (i.e. by physical states of physical objects). Extension is not a property of either mental phenomena or physical states. Yet, the former are neither more nor less locatable than the latter. Both may be located where their possessors -- the person or the physical entity -- are. Other traditional characterizations are found to be too narrow, thereby excluding phenomena that would ordinarily be considered mental. For instance, the features of intentionality and purposiveness do not, at least not in any straightforward way, pertain to sensation.⁹ Picking

⁸Discussed by Richard Rorty, "Incorrigibility as the Mark of the Mental," The Journal of Philosophy (June 25, 1970): 399-424. Although it is consciousness which has been traditionally considered a mark of the mental, Rorty prefers introspectibility.

⁹The lack of straightforwardness is illustrated by the controversy between Anscombe and Robinson on this matter. See G.E.M. Anscombe, "The Intentionality of Sensation: A Grammatical Feature," in Analytical Philosophy, ed. R.J. Butler, Oxford: Basil Blackwell, 1965), pp. 158-180 and H.M. Robinson, "The Irrelevance of Intentionality to Perception," The Philosophical Quarterly (October, 1924): 300-311.

introspectibility as distinctive of the mental involves us in circularity insofar as "we cannot explain what introspection is except by reference to an antecedently understood notion of what is mental."¹⁰ While the concept of introspection may not be dependent on the concept of the mental in every theory, that dependence does hold for Locke's theory. While we needn't suppose that all of these problems are immune to dissolution, we may as well assume the worst, that some anomalies are with us to stay. Accordingly, it is to privacy that we turn to distinguish the mental from the physical.

"Privacy" has a number of significations in this context.¹¹ By calling mental phenomena private, we might mean that they are inaccessible to all but a single person -- which is to say, the person experiencing the mental phenomena in question. "Privacy" is then being used in the sense of inaccessibility. The mental might be considered private insofar as there is at least one mode of access to it which is achieved through some special route available to just one person. Here, privacy is considered to be special access. Or by "privacy," we might be referring to the final authority granted the experiencing subject with respect to his mental phenomena. Then, privacy is tantamount to incorrigibility in effect (since no one, with the exception of the

¹⁰Rorty, op. cit., p. 409.

¹¹The four senses of privacy which will be discussed were distinguished by A.J. Ayer, "Privacy," The Concept of a Person, (New York: St. Martin's, 1963), pp. 52-81.

experiencing subject, can correct the subject's claims). Our final alternative is to understand the privacy of mental phenomena to consist in their unshareability: the experiencing subject exclusively possesses the mental phenomena that he experiences so that numerical identity is denied to mental phenomena of the same type which are experienced by different persons.

The kinds of things we say which form the ground for the attributions of privacy to the mental are things like:

- (A) Only I can know my pain because only I
can feel it (inaccessibility).
- (B) I know I'm in pain because I feel it
(special access).
- (C) No one else can feel my pain (unshareability).
- (D) No one can doubt my sincere claim to be in
pain (incorrigibility).

Presumably, no term referring to a physical entity can be used in these remarks (or their ilk) instead of "pain," for physical entities are public. By "physical entities" we mean to indicate such things as tables and chairs which we use and try to avoid bumping into. Assigning a public status to physical things means that whether more than one person actually has access to them or not, physical entities are available to anyone given the correct circumstances. Furthermore, physical entities are supposed to exist independently of the observing subject: their existence is unaffected by the subjective experiences of the observer

(unless certain causal relationships obtain). Sense observation is the normal avenue to acquaintance with the physical and it is open to anyone with a properly functioning sensory apparatus. Thus, no one is, in principle, in any more privileged a position with respect to physical phenomena than anyone else. Physical entities are not private in any of the four senses of "privacy" discussed. One would suppose that, if a term may sensibly be used instead of "pain" in remarks exemplified by those above, that term signifies something mental: privacy allows us to pick out the mental. The restrictions on this supposition will have to be discussed later. Let us proceed untrammelled for now.

The strongest sense of "privacy" is that of inaccessibility. It is strongest because the other senses of privacy follow from it. Thus, if one entity is inaccessible to anyone except a single individual, then it may be inferred that there is at least one way in which that entity is inaccessible to anyone else, that that individual's sincere proclamations concerning the entity cannot be overridden by anyone else, and that the entity cannot be shared with others.¹² There is some reason to think that Locke defined the mental in such a way that privacy as inaccessibility may be attributed to it.¹³ According to Locke, consciousness is not only

¹²Pointed out by Ayer, ibid., pp. 79-80.

¹³The accessibility of mental phenomena in Locke's theory has been urged by Landesman, op. cit. p. 25.

necessary for there to be mental entities, it is also intimately related to personal identity.¹⁴ Consciousness is what makes the person who he is and not someone else. By the same token,

Consciousness is the perception of what passes in a man's own mind. Can another man perceive that I am conscious of anything when I perceive it not myself? No man's knowledge here can go beyond his experience...This some may suspect to be a step beyond the Rosicrucians: it seeming easier to make oneself visible to others than to make another's thoughts visible to me, which are not visible to himself (II, 1, 19).

Through consciousness, the existence of a mental entity is so intertwined with the identity of the person that access to the mental entity is limited to the person conscious of it. No one else can be allowed that same consciousness unless he be that same person. Taking Locke's lead, let us suppose then that mental phenomena may be identified in terms of this strongest sense of "privacy." What the private language argument tries to show is that privacy, in the sense of inaccessibility, precludes descriptions of the mental because it interferes with the ability to refer to the mental.

There have been a number of interpretations of Wittgenstein's private language argument. There are those who understand the private language argument as offering the thesis that verification is required for meaning: "he (Wittgenstein) seems to take the view that someone who attempted to use language in this private way (to describe

¹⁴II, 1, 8 and II, 27.

his own private experiences) would not merely be unable to communicate his meaning to others, but would have no meaning to communicate even to himself" (parentheses added).¹⁵

The version of the private language argument to be discussed here will not be that general in scope. It will not be presented as an argument about the conditions for meaning so much as one concerning the conditions for referring.

The private language argument has also been understood as hammering home the conclusion that mental processes cannot serve as referents for words: "The stronger thesis says that no words name sensations (or 'private experiences'), and in particular the word 'pain' does not (cf. 293)."¹⁶

Again, the range of this version of the argument is wider than the version offered in these pages. As we see it, the private language argument shows that we cannot help but fail to refer to what is private -- but not necessarily to that which is mental. The reason for this failure is that privacy (in the sense of inaccessibility) eliminates the distinction between what has been correctly identified and what only seems to have been correctly identified.

Wittgenstein's private language argument is an attempt to demonstrate this failure of reference through the envisioning of circumstances wherein the attempt to refer to a

¹⁵A.J. Ayer, "Can There Be a Private Language" in Wittgenstein: The Philosophical Investigations, ed. George Pitcher, (Notre Dame: The University of Notre Dame Press, 1968), p. 254.

¹⁶P. F. Strawson, "Review of Wittgenstein's Philosophical Investigations," in Pitcher, ibid., p. 42.

private experience is made. Thus, Wittgenstein asks that we

...imagine the following case. I want to keep a diary about the recurrence of a certain sensation. To this end I associate it with the sign "S" and write this sign in a calendar for every day on which I have the sensation. -- I will remark first of all that a definition of the sign cannot be formulated. -- But still I can give myself a kind of ostensive definition. -- How? Can I point to the sensation? Not in the ordinary sense. But I speak, or write the sign down, and at the same time I concentrate my attention on the sensation -- and so, as it were, point to it inwardly. -- But what is this ceremony for? For that is all it seems to be! A definition surely serves to establish the meaning of a sign. -- Well, that is done by the concentration of my attention; for in this way I impress on myself the connexion between the sign and the sensation. -- But "I impress it on myself" can only mean: this process brings it about that I remember the connexion right in the future. But in the present case I have no criterion of correctness. One would like to say: whatever is going to seem right to me is right. And that only means that here we can't talk about 'right' (PI, 258).

In Wittgenstein's example the symbol "S" is deployed to keep track of the occurrence of a certain sensation. "S" will be used to refer to those sensations which are of the kind typified by the particular sensation initiating this task.¹⁷ The restrictions on the performance of this task are introduced by the privacy of sensation -- that is to say, sensations are considered as being directly known only to the person having (or feeling) them and not to anyone else

¹⁷ If one prefers to view the problem as that of recording the re-occurrence of a particular sensation, then "S" may be used as a proper name of the sensation and "S"'s function will be purely referential.

for no one can have (or feel) someone else's sensations.¹⁸

If there can be a language consisting of words whose referents are sensations, then no one besides the experiencing subject who has created this language can know what the subject is talking about.¹⁹ And if learning a language requires acquaintance with the referents of its referring terms, there is, in principle, no way in which anyone else can learn that language. And so, we have a private language.

Given the initial decision about the means for recording the occurrence of some sensation, the problem facing Wittgenstein's private language speaker is to identify those of his sensations which are sufficiently like the original to warrant his subsequent use of "S". When do I, the speaker, next use "S"? When that certain sort of sensation crops up. Now a referring relationship between a linguistic term and some entity will not be established by mere fiat. Should I use the term occasionally in conjunction with the relevant entity but mostly in connection with other things, that term cannot be said to refer to the former. If we label carrots and silks as well as jars "jars," the word "jars" will not just refer to jars. While reference does not

¹⁸"In what sense are my sensations private? - Well, only I can know whether I am really in pain; another person can only surmise it" (PI, 246).

¹⁹"The individual words of this language are to refer to what can only be known to the person speaking; to his immediate private sensations. So another person cannot understand the language" (PI, 243).

demand errorless use of a referring term -- in the phrase "star first seen at dawn," although "star" here is a misnomer, for what is being referred to is a planet and not a star, the reference to Venus still goes through -- it cannot tolerate more than occasional failure. Reference is a more complicated matter than the mere association -- even the constant association -- of a linguistic term with a relevant entity (be it particular or class or what have you). The association must also emerge from a complex pattern of activities: e.g. 'When one says "he gave a name to his sensation" one forgets that a great deal of stage-setting in the language is presupposed if the mere act of naming is to make sense' (PI, 257). A sensation word will refer to a sensation if it is used in

...such things as showing the location of the sensation, exhibiting different reactions to different intensities of stimulus, seeking or avoiding causes of the sensation, choosing one sensation in preference to another, indicating the duration of the sensation, and so on.²⁰

Nonetheless, reference requires a certain degree of accuracy. Hence the question of verification arises.

How do I verify that my use of "S" is correct - that my records are accurate? The restrictions mentioned earlier constrain me from consulting the views of others or considering behavior with which that type of sensation may be associated. The best knowledge to be gained comes from my

²⁰ Norman Malcolm "Wittgenstein's Philosophical Investigations," in Pitcher, op. cit., pp. 96-97.

having the sensation. In answer to my question, then, I can but repeat; only when that certain sensation shows up. It is only then that I can ascertain that I have managed to refer to the right sensation, that it is not some other sensation which has appeared and which I have mistakenly called "S". So I turn to the sensation 'before me' in order to verify -- check the accuracy of -- this subsequent use of "S". Before the verification can be accomplished, the sensation needs to be identified. Unfortunately, it is my identification of the sensation which is in question. To illustrate, consider the task of labelling jars "jars." The first jar is labelled "jar." Another object comes along and we are confronted with the problem of deciding whether it gets the same label as the first. It gets the same label if it is a jar. In order to ascertain that the object has been correctly labelled, we must make sure that the object is a jar. However, if there are any doubts about what to label the object, they are doubts about whether the object is a jar. Reference (e.g. labelling) and identification are interrelated activities.

The problem of identifying jars may be resolved in ways not open to me in the case of sensations. As a physical entity, a jar is open to the gaze of other observers and their testimony may settle the issue of how to identify the particular material thing under consideration. With respect to sensations, no one else can do the identifying for me. Furthermore, when

it comes to sensations, only the sensation I am currently undergoing is present to me. This is not to say that different experiences cannot co-exist for an individual; they can, headaches may co-exist with stomach aches.²¹ One's mental life consists of a succession of varying experiences where experiences of different kinds displace one another. Although one's mental life need not be like this as a matter of fact, it must be like this sometimes in order for the question concerning the identification of the type of sensation to make any sense. Co-existing experiences cannot belong to the same type and still be designated as distinct tokens of that type. (Qualitative similarity allows us to categorize particular mental phenomena as being of one type rather than another.) Sensations are differentiated as distinct tokens of the same type in the life of a person when they are separated by some other experience. Were the sensation to be experienced uninterruptedly, it would count as a single instance of that type. A headache which co-exists with a qualitatively similar headache is regarded as a single headache. In contrast to sensations, different instances of a physical type may very well co-exist in time and still be distinguishable. Unlike sensations, the first jar can be kept handy for comparison with the other candidates for the label "jar." My perplexity about the identity of my current

²¹Pointed out by Professor Charles Landesman, Hunter College.

sensation arises in circumstances where the sensation which started the whole business is past and unavailable for comparison. The point of Wittgenstein's example -- of entertaining the notion of a private language -- is that the issues raised here are irresolvable. My perplexity does not admit of a real solution. Apparently, the peculiarity of trying to use (inaccessibly) private entities as referents is that there is no way of distinguishing what has been correctly referred to from what only seems to have been correctly referred to.

Of course, circumstances may so conspire that it just happens that we can't distinguish between what seems to us to be correct and what is correct. Still, in using some word, I will be using it correctly or I will not. However it may strike me, I would be either right or wrong in my application of the word. And that would remain the case despite my not being able to tell whether I am indeed right or not. The force of Wittgenstein's example, though, is that in the case where the privacy (as inaccessibility) of referents obtains, there is no distinction to be made between what seems to be and what is. We are brought to acknowledge the justice of this observation of Wittgenstein's when we analyze the alternatives facing the private language speaker as he tries to deal with his perplexity.

The speaker is faced with the problem of trying to ascertain whether he is correct in identifying his sensation

as the referent, S, whose presence is supposed to justify his use of "S." As the speaker, I can see only two ways of handling this problem, neither satisfactory. I can decide that I couldn't have misidentified the sensation. That would mean adopting the convention that what seems to me to be the case is the case. Or I can settle for not being able to tell whether my use of "S" is correct. Thus everything would only seem to me to be the case, thereby implying that it might not be the case. If I adopt a convention which decrees my use of "S" infallible, then it is irrelevant whether or not my use of "S" coincides with the appearance of S in actuality. Convention may dictate our view of reality; it does not dictate reality. Declaring oneself infallible does not make one so. Despite the convention, my use of "S" may significantly diverge from the appearance of S. On the other hand, if I settle for what merely seems to me to be the case, then S may never or only intermittently be present when I use "S." Accidental coincidence is not enough to establish a connection between the relevant sensation and "S." As one philosopher remarks about "pain" as a private language term, "but I did not establish a connection (between "pain" and pain) if subsequently I applied that word to sensations other than pain or to things other than sensations, e.g. emotions."²² In neither of the circumstances outlined above can "S" be considered to be referring to the

²²Malcolm, *ibid.*, p. 68.

desired sensation. One might be tempted to object that the aforementioned alternatives are not exhaustive. It might be argued that the failure to mention memory is a crucial omission.

Even in the case of material bodies, the standard is not always available for comparison. In the absence of the standard, memory comes into play as a factor in our decision about whether the case before us conforms to the requirements set forth by the paradigm case. Memories of the first jar -- one's own memory and the memories of other observers -- will determine whether the present instance is to count as a jar. It would seem that for sensations too I can use what I remember of the first to check up on my subsequent use of "S." Again, privacy creates difficulties and, according to Wittgenstein, memory provides no solution:

But justification consists in appealing to something independent. -- "But surely I can appeal from one memory to another. For example, I don't know if I have remembered the time of departure of a train right and to check it I call to mind how a page of the timetable looked. Isn't it the same here?" -- No; for this process has got to produce a memory which is actually correct. If the mental image of the timetable could not itself be tested for correctness, how could it confirm the correctness of the first memory? (As if someone were to buy several copies of the morning paper to assure himself that what it said was true.) (PI, 265).

Memories verify only if they themselves are veridical. I need to distinguish my accurate from my inaccurate recollections in order rely on memory as a guide to the past. There arises, then, the problem of verifying memory. My

memory of S would be veridical if it were an accurate recollection of the first sensation. The first sensation is gone, unavailable for direct comparison. How can I tell whether my memory is accurate? In the case of jars, I could check to see whether my memories conformed to those of other observers. The privacy of sensations eliminates that alternative for identifying S. We cannot appeal to the role the experience plays in our lives because we are trying to introduce it into our lives.²³

Without a way of ascertaining whether the memory is accurate or not, its veridicality comes under a cloud and I cannot rest content with this memory. Nor can I appeal to some other memory of the private object because its veridicality may also be challenged and that challenge not be met. On the other hand, I can adopt the convention that my memory is utterly reliable;²⁴ on the other hand, I can settle for not being able to tell whether I remember correctly (i.e., I settle for seeming to remember correctly). But these are familiar alternatives whose futility was already made apparent for the application of "S." The failure to find a means of verifying our use of "S" -- whether by way of the identification of S directly or indirectly via memory --

²³See Malcolm, ibid., pp. 96-97.

²⁴This, it seems to us, is the path that Ayer's plea for the acceptance of final acts of recognition leads to. Cf. A.J. Ayer, "Can There Be a Private Language?" in Pitcher, op. cit., pp. 256-257.

ultimately prevents our referring to S with "S." Although the referring relationship involved in the private language endeavor created by Wittgenstein involved the existence of the referent, it is likely that this condition was imposed to make the case for a private language as simple and as strong as possible. The failure of a private language to emerge from these conditions augurs unfavorably for its emergence from less favorable circumstances. The principle emerging from this failure -- from the private language argument, that is -- is that verification must be possible -- not actual -- in order that referring be possible.

What constraints has the discussion so far put upon our claims concerning introspection? If the private language argument is right, then the set of introspective descriptions constitutes an empty set. Introspective descriptions are descriptions of oneself with respect to one's mental features that issue from introspection. The form such descriptions will be seen as taking will be either the attribution of a mental feature to the subject such that, when uttered, the subject will be ascribing the mental feature to himself or the attribution of properties to some mental feature of the speaker. The former statements have the first person as subject and a mental term in the predicate position. An example might be "I am in pain." The latter set of statements -- exemplified by "My pain is severe" -- contains a mental term with the first person possessive case in the

subject position. A mental term will be regarded as referring to a private entity of the sort involved by the private language argument if that term may be appropriately used instead of "pain" in aforementioned statements (A) through (D). When the mental term is considered as involving reference to some feature of the subject inaccessible to all but the subject, then according to the private language argument, the term cannot be taken to refer to anything at all, much less to refer to some mental feature. The speaker, uttering a supposed first person introspective description, will not be attributing anything to himself. And the speaker will ascribe properties to nothing if he tries to ascribe them to his private mental features. There are sentences that look as though they can function as introspective descriptions. What the private language argument indicates is that such a function is not fulfillable within the framework of privacy (as inaccessibility).

In the absence of any introspective descriptions, the purpose of introspection as assigned by Locke is dissipated. It will be recalled that Locke introduced introspection into his account as a means by which the subject identified the operation of the mind that he is undergoing. Via introspection, the subject is able to attribute the appropriate operation of the mind to himself. As a result, Locke would have introspection constantly intervening in the production of those self-descriptions involving the ascription of the mind's operations. However, if (and this is a big "if") the mind's

operations are private (in the sense of inaccessible) the question of their identification has no satisfactory answer, reference to them fails, and the expected descriptions do not emerge. Should the mind's operations be assigned to the private sector, Locke's raison d'etre for introspection is obviated.

2. Privacy and Introspection as an Investigative Tool

The implications which may be inferred from privacy (as inaccessibility) limits introspection's use as an investigative tool. What is meant by the reference to introspection as an investigative tool is its use as a process yielding evidence or support for certain descriptions. However, if these descriptions are understood to apply to private objects (in the strongest sense of "private"), evidence becomes increasingly irrelevant. Privacy as inaccessibility leaves no room for error on the part of the subject in identifying the subject of the mental experience. It guarantees that there are no other possible candidates for the role of subject of those mental features which are experienced. In that case, by using "I," I am not picking one person out of several available and the possessive "my" is not selecting one owner from amongst other possible owners. There is no question, then, of inadvertently selecting the wrong person to be the subject with one's use of "I" or of mistaking the owner of the mental feature with "my." A field of one offers no problem of identification. For

example, because of the privacy of pain, the first person claim that one is in pain is not a conclusion one reaches after having chosen, from a field of possible rivals, the subject who is suffering. It is not as though we stumble upon some pains and have to figure out to whom they belong. The only pains I can encounter are mine (P I, 246) and "another person can't have my pains" (PI, 253). This is not to say that the speaker cannot lay false claim to some mental feature. His claim would be false if he were lying or pretending. What is ruled out by privacy (as inaccessibility) is the possibility of an honest mistake on the part of the speaker. The question of evidence for the speaker's sincerity can arise. The elimination of error in identifying the experiencing subject implies that the need for evidence for the accuracy of the identification will not come up.

Moreover, if introspection is supposed to provide evidence for introspective descriptions and there are no such descriptions, there is no need for an evidence-gathering process such as introspection is supposed to be. Suppose, per contra, that introspective descriptions involving private entities are possible. What kind of support may be expected from introspection? Let us first consider how sense observation yields support because that is what we

hope to get from introspection.²⁵

In offering a description of some state of affairs involving physical entities, the best support for the truth of the description is provided by sense observation. The speaker, describing the state of affairs, can defend the truth of the description by indicating that she was in a good position to ascertain the truth of the matter, i.e. by indicating that she observed the state of affairs (Shoemaker, 1963, p. 64). If the description is "there is a sailboat," her defense is a first-person sense observation statement -- possibly, "I see a sailboat." The acceptability of her defense may be determined through a further sense observation: viz., someone else's sense observation of her observing the sailboat. This verification of our first speaker's defense may be expressed in the third-person sense observation statement, "the woman saw the sailboat." The relationship between first and third person sense observation statements deserves further discussion at this point because it will be an important factor in introspection's failure to duplicate the above situation.

²⁵ Adapted from the argument given by Sidney Shoemaker which denies that first person psychological statements articulate contingent truths about the self and that there is a question of identifying the self in Self-Knowledge and Self-Identify, (Ithaca: Cornell University Press, 1963). Hereafter references to this work will be given in the text by "Shoemaker, 1963."

One of the more obvious features of sense observation is that it involves an object to be observed and a subject to do the observing (Shoemaker, 1963, p. 65). The grammatical form of the sense observation statement -- two substantives connected by a verb of sensation -- neatly mirrors what the world must contain for that statement to be true, that is, two entities in a particular relation. That the two entities are distinguished as subject and object clues us in to the asymmetricality of the observation relation. Although it may happen that the object being observed is observing the subject -- as when two people look at each other -- this is not necessary for observation to occur. The asymmetricality of observation indicates that it is only an observing subject and not an observing object which is necessary for observation. The paradigm for a sense observation claim is the third person sense observation statement where a sense observation relation is asserted of some other party, e.g., "the woman sees the sailboat."

Just as one attributes a sense observation relation to another, as long as that other is a person, so may he attribute the sense observation relation to himself. The resultant claim is a first-person sense observation statement -- e.g., "I see the sailboat" when said by the woman in question. The first-person sense observation statement has the same truth conditions as the corresponding third-person sense observation statement: Two entities, the woman however

referred to (whether by "I" or "the woman") and the sailboat, must be in that relation stipulated by the sense observation statement. The disparity between third and first-person sense observation statements is that the former is based on the sense observation of its truth conditions whereas the latter is not.

A third person sense observation statement arises when the speaker observes the woman, the sailboat, that the woman is looking at the boat under appropriate viewing conditions. The situation observed by the speaker constitutes the truth condition for the third person sense observation statement. Jack says, "The woman sees the sailboat" because he observes that the woman sees the sailboat. Such a construal is less apparent for first person sense observation statements.

The truth-condition of a first person sense observation statement is not what is observed by the speaker.²⁶ The speaker and the subject are identical. Thus, the speaker observes what the subject observes, that is to say, the object. The object of sense observation for the subject in "I see the sailboat" is the sailboat and when the aforementioned woman is the one to make this remark, we say that

²⁶Shoemaker, *ibid.*, p. 120. Shoemaker discusses this disparity as lying between first person sense observation statements and some empirical statement like "the typewriter is on the table" (*ibid.*, pp. 120-124). Since the disparity applies to statements based on sense observation, I feel it applies as well to sense observation statements based on sense observation.

the object of sense observation for the speaker, the woman, is the sailboat. The state of affairs expressed by the first person sense observation statement -- that there is a subject related by sense observation to an object -- is not what the speaker is observing. All that the speaker observes is the object, not the subject, of the sense observation. We do not want to imply yet that the subject cannot be the object of sense observation but that, were the speaker to observe himself observing, he would more accurately describe the situation by saying, "I see myself seeing the sailboat" rather than "I see the sailboat."

If we turn our attention to first person introspection statements, we note that they are similar to first person sense observation statements except that the verb of perception will be contained by scare quotes to indicate that the relation is one of introspection.²⁷ The object in a first person introspection statement will be some mental entity. An example of a first person introspection statement might be, "I 'see' the image of a sailboat." When the subject referred to by "I" here is our exemplary woman, we may construct a third person introspection statement to express the same fact as the above first person introspection statement, to wit, "the woman 'sees' the image of a sailboat."

²⁷Introspection statements state that introspection is going on. They differ from introspective statements insofar as the latter are merely descriptions resulting from introspection.

So far the parallel between introspection and sense observation holds in that, as in sense observation, the same truth condition obtains for both first and third person versions of an introspection claim. The parallel breaks down once we realize that this truth condition is not introspectible.

One expects a first person introspection statement, like a first person sense observation statement, to be based on the introspection of the object alone. What is 'seen' by the subject is the image. Following Locke (and Shoemaker), the subject doing the introspection is the self. Since we want to maintain the parallels between introspection and sense observation as long as we can, let us assume that the introspecting subject and the introspected object are not precisely identical -- that the introspected object is, say, some feature of the subject. Therefore, in a first person introspection statement, the mental object is what is introspected. To be anything like a first person observation statement, the first person introspection statement should have as its truth condition that a particular relation (an introspective one) holds between two entities: here, a self -- the woman -- and the mental image of a sailboat. Since the speaker is identical with the subject, the object of introspection by the subject is that of the speaker, viz., the image of the sailboat. Of course, the object does not give the truth condition for the first person introspection statement.

Suppose we ascribe an introspection relation to someone else. We might want to use a third person introspection statement: "the woman 'sees' the image of a sailboat." In order for this third person introspection statement to be based on the introspection of its truth condition, we would have to 'see' the woman, 'see' the image of a sailboat, and 'see' that an introspective relation holds between them. Now we have stipulated that the object of introspection be mental. For a self to become an object of introspection, it must be mental. We needn't hold that the self be completely mental, only that any material features of the self be excluded from introspection. To introspect the truth condition of a third person introspection statement, we deal solely within the realm of the mental. And here's the rub. We are supposing mental entities to be private. No one may have access to any mental phenomena unless he is the subject having that mental phenomena. If introspection is a way for a mental entity to become accessible, then only the subject having that mental entity can introspect the latter. Consequently, the only way in which a third person introspection statement can be based on introspection is when the speaker and the subject are the same; i.e., when the woman says of herself, "the woman 'sees' the image of a sailboat." Under these circumstances, the third person introspection statement only has the form of a third person claim. It has the force of a first person claim. The state of affairs left to us is that all that any introspection

claim may be based on is the introspection of the object. The subject is not introspected. As a result, the speaker's defense of her introspective description -- namely, that she introspected the relevant state of affairs -- cannot be corroborated through introspection. No one can introspect someone else introspecting.

It is not only introspection's use to confirm descriptions which is restricted. Introspection is correspondingly limited in its use for falsifying introspective descriptions. Consider the following account of the falsifiability of sense observation statements: Given a subject and given an object, it is possible to identify the object of sense observation independently of its relation to the subject: One may identify the object via its relation to some other subject. I need not be limited to describing the sailboat the woman sees always with reference to the woman. I can describe the sailboat as what I, for one, see. The object of sense observation is public -- accessible to more than one individual. Because of this public feature, we can detect when the stipulated sense observation relation between the subject and the object fails to hold, namely, when the object is in a sense observation relation with some other subject (Shoemaker, 1963, p. 94). Furthermore, the observing subject and at least various aspects of the observation situation are in the public domain. Thus, another person will observe the falsity of some observation claim if he observes the subject of this claim without the proper

observed object or if he observes both parties but not that the sense observation relation holds (some of the necessary conditions -- e.g., the absence of impediments -- are not fulfilled). These possible falsifiability conditions are implied by the possibility of third person sense observation statements.

The emptiness of the set of third person introspection statements indicates that the falsity of introspection statements is not detectable in the ways discussed above. This is not to say that introspection statements can never be false. They would be if the required (introspection) relation between the subject and object did not obtain. Nevertheless, we don't seem to be able to experience such falsifying conditions. Because of the privacy of the mental, there is no way for there to be a substitute for the self in its introspective relationship with the mental object. There is then no way to identify that object without that self embedded (implicitly or otherwise) in the identification (Shoemaker, 1963, p. 94). But if I were to identify an image as "the afterimage I see" and then go on to say that I see it, I would not be reporting any fact that I have discovered about the object thus identified; I would simply be repeating part of my identifying description (Shoemaker, 1963, p. 97). By pointing to the mental object i.e., attending to it or referring to it with an indexical expression -- 'this mental object') as a means of

identification, we do not succeed in escaping implicit reference to the self. Only the self having the mental object can point to it (Shoemaker, 1963, pp. 97-98). The mental object is not accessible to someone else for him to point to. The elimination of alternative subjects to introspectively relate to the mental object means that there is no way for us to detect the failure of the introspective relation to hold between the subject and the object. Our ability to talk about the experience of such falsifying introspective conditions is likewise circumscribed. Only consider the self-contradictoriness of such efforts as "I can 'see' myself and an image and introspect that my self does not 'see' that image" (Shoemaker, 1963, p. 94). These limitations are imposed by privacy which stipulates that an introspected object must be introspected by the subject in question. Privacy also renders the self hidden from another's introspective gaze. The only person who can detect the falsity of an introspection claim is the self who is doing the introspecting. As already noted, he can't discover an introspected object that he is not introspecting. He can only discover that he was either mistaken about the relation between himself and a (not necessarily introspected) mental phenomenon or about the nature of the mental phenomenon itself. Understanding these kinds of mistakes, however, poses special problems to be discussed when privacy as incorrigibility is entertained as a distinguishing feature of the mental.

Because there is no way, in principle, to corroborate through introspection another's defense of his introspective description, his defense suffers from loss of credibility.²⁸ The reliability of any particular sense observation is validated by a network of other sense observations (i.e. those of other observers) and our experience of this conformity among sense observations engenders confidence in sense observation as a means of getting to know about physical phenomena. As a result, the acceptance of the claim to be in a particular sense observation relation to a physical phenomena as justification for some description of the phenomena grows. Unfortunately there is no network of confirming introspections contributed by a number of introspecters. There are no independent introspections to which we can appeal to validate the reliability of introspection as a source of descriptions. In sum, we do not have the reasons for considering introspection the support

²⁸"...there is an obvious sense in which we explain someone's ability to make true statements of a certain kind by saying that he has a property of the appropriate sort, for we know that any normal person who had that property would have that ability. There is an equally obvious sense in which the having of such a property can justify a person making a statement, for it gives the statement, if it is of an appropriate kind, a high likelihood of being true. But such explanations and justifications can be given only where it is possible in principle to establish empirically whether a person does have the appropriate property, i.e., is in the appropriate position. For in giving such a justification for a statement of one's own one is not simply claiming that one's statement is justified, but is trying to show that it is, so it must be possible for others to see that it is (or that it is not)." Shoemaker, 1963, pp. 222-223.

system for descriptions of mental phenomena that we have for sense observation.²⁹ Privacy as inaccessibility prevents introspection from fulfilling the role of investigative tool expected of an observation-type process.

3. Behavior as a Criterion of the Mental

The upshot of this discussion of the effects of employing privacy as inaccessibility to characterize the mental is that we relinquish such an account of the mental. Never mind the damage done to the attempts to construe introspection on the model of sense observation. Never mind that privacy prevents introspection from both yielding descriptions of the mental and from functioning as an investigative method in the expected manner (i.e. à la sense observation). The motivation for getting rid of privacy as inaccessibility is less parochial than just protecting a sense observation model of introspection. It goes against the grain to accept a theory of mental phenomena which makes it impossible for us to talk about the mental. Given a choice between eliminating talk about mental entities or finding some other distinguishing mark for mental entities, it is the latter alternative which is to be preferred.

²⁹There might be other reasons for regarding introspection as justification for descriptions of mental phenomena. Because of our commitment to a sense observation model of introspection, we are interested in providing a supportive role for introspection like that of sense observation. The possible existence of these other reasons is rendered besides the point.

Thus far our dissatisfaction with attributing privacy as inaccessibility to the mental has hinged upon the insights afforded by the private language argument. It might be the case that the private language argument is less convincing than we suppose. Even so, we have reason to object to characterizing the mental in this way. The reason is that privacy as inaccessibility is not a characteristic which straightforwardly applies to all things which are counted as mental. What we have in mind here are beliefs, motives, desires, moods, etc. -- the kinds of things which are considered mental activities by Locke and which are more readily analyzed as dispositions than as episodic processes.³⁰

One of our reasons for attributing privacy as inaccessibility to mental phenomena in the first place -- viz., certain things we say about the mental -- fail to apply to the aforementioned mental phenomena. "Beliefs," "desires," "intentions," are not obviously substitutable for "pain" in remarks (A) through (D). Not only can we not insist on our sole access to our beliefs, but we have to admit that there are times when others have better access to them than we do. We need only consider how often we are blind to our own prejudices and how well we see the prejudices of others to realize that behavior can be a better indicator of beliefs than other means not available to an outside observer. Privacy as

³⁰See Gilbert Ryle, The Concept of Mind, op. cit., particularly Chapters IV and V.

inaccessibility is too narrow to embrace all phenomena counted as mental.

We may as well admit that the mental is accessible to more than one person -- that other people besides myself can know about the mental phenomena I am experiencing. This will not be a simple matter for to get around the difficulties raised by the private language argument, behavior will be designated as criteria for the mental so that there will be public access to the mental life of another. This will have to be reconciled with consciousness as a mark of the mental since consciousness, too, provides access to mental phenomena. Once this is accomplished, we can set up a framework for constructing the circumstances suitable for the emergence of introspective descriptions. We can also take this opportunity to admit that tying privacy (as inaccessibility) to the mental by way of consciousness' role in establishing personal identity is not the only way to understand Locke. We remind ourselves that

there is one characteristic of thinking that is central in Locke's philosophy of language, namely that a person's thoughts cannot be directly perceived by another....Thoughts are private or invisible; this, however, need not be the strong sense of privacy that dualism might be thought to require; it is a sense of privacy according to which, in order for a person to communicate or to make his thoughts known to others, he must express them by means of signs which are objects of sense-perception. Because thoughts are private, language, the chief vehicle of expression, is indispensable as a means of communication.³¹

³¹Landesman, op. cit., p. 25.

The way that the mental becomes accessible to others is through behavior. Others can know what I am feeling because of what I say and do. Not everything I do justifies the ascription of a mental term to me. The presence of certain behavior associated with some mental phenomena and the absence of defeating circumstances warrants the application of the relevant mental term. The brevity of this account hides a whole host of problems concerning the relation between behavior and the application of mental terms. In considering these problems, consciousness emerges as an attractive alternative to privacy (as inaccessibility) in distinguishing the mental.

Explanations for the relationship between behavior and the use of mental terms (i.e., terms for mental phenomena) -- how the relationship has come about and how it may be understood -- may be grouped into rival camps. Neither camp possesses trouble-free explanations. One camp is formed by accounts positing a contingent relationship between the mental and accompanying behavior. This relationship is then taken to justify the use of the accompanying behavior as evidence for the application of mental terms. For instance, in the argument from analogy it is by appealing to one's own case that behavior becomes acceptable evidence for ascribing mental phenomena to another. Behavior is regarded as evidence for the existence of mental phenomena in someone else on the grounds that similar behavior was manifested by oneself

upon experiencing the mental. Thus, because I cry when in pain, someone else's cries constitute grounds for my attribution of pain to him. Another account belonging to this camp focuses on the correlations which may be found to exist between mental phenomena and behavior. The discovery of such correlations allows the behavior to be elevated to evidential status for the mental. Crying becomes a symptom of pain because of the correlation found to exist between crying and pain. Besides the dubiousness of generalizing from a single instance -- i.e. going from one's own case to others -- the major difficulty besetting accounts which posit a contingent relationship is their failure to circumvent the problem of identifying the mental. According to the private language argument, when one's own case is considered in inviolable isolation from that of everyone else's and from behavior (i.e., as private in the sense of inaccessible), the mental phenomenon under consideration eludes identification. How, then, may a contingent relationship between the mental and behavior be discovered when one party to the relationship resists identification? As long as this question remains unanswered, the grounds for accepting behavior as evidence for the mental are undercut.

The remaining alternative is to consider the relationship between behavior and the mental to be a matter of convention rather than one of matter of fact. This, the view of the opposing camp, involves positing a conceptual tie between behavior and mental phenomena. Behavior is

given a decisive role in the application of mental terms via the very concept of the mental involved. The major obstacle to an alliance between a staunch defender of introspection and this camp is the reduction of the mental to behavior.

Of the various accounts of the logical tie between behavior and the mental, the one to be examined here will be a Wittgensteinian 'criteriological' view. What makes this account special is that it, unlike other accounts, is particularly germane to the problem of introspective descriptions. Its unique value lies in its mistake of taking a single concept (that of some mental phenomena) and making of it two different concepts, one tied to a first-person use and the other to an other-person use of the mental term.³²

³²Other 'conceptual' accounts have their own problems. Arguments against functionalism are offered by N.J. Block and J.A. Fodor, "What Psychological States Are Not," The Philosophical Review 81 (April, 1972): 159-181. Criticism of logical behaviorism is offered by Hilary Putnam, "The Mental Life of Some Machines," in Modern Materialism: Readings on Mind-Body Identity, ed. John O'Connor (New York: Harcourt, Brace and World, 1969), pp. 263-281. None of them make much of the contrast between first and other person uses of mental terms. It is difficult to know in which camp to place those theories which identify the mental as a theoretical entity explaining and predicting behavior (vide Wilfred Sellars, "Materialism and the Mind and Body Problem," The Review of Metaphysics 17 (1963):49-67 and Charles S. Chihara and J.A. Fodor, "Operationalism and Ordinary Language: A Critique of Wittgenstein" in Pitcher, op. cit., pp. 384-419. Since these accounts are better understood as explaining the origins of our use of mental terms rather than their current use, they, too, are unlikely to help us find a solution to the problem of introspective descriptions.

This fault of the 'criteriological' view arises from an oddity in our concept of the mental. It is in wrestling with an alternate explanation of this oddity that consciousness is considered as a supplement to behavior in providing access to the mental. As a result, a likely-looking means to introspective descriptions appears on the horizon.

By a "'criteriological' view of behavior," we are referring to the position that behavior (of some specified kind) is a criterion for the application of some mental term. Because what Wittgenstein's exact notion of 'criterion' is is under dispute, we cannot claim to do more than present a Wittgenstein - inspired 'criteriological' view. To say, then, that behavior, e.g., crying and writhing, is a criterion of something mental, e.g., pains, is to indicate that the behavior -- the crying and writhing -- justifies the use of the mental term: here, the term "pain".³³ Under normal circumstances, if behavior is a criterion for the mental, it determines the application of that mental term. The criterion, then, forms part of the concept of that for which

³³"X is a criterion of Y in situations of type S if the very meaning or definition of 'Y' (or, as Wittgenstein might have put it, if the "grammatical" rules for the use of 'Y') justify the claim that one can see, recognize, detect, or determine the applicability of 'Y' on the basis of X in normal situations of type S." C.S. Chihara and J.A. Fodor, "Operationalism and Ordinary Language: A Critique of Wittgenstein" in Pitcher, op. cit., p. 397. Criteria may be considered evidence for the application of a term. But evidence is not limited to criteria: evidence may also consist of correlated phenomena. Criteria form a sub-set of the class of evidence.

it is a criterion: crying and writhing form part of the concept of pain. In general, identifying behavior as a criterion for the mental involves acknowledging behavior as part of the concept of the mental.

It is important to realize that by giving the criteria for a term, we do not thereby exhaust the concept. A criterion is not identical to that of which it is a criterion: the mental is not the same as the behavior which functions as its criteria -- the pain is not the crying and writhing. It would seem that the 'criteriological' view is exempt from the objection that the mental is reduced to behavior. However this impression is in important respects illusory. There is no role given for the mental entity to play.

"Imagine a person whose memory could not retain what the word 'pain' meant -- so that he constantly called different things by that name -- but nevertheless used the word in a way fitting in with the usual symptoms and presuppositions of pain" -- in short he uses it as we all do. Here I should like to say: a wheel that can be turned though nothing else moves with it, is not part of the mechanism (PI, 271).

When behavioral criteria are the decisive factor in determining the correctness of the application of some mental term rather than the mental phenomena, the latter is, for all intents and purposes, eliminated. The mental phenomenon may exist but "the conclusion was only that a nothing would serve just as well as a something about which nothing could be said" (PI, 304). The absence of any role for the mental in the 'criteriological' views is further confirmed by Wittgenstein's account of the first-person use of mental terms.

It will be recalled that the problem of understanding first-person applications of mental terms motivated the private language argument in the first place. The proffered solution was to redefine the mental -- to discard privacy as inaccessibility and allow the mental to become accessible through behavior. Further reflection, however, reveals that this redefinition does not amount to an explanation of how one talks about the mental in one's own case.

Using behavior as a criterion for the mental, one is justified in ascribing mental phenomena to others. The behavior, in ordinary circumstances, warrants the application of the relevant mental terms. The exception is our own case. We do not ascribe mental phenomena to ourselves because of the way we behave. In attributing a sensation to oneself "what I do is not, of course, to identify my sensation by criteria..." (PI, 290). Should a person use his own behavior as the basis for applying a mental term to himself, we would consider him to have misunderstood the meaning of the word. He would not be using the mental word properly. The purport of the private language argument is not that behavior can function as criteria for first-person ascriptions of the mental. Behavior is not being suggested as a means of verifying the accuracy of one's identification of some mental phenomenon. Rather, the moral of the private language argument is that, without the possibility of verification, the first-person use of mental terms should not be considered an instance of identification -- and, hence of referring and

describing -- at all. "That is to say: if we construe the grammar of the expression of sensation on the model of 'object and designation' the object drops out of consideration as irrelevant" (PI, 293). Our understanding of the linguistic function of first-person ascriptions of mental phenomena apparently requires revision.

When the mental phenomenon is the sensation of pain, the self-ascription of pain, "I am in pain," involves reference neither to the subject nor to the sensation and is not a description of the subject. Wittgenstein offers a reinterpretation of the workings of self-ascriptions of pain which is derived from a plausible reconstruction of our acquisition of the word 'pain': i.e.,

...words are connected with the primitive, the natural, expressions of the sensation and used in their place. A child has hurt himself and he cries; and then adults talk to him and teach him exclamations and, later, sentences. They teach the child new pain behavior. "So you are saying that the word 'pain' really means crying?" -- On the contrary: the verbal expression of pain replaces crying and does not describe it (PI, 244).

Instead of regarding "I am in pain" as a description whose accuracy is to be measured against the situation involved, it is to be considered an expression (of pain).

In designating the linguistic function of first-person ascriptions of pain as one of expression, we are meant to view the ascription as an instance of linguistic behavior -- with the emphasis being placed on the behavioral aspect. With this emphasis, the similarities between the first-person claim to pain and unlearned non-verbal pain behavior are

reinforced. Just as I have no doubts about the truth or falsity involved by crying and groaning when in pain, no more do self-doubts arise for me when I exclaim that I am in pain under the same circumstances. From the point of view of others, the linguistic behavior exhibited is part and parcel of the set of criteria for applying the mental term given the appropriate setting (e.g. not that of a dramatic performance). Both what I say and do decides the issue of whether to apply a mental term to me or not (an issue which arises, not for me, but for others). Like crying and groaning, my claims about my pains are conventionally linked to the concept of pain as criteria for pain.

The assignment of an expressive function to first-person ascriptions of mental phenomena is not illuminating for all mental terms. Consider sensations, like the sensation of red, which are the subjective effects of sense observation. A sentence like "I am having a sensation of red" can only be regarded as an expression if we take "expression" in its widest sense where thoughts and truths as well as emotions get expressed. In the narrow sense of "expression" where we are concerned with vehicles for communicating feelings and emotions, (e.g. where smiles, gestures, as well as comments can communicate happiness), "I am having a sensation of red" ordinarily fails to be expressive. It shares certain 'criteriological' characteristics with "I am in pain" -- my sincere claim to possess the

sensation of red constitutes one of the criteria for attributing that sensation to me and questions about the truth or falsity of my claim to the sensation make as little sense for my own case as they do for my claim to pain. "What is the criterion for the redness of an image? For me, when it is someone else's image: what he says and does. For myself, when it is my image: nothing" (PI, 377). The source of these characteristics for the first person uses of "the sensation of red" is different from that of first person uses of "pain": it lies, according to Wittgenstein, in its linguistic function as a rule of grammar. "How do I know that this colour is red? -- It would be an answer to say: "I have learnt English" (PI, 380). Whether the above analyses are deemed satisfactory or not, they are cases in point, the point being that the appeal to private entities in understanding first person uses of mental terms is avoidable if we assign a non-referential function to such uses. Mental phenomena per se are deliberately not given a part to play in first person uses of mental terms.

Other-person uses of mental terms are allowed to function as descriptions. They do so, however, only insofar as they are based on behavior which can act as criteria for those terms. The first-person use of mental terms is neither considered descriptive nor is it based on criteria. If, as Wittgenstein claims, by explaining the use of a term, one thereby explains the concept, different uses signify different

concepts. Any mental concept, which embraces the above disparate first and other person uses, is, in truth, two different concepts. The 'criteriological' view evidently divides the concept of the mental along lines created by the employment of criteria.

The merit of the 'criteriological' account lies in its drawing attention to the differences between first and other person uses of mental terms. Recognition is sought for such differences as the following: Should there be disagreement about the attribution of some mental phenomenon to a person, it is the view of that person which is generally deferred to.³⁴ The subject's claims about his pains are rarely disputed -- exceptions occur in the case of extreme youth. For those mental concepts like "pain" (rather than those like "belief") for which the subject is generally regarded as the unimpeachable authority on his own experience, doubt is a stranger to self-ascriptions of those experiences. With respect to others, though, doubt is legitimate. And while our knowledge about the mental phenomena of others is mediate, based on inferences from behavior and the surrounding circumstances, the information we have about our mental phenomena is not based on inference. If such 'self-knowledge' may be said to be based on anything at all

³⁴ This would not necessarily hold for the concepts of belief, desire, intention, mood, etc.

(which is disputed by some³⁵), it is directly based on the experiences themselves.

The fault of the 'criteriological' account lies in its failure to acknowledge important similarities between first and other person uses of mental terms.

...One must also be struck with the fact, or at any rate with the possibility, that there are first-person statements that are not one's own. Once one recognizes that "other beings may also have the right to say I," one immediately notices that there is what may be called a "logical correspondence" between first-person and third-person statements (Shoemaker, 1963, p. 12).

The "logical correspondence" arises from the situation where the same fact is communicated by both first person and other person comments. When I say that Jack is in pain and Jack says, "I am in pain," both remarks impart the same information. The same truth conditions obtain for both claims. Only the speakers are different, thereby necessitating a change in the reference to the subject.

More generally, if S is a sentence in the third person that expresses a statement about a person A, and if S' is a sentence obtained from S by replacing the expressions in S that refer to A with first-person pronouns of the grammatically appropriate cases, and by making whatever changes are grammatically required by the insertion of these pronouns (e.g., replacing "is" by "am," "sees" by "see" and so on), then S' will make a true statement when asserted by A if and only if the statement expressed S is true (Shoemaker, 1963, p. 170).

If both first person and other person remarks are rightly regarded as communicating the same fact, to assign them

³⁵"It is nonsense to speak of my knowing on inductive grounds, or on the basis of the testimony of others, that I am in pain" (Shoemaker, 1963, p. 224).

disparate linguistic functions seems a premature move on our part.

Furthermore, it seems counter-intuitive to regard our mental concepts as actually double concepts. Pain is pain no matter who has it or who is said to have it. If pain is correctly attributed to both you and me, it is assumed that phenomena of the same type are occurring in both of us. Our intuition tells us that a single concept of pain underlies both first person and other person uses of "pain." And that intuition arises from the connection between a mental term and the associated phenomenon - a connection consisting, in part, of understanding the mental term as being used to talk about certain mental phenomena.

The double concept of the mental came about because of the gap found between first and other person uses of mental terms. This gap may be closed by blurring the distinctions between the two uses. We want to dispel the air of utter disparity between first and other person uses created by the 'criteriological' view. This may be done, in part, not by denying the existence of differences, but by relocating the source of these differences. In the 'criteriological' account, differences in the roles for self-doubt and evidence were associated with differences in grammatical person: while evidence formed the basis for other person attributions of mental phenomena like pain, evidence was unnecessary -- even out of place -- for first person attributions. It was then concluded that these differences heralded a change in

linguistic function -- expression was assigned to first person ascriptions of pain, description to third person ascriptions. Linguistic function was tied to grammatical person. A shift in perspective-- we recognize that linguistic function is more a product of use and context than of sentence structure -- serves to loosen the connection between function and person. Expression is not reserved exclusively for first person sentences. Other person sentences may also be used expressively. What is striking about the first person use of "pain" - i.e. "I am in pain" - is its peculiar appropriateness as a vehicle of expression: an appropriateness that is due to the coincidence of what is being talked about -- viz. pain -- and what is being expressed -- also pain. Although uncharacterized by this happy coincidence, other person sentences may serve as vehicles of expression (even though what is expressed is not what is being talked about). Thus, "he is in pain" may express sympathy although it is about someone else's pains. As an expression of sympathy, the speaker would not ordinarily require evidence nor entertain doubts about the truth of his offer of sympathy. It is linguistic function, not grammatical person, which determines what parts doubts and evidence are to play. The association between these roles and grammatical person arises only insofar as some sentence is being used to perform some linguistic function. The difference between "I am in pain" and "he is in pain" is not necessarily the difference between expressive

and non-expressive uses of "pain" (though it may be). The same, mutatis mutandi, goes for "the sensation of red" and like mental terms.

The disparity between first and other person ascriptions of mental terms may be further minimized by allowing such ascriptions to fulfill the same linguistic function. When this linguistic function is that of reference, a bond is forged between the two types of ascriptions. For it is the exclusion of a referring and descriptive function from the first-person repertoire, insisted upon by the private language argument, which creates the gap between first and other person uses of mental terms. Success in restoring descriptive and referring functions to first person ascriptions of mental terms will warrant the claim that the difference between "I am in pain" and "he is in pain" is also not necessarily the difference between non-descriptive (or non-referential) and descriptive (or referential) uses of "pain."

Just as it was important for us to realize the lack of a one-to-one correspondence between linguistic function and sentence structure, so it is crucial that we acknowledge that linguistic function is not always monopolistic in effect. Any particular utterance of a sentence may, in fact, serve more than one linguistic function. "He is in pain" may function both as a description of someone's mental state as well as an expression of sympathy.

To include the possibility of a referential function for a first person use of a mental terms, a means of verifying

one's identification of some mental phenomenon must be provided. Let us see how the verification process proceeds for the identification of jars before going on to the identification of a mental phenomenon. When I identify a jar as such, using its resemblance to a previous example as my guide, what I see forms the basis of my identification. The absence of the original jar may lead me to have doubts about the matter. To confirm my identification, I can find out whether what other people see conforms to what I've seen. This procedure is acceptable because part of our concept of a jar is that of something which is visible to the public (under appropriate conditions). In the case of mental phenomena, a means of verification is at hand as long as behavior is regarded as conceptually related to the mental, i.e. as criteria for the mental.

Consider the identification problem in the private language argument. I follow up my decision to refer to a certain sensation "S" by calling a subsequent sensation, which seems to me to contain the relevant features of the first sensation, "S". I base my identification on the felt qualities of the sensation. My concept of the sensation is that of something which has certain felt qualities. For whatever reason, I am not entirely confident about the identification (hence, the use of "seems").³⁶ As long

³⁶ Later we will attempt to make the emergence of such doubt credible.

as behavior can act as criteria for the mental, other people are granted access to the mental. My behavior and the testimony of others becomes available as evidence for one classification of the mental phenomenon rather than some other. Since I'm in doubt, then, what I can do is to get other people's testimony on the matter -- testimony regarding the presence of S that is based on behavior that I've exhibited. If behavior which is a criterion for S was present under the appropriate circumstances, the testimony will corroborate my identification and I will be reassured that by my use of "S" I am referring to S. The concept of S underlying this procedure is not only the concept of something which normally is accompanied by certain types of behavior in certain situations but also the concept of that which has certain felt qualities.

4. Consciousness as a Distinguishing Mark of the Mental

The abandonment of privacy as inaccessibility as distinctive of mental phenomena in favor of accessibility to the mental via behavioral criteria should not be taken as an espousal of behavior as characterizing the mental. Such a move would be tantamount to eliminating the mental as a non-physical phenomenon. As a result, a lacuna has been created: a distinguishing mark for the mental remains to be found. We now turn to the other senses of "privacy" for a likely candidate. The strongest sense of privacy has been found to be too strong. Privacy as inaccessibility

has the effect of eliminating the mental for referring and describing purposes. A weaker sense of 'privacy' might do a better job.

Privacy as unshareability is too weak. When privacy as unshareability is understood 'loosely,' it does not ring true; understood 'strictly', it encompasses non-mental phenomena. Loosely speaking, to say that mental phenomena cannot be shared is to deny that two people may feel the same despite the resemblance obtaining between their mental experiences and what occasions them: it is to deny that people can have mental experiences of the same type. The unacceptability of this position is obvious: It makes nonsense of claims to share another's griefs, joys, pains, etc; it destroys the basis for sympathy and empathy. When a 'loose' notion of mental shareability is rejected, it is most probably due to a stricter notion of shareability. Strictly speaking, we will say that some mental experience is being shared if and only if the mental phenomenon experienced by one person is numerically identical to that experienced by someone else. To make any sense of the numerical identity of mental phenomena at all,³⁷ it would be most natural to tie

³⁷Ayer, A.J. expresses serious doubts about this in his "Concept of a Person," op. cit.

the identity of mental phenomena to the identity of the experiencing subject.³⁸ Consequently, the mental would be unshareable as long as more than one experiencing subject is involved. By the same reasoning, any state (be it mental or non-mental) which is identified by reference to the identity of the entity in possession of that state becomes unshareable, too. "...If it is true that you cannot have my feelings, it is equally true that you cannot sleep my sleep, or smile my smile or speak with my voice."³⁹ Any doubts about identifying these physical states by way of their possessors are doubts which may also be raised about using the person as the basis for allocating numerical identity to mental phenomena. Arguments for the unshareability of non-mental states are no less and no more decisive than those for mental phenomena's unshareability. Privacy, as unshareability, cannot be restricted to the mental.

Privacy as incorrigibility is an extremely attractive candidate for a distinguishing mark for the mental. As

³⁸"The principles of individuation of such experiences (sensations, mental events, etc.) essentially turn on the identities of the persons to whose histories they belong. A twinge of toothache or a private impression of red cannot in general be identified in our common language except as the twinge which such-and-such an identified person had or is having. Identifying references to 'private particulars' depend on identifying references to particulars of another type altogether, namely persons." (Parentheses added). P.F. Strawson, Individuals (Garden City, N.Y.: Anchor Books Doubleday & Co., 1963), p. 31.

³⁹Ayer, 1963, op.cit., p.80 .

espoused by Rorty, the incorrigibility of the mental amounts to the absence of rational procedures for overriding first person reports of mental phenomena.⁴⁰ Rorty deliberately reduces the investigation of mental phenomena to the question of the conventions governing certain of our linguistic procedures when he converts incorrigibility to 'non-overridability' by rational procedures. His reason for choosing incorrigibility as distinctive of the mental is that incorrigibility is inapplicable to anything physical. This should come as no surprise to us -- we have already had occasion to note the intimate connections between the physical realm, sense observation, and corrigibility. In Rorty's eyes, the advantage to making incorrigibility a matter of linguistic convention is that not only does incorrigibility not apply to anything physical now, it will not be discovered to apply to anything physical later.

...(W)e are never going to identify the property of being the subject of an incorrigible or near-incorrigible report with any neurological property. For this is not a feature which might be found mirrored in neurology -- it is a feature attached to them by the linguistic practices of a community.⁴¹

Unfortunately, as Rorty admits, incorrigibility is too restrictive -- it does not include mental phenomena such as beliefs, motives, etc.

⁴⁰Richard Rorty, "Incorrigibility as the Mark of the Mental," The Journal of Philosophy (June 25, 1970): 399-424.

⁴¹Rorty, ibid, p. 422.

Rorty's stratagem has been further criticized on the grounds that a successful demonstration of mental-physical incompatibility must be rooted in the nature of the underlying phenomena -- that we must show the nature of the mental to be such that it resists assimilation to the physical.⁴² Comparison of linguistic practices may be relied upon only if it is shown that they reflect the nature of their subject-matter. Moreover, were we to follow in Rorty's footsteps, our efforts to find parallels between introspection and sense observation will be hampered by this emphasis on linguistic procedures. In order to even begin to compare introspection with sense observation, introspection must be considered as providing access to phenomena. Limiting ourselves to linguistic practices will prevent us from drawing this parallel in a convincing manner. As a result, we want to acknowledge our indebtedness to Rorty for both the insight and the limitations of his analysis of incorrigibility as an insurmountable impediment to conflating the mental with the physical. They supply us with the parameters of our characterization of the mental. We are now looking for some feature which belongs to mental phenomena and, as such, may involve incorrigibility.

The concept of the mental which underlies the suggested verification process for first-person identification of mental phenomena offers another possible candidate: viz. privacy

⁴²See Rosenthal, op. cit.

as special access, alluded to in the phrase "felt qualities." It has been objected that this sense of "privacy" encompasses more than mental phenomena: by understanding privacy as special access in terms of "...things (being) private to a given person if he can know about them in ways different from those in which anyone else can know about them. But in this sense my stomach is private to me, for I can know that it is fluttering by feeling that it is, and no one else can do that."⁴³ This objection may be bypassed by specifying the exact nature of the special access characteristic of mental phenomena. In referring to the "felt qualities" of mental phenomena, we mean to imply not only that there is an avenue to them which is solely available to the experiencing subject but also that that avenue is consciousness (or awareness). Instead of "felt qualities," we could as readily have talked about qualities of which we were conscious (or aware).

The exigencies of language (as noted in the private language argument) are such that the concept of the mental rules out the possibility of mental phenomena never being publicly accessible. Earlier, we were careful not to identify mental phenomena with their behavioral criteria. It must be acknowledged that mental phenomena could exist without being accompanied by these criteria. What makes the mental special is that, for any particular mental phenomenon,

⁴³Rorty, ibid., p. 413.

the possibility exists that it won't become accessible to someone else. That mental phenomenon would be accessible to only one person. Without public manifestation of the mental phenomenon (without the cooperation of the subject of the mental phenomenon), no one else can gain access to that phenomenon.

Although we have permitted mental phenomena to become public -- by acknowledging that there is a way for others to detect them⁴⁴ -- we have managed to retain some privacy. Thus, mental phenomena are public because they are detectable by others when they are accompanied by relevant behavior. Mental phenomena are private insofar as, whenever they are not so accompanied, they are not detectable by others. While publicity is a necessary possibility for all mental phenomena, privacy is a possibility for any mental phenomenon. The case is quite otherwise for physical entities. Physical phenomena are public in that they, too, must be detectable by others. Provided that, for any entity perceived by a single individual, it is not possible that the entity be perceived by anyone else, then we immediately suspect that the object does not (physically) exist.⁴⁵ The withdrawal of the physical when privacy appears on the scene explains why no taint of privacy attaches to the physical.

⁴⁴Ayer discusses this version of publicity in op. cit. p. 58.

⁴⁵Ibid., p. 76.

The possibility of successful suppression tells us that the subject has a special access to his mental states which is unavailable to other individuals (with respect to his mental states). Inasmuch as adopting behavioral criteria for the mental subjected mental phenomena to public scrutiny by way of sense observation, hiding the mental from such scrutiny would entail their retirement from sense observation. Negatively characterized, special access would be the avenue an individual has to his mental phenomena which is not sense observation. (In such wise, the access which someone has to his own body (even his fluttering stomach) is excluded from privacy as special access because the former access is a variety of sense observation.) Moreover, it is this occasional suppression which explains the allure of the other senses of "privacy" as distinguishing marks of the mental. Whereas we suppose that we can discover any physical phenomenon by placing ourselves in the proper perceptual circumstances; should an individual be successful at suppressing all tell-tale signs, there is nothing we can do to reveal his secret mental life. For all practical purposes, his mental life is inaccessible to anyone else and cannot be shared by another. And it is in such circumstances, that his word concerning his mental life is final. Our positive characterization puts us squarely in the Lockean tradition: it involves identifying this special access with consciousness.

In Locke's view, consciousness determines personal identity. Consequently, a person's consciousness of his

mental state is not something that anyone else can have unless they were one and the same person. When consciousness is the only avenue to the mental available, only the experiencing subject can avail himself of it. The "when" introduces a crucial qualification. It is imperative that consciousness not always be the only avenue to the mental. Behold our claim that our consciousness of our mental processes is translated into public terms through behavior. When we behave in certain ways, our mental states become accessible to others. Accordingly, our behavior becomes criteria for the application of mental predicates. Manifesting one's mental state through behavior renders it susceptible to sense observation without closing it to consciousness. Indeed, it is not by way of our behavior that our mental phenomena become accessible to us. Criteria are other-directed: the producer (of the behavior) does not normally use criteria to apply mental terms to himself. Consciousness remains our access to our own mental processes including our mental activities. It would be implausible to claim that the occasional suppression of beliefs, desires, motives, etc. (such that access to them can be gained only through consciousness) is impossible. Thus, consciousness is a necessary prerequisite of the availability of the mental. In sum, we may distinguish the mental as that which, when successfully suppressed, leaves consciousness as its only access.

As is the case for many of Locke's concepts, there is an embarrassment of senses connected with Locke's use of

"consciousness." Espousal of consciousness as distinctive of the mental has consequences for any notion of consciousness which is adopted. A brief examination of "consciousness" seems to be called for in order to determine just what the adoption of Lockean consciousness as a mark of the mental commits us to.

Three senses of "consciousness" may be distilled from Locke's discussion. There is, first, that sense of "consciousness" as a functioning of the mind whereby ideas are revealed. In identifying the special access that the experiencing subject has to his mental life with consciousness, it is presumably this first sense of "consciousness" which is being utilized. Because of certain things we say, however, there is some difficulty with using consciousness as access as a distinguishing mark of the mental. "Awareness" and "consciousness" may often be used interchangeably. We admit to becoming aware of all sorts of things, not all of which are counted as mental. We are aware of material entities like tables and chairs as well as facts involving such entities, consider claims to be aware that tables and chairs come in many shapes and materials. Indeed, our awareness can extend to any number of facts about the world. While "consciousness" is not so catholic in its objects -- we do not ordinarily talk of being conscious of chairs -- the boundaries on its objects do not coincide with those separating the mental from the non-mental. Not only may I be conscious of anger stirring within me, but I may also be conscious of my neighbor's disturbing

presence. As these remarks illustrate, "to be aware" and "to be conscious" are verbs of cognition. As such, they share with other verbs of cognition no special general restrictions upon their contents. Yet, if consciousness as access is to distinguish the mental, we would want it to be a special type of cognition peculiar to the mental realm.

Locke has designated consciousness as necessary for the existence of mental phenomena such as ideas. This ploy suggests a second sense of "consciousness" where the latter become the "stuff" (so to speak) of the mental. The view that consciousness is an essential property of mental entities tempts us to consider the ideas and activities of the mind as so many states of consciousness. Thus, sensations like after-images, illusions, hallucinations, etc. are classified as mental because their existence depends on someone being conscious of them. Inasmuch as they seem more like particulars than processes, they are regarded as different types of conscious states. Consciousness and the mental seem to be equated for this second view of "consciousness." But it is this very feature which renders this second sense of "consciousness" unfit as a mark of the mental. The whole point of a distinguishing mark is to enable us to pick out something else. If consciousness and the mental are, to all intents and purposes, equivalent, the designation of consciousness as a distinguishing mark of the mental becomes an empty gesture for it turns out that consciousness has become its own distinguishing mark.

It has already been noted that consciousness for Locke may be considered as the having of ideas. As such, the various operations of the mind would be distinguishable as different modes of having ideas -- or, as different ways of being conscious. The third sense of "consciousness,"⁴⁶ may be considered a compromise between the first two senses. Like the first sense, consciousness continues to be regarded as a functioning or process. But like the second notion, any implication that there are two entities (a cognisant subject and ideas, for example) related is relinquished.

In this third way of understanding "consciousness," the phrases designating the objects of consciousness are the nominative accusatives of the verbal phrase "to be conscious." Despite their nominative status, these accusatives are not to be taken as standing for a particular entity but rather as indicative of the particular way that the subject is conscious. In the phrase "to dance a tango," even though "tango," is a noun, it modifies the verb "to dance." Thus, when dancing a tango, there are not two things occurring: it's just that we're dancing in a certain way. Similarly, on this view, the use of a nominative phrase as the object of the verb in, say, my report on an after-image (as in "I see green spots ") can obscure the actual adverbial function of the phrase. While perhaps a better representative of the nature of one's consciousness of after-images, the statement "I am seeing

⁴⁶ Suggested by Professor Charles Landesman, Hunter College, CUNY.

greenly and spottedly" involves a most infelicitous turn of phrase. We need not resort to such statements since the recognition that the phrase giving the object is merely the cognate accusative of the verb should rid us of the temptation to reify the objects of consciousness. As a result, concern that consciousness may take non-mental objects disappears since, in this manner of understanding "consciousness," the objects are only a matter of speaking, they are grammatical objects. Moreover, since consciousness is still a process or activity, it remains eligible to be considered a mode of cognitive activity.

In this third sense of "consciousness," consciousness is certainly necessary for the mental. But because a certain amount of latitude is contained by the notion of a "way of x-ing," the notion of "ways of being conscious" may be construed so that consciousness is not sufficient for something to be mental. For instance, the tango, the waltz, the pogo are all ways of dancing. So is dancing happily, dancing in time to the music, dancing with a smile on one's face, etc. Generally speaking, the notion of "ways of x-ing" may include not only determinate forms of x-ing but may also encompass other features including accompaniments, surroundings, and other circumstances. The requirements of mental (including introspective) descriptions stipulate that behavior be involved with the mental. Behavior of the appropriate kind then generally characterizes (though it may not do so on occasions) the mental. Thus, most of the various ways we are conscious

include behavioral manifestations of the proper sort. Consciousness and the mental are not then equivalent and there is no problem with consciousness being a distinguishing mark of the mental.

The advantages attached to this third sense of consciousness should not blind us to the disadvantages. The first two senses leave our inclination to people the mental realm with particulars intact. This inclination derives from such things as our experiences of after-images. Not only do after-images have a definite duration, but they possess other features reminiscent of those of material particulars. After-images are spatial in their own peculiar way -- they appear in front of us without being locatable in the spatial coordinate system created by physical entities. They also come in peculiar sizes, peculiar because the claim that an after-image is certainly smaller than a person's head may go hand in hand with the complaint that the after-image obscures one's view of the person's head. It seems as odd to conceive of an after-image as a process as it does to conceive of tables and chairs as processes. Yet, in the case of the latter, when we leave the ordinary realm for the more technical one of physics, that is exactly what we do: it becomes more useful to describe the physical in terms of processes. Perhaps by construing an after-image as a particular way of being conscious, we may be considered to be abandoning the layman's point of view for a more technical one. If indeed this third sense of consciousness operates on a more technical level, then its

acceptance depends on its meeting standards of coherence and demonstrating its heuristic value. Unfortunately, there is no widely accepted theory of mind in the context of which this view of consciousness may display its worth. We are adopting this sense of "consciousness" fully aware of the risks involved. Henceforth, though we will speak as the layman does, using "consciousness" in either one of the first two senses, it is to this third sense of "consciousness" that we will actually be committed. At the very least, this move allows us to proceed with our investigation of introspection.

The adoption of consciousness as a distinguishing mark of the mental has its price. The adoption of consciousness as the distinguishing mark of the mental is, however, a move that may not be sanctioned by Locke's theories. Locke insists that consciousness is necessary for perception in general -- i.e., for our having ideas. Yet consciousness does not reveal the mind. If the mind is to be classified along with its operations and ideas as mental (and non-physical), then the mark of the mental cannot be consciousness but must be either that of being mind or belonging to mind. Fastening upon consciousness as distinctive of the mental would have the effect of making the Lockean mind non-mental. However, there are certain aspects of Locke's views on the mind which could support such a move. In the first place, Locke's commitment to the existence of substance -- be it body or mind -- is less than wholehearted. Furthermore, Locke does attribute spatial characteristics -- e.g., locatability and movement -- to the

mind. The selection of consciousness to distinguish the mental may not be the deviation from Locke's views that one might at first suppose.

Moreover, in adopting a process view of consciousness and in maintaining a schism between the mental and the physical, we are opting for a dualism of attribute rather than a dualism of substance: The introspecting subject is the person, an entity possessing both physical and mental attributes. The picture of introspection that we finally get will emerge from a different context than the surrounding Lockean introspection. Locke's views were articulated within a traditional dualism of substance. While this is undoubtedly the case, we have already had reason to note that Locke was not entirely comfortable with this tradition. His suspicion of substance has already been remarked upon as has his willingness to blur the mental and the physical by intermingling physical and mental characteristics. His attribution of spatial location and movement to mind and his willingness to entertain the notion of thinking matter are cases in point. As a consequence, we may venture to say that this change in the dualist framework has been foreshadowed in Locke's theory.

Besides the consequences to Locke's theory, unconscious mental phenomena fall by the wayside when consciousness distinguishes the mental. Since the inclusion of the unconscious into the realm of the mental is largely due to the similarities between the role of the unconscious in explaining human behavior and the explanatory role of certain mental phenomena

(e.g. beliefs, desires) and since it is possible for entirely different phenomena to occupy similar explanatory roles, we need not mourn the passing of the unconscious from the mental domain. More serious difficulties are raised by the interdependence between the notion of the mental and that of consciousness. These difficulties in relation to introspection will be discussed in the next chapter.

5. Unity of Consciousness and Behavior in the Concept of the Mental

In the meantime, not only do we have in consciousness a distinguishing mark for the mental, but also answers for questions raised by our account of the verification of the identifications of one's mental experiences. It will be remembered that the concept of a jar revealed the uniformity of my and other person identifications, viz. public visibility. In the case of S, the basis for my identification (felt qualities) was not the same as that for other person identifications (behavior and situation) and the concept of S reflected this duality. The reader may wonder whether our solution doesn't incorporate the flaws of the 'criteriological' view. We criticized the 'criteriological' view for creating two concepts out of a single one. Although our solution lays claim to a single concept of the mental, that concept is comprised of two disparate features. Is their unity into a single concept genuine or is it merely a putative unity? Related to this question is a second

one: given the noninferential nature of most first person uses of mental terms, how are we justified in assuming that evidence is relevant for first person identifications of mental phenomena? This latter question challenges us to show that allowing the concept of the mental to embrace behavior as well as consciousness is not an ad hoc maneuver geared to avoid the problems raised by the private language argument. There is an air of arbitrariness about our solution to identifying the mental which must be dispelled.

Privacy as special access was identified as consciousness because the latter was deemed (in accordance with Lockean dictates) to be an intrinsic feature of mental phenomena. The nature of the mental determined our choice of a distinguishing mark of the mental. Similarly, it is the nature of mental phenomena to which we turn to legitimate the concept of the mental underlying our attempt to provide a referential function for first-person uses of mental terms. That this concept of the mental is the concept of a certain sort of phenomenon is the source of unity in that concept. By the same token, the disparate features contained in the concept of the mental derive from the nature of the phenomena involved. Combining these features into a single concept constitutes the recognition of the unitary nature of the source of the disparity.

Mental phenomena have been defined in terms of consciousness. The explanation for joining behavior to consciousness in the concept of the mental concerns certain contingent

aspects of mental phenomena, viz. the network of causal relationships in which mental phenomena participate. Upon noticing that only some types of behavior are regarded as indicative of the mental while others are not, we cannot help but be struck by the causal relationship obtaining between behavior which is a criterion and the associated mental phenomenon. Jack's falling down and breaking his crown give rise to his pains which, in their turn, produce his wails of distress. It is inherent to the constitution of human beings that we feel pain attending bodily injury and, as a result, spontaneously respond with certain types of behavior. It is also part of the social history of human beings that past infancy the behavior exhibited in the presence of pain is modified. Learned behavior such as verbal remarks are incorporated into our repertoire of behavior suitable for manifesting pain. Socialization has added new causal connections (albeit not merely a causal connection) between mental phenomena and behavior. The causal connections in general make the association between the mental and behavior a natural one.

However, the association between behavior and the mental is more than natural -- it is also conceptual. Behavioral criteria are all causally related to the mental phenomena for which they are criteria. The interplay between the causal and criterion status of behavior is most striking when we consider that one way to explain what, say, "pain" means to someone who doesn't know is by '...pricking him with

a pin and saying: "See, that's what pain is!"' (PI, 288). Not everything to which some mental phenomena is causally related counts as criteria for it, though. Evidently, a selection process occurs by which some of the causal relations are incorporated into the concept of the mental phenomena. Most likely, socialization accounts for this development also: we learn to consider certain types of responses as typical of our having some mental experience and to reject other responses as incidental to the experience. The reasons for this selectivity are lost in the mists of long-standing tradition. Probably responses were chosen for their high degree of visibility, for the frequency with which they occurred for different individuals under varying circumstances, and for their success in evoking desired responses from other people. Were eyeball-rolling to be attention-getting, commonly exhibited by suffering individuals, and provocative of sympathy and aid from others and crying and writhing not; then eyeball-rolling quite possibly might have been adopted as a criterion for pain instead of crying and writhing. Artificiality is inexorably introduced by the adoption of conventions: in this case, we have opted for enshrining certain sorts of behavior as criteria for the mental. Then the mystery shrouding the selection process combines with the conventional elevation of certain behavior to the status of criteria to produce the aura of arbitrariness surrounding the concept of the mental.

If the unity of the concept of the mental derives from the phenomenon itself, the duality embraced by the concept originates in the accessibility of the phenomena. By way of our adoption of the convention decreeing behavior as criteria for the mental, a second mode of access has been added to consciousness. Because both modes are conceptually linked to the mental, theoretically neither mode should be favored above the other. Practically, consciousness would seem to have the advantage because the set of behavior which functions as criteria for any particular mental phenomenon is indefinitely large with defeasible conditions attached. Crying, writhing, uttering "I am in pain" are only a few examples of the types of behaviors which count as showing pain. In citing these examples, we are perforce simplifying matters to the point of distortion because crying, et al. count as pain criteria only in specified circumstances (which can vary greatly in details) -- e.g. accompanying bodily injury except for cases of hypochondria⁴⁷ -- whose description must contain the proviso that nothing obtains which counter-indicates the attribution of pain. Nevertheless, most people, with the exception of hardened skeptics, demonstrate flexibility and confidence in dealing with behavioral criteria.

⁴⁷We'd probably start wondering about the suffering of a hypochondriac who had never sustained any injury and suffered therefrom.

Any question about the superiority of consciousness or behavior as a means of discovering the mental is further nullified by the concordance which is expected to prevail between them. A large degree of constant association, of uniformity, prevails between the mental phenomenon as revealed by consciousness and the causally-related behaviors. Behavioral criteria for the mental were chosen from among the causes and effects attending the mental. Consciousness and behavioral criteria are causal partners in the history of mental phenomena. Causal ties -- not to mention the conceptual ties -- prevent them from being sundered. We have both conceptual and causal reasons to expect consciousness and behavior to tell the same tale -- to lead us to the same mental phenomenon. Consciousness and behavioral criteria for the mental are expected to be complementary, to reinforce each other.

It might seem that in allowing the mental to be defined by its causal role (insofar as the latter is considered a criterion) we are letting functionalism in through the back door. Presumably, tying the mental to a causal role raises the specter of the elimination of the mental by the physical just in case that causal role is fulfilled by something physical. This threat is averted because functionalism's entry is blocked by consciousness. The mental has also been defined in terms of consciousness such that even though something physical may fulfill the causal role of the mental, it cannot replace the mental unless it, too, is characterized

by consciousness. But, if the physical is characterized by consciousness, it is mental and we are reducing the physical to the mental. To be felt as pain, for example, is essential to pains. For something physical -- say a neurological process -- to be identified as pain, it would not suffice that the neurological process be causally connected to injuries, crying, writhing, etc. just as pain is supposed to be. The neurological process would also have to be felt as pain. And if the neurological process possessed the property of being felt as pain, that would suffice to establish it as pain. There would be no need to construct a functional equivalence between the neurological process and pain.

With the above discussion we have hopefully furnished a plausible -- if not compelling -- account of why consciousness and behavioral criteria are merged into a single concept of the mental. By adopting the stance that this merger has its roots in a particular subject-matter, we do not intend to imply that what we talk about can be clearly distinguished from how we talk about it -- that ontological commitments are clearly distinguishable from linguistic conventions. Too often, the identification of some belief as a matter of convention is hailed as the discovery of the conceptual framework structuring our experiences. For instance, Rorty only allows the misuse of language to obtain in those situations where non-verbal behavioral criteria and the speaker's utterances concerning some mental phenomena conflict. Genuine

error over the identification of the relevant mental phenomenon is ruled out⁴⁸ -- too hastily, perhaps. The recognition that conventions structure our experience of the world should not blind us to the fact that there is an interaction between beliefs and experience. We should, therefore, not turn our backs on the very real possibility that the conventions adopted reflect our encounters with the world. That possibility has inspired our explanation of the unity of consciousness with behavioral criteria into one concept of the mental.

6. The Possibility of Introspective Descriptions

The purpose behind our discussion of the causal role of mental phenomena was to supply a plausible context for the merger of consciousness and behavioral criteria into a single concept. The effectiveness of this task is hampered by the tendency of consciousness and behavioral criteria to gravitate towards first person and other person uses of mental terms, respectively. Consciousness is available only for one's own case. We have allowed this to stand as a peculiarity of the mental. It is only the recognition that any person -- not just oneself -- can speak from his own case which discourages us from limiting consciousness to the first person use of mental terms. It was hoped that by mentioning the causal role of mental phenomena the appeal to behavioral criteria as warrant for the application of mental terms would be seen to

⁴⁸Richard Rorty, "Mind-Body Identity, Privacy and Categories," Materialism and the Mind-Body Problem, ed. David M. Rosenthal (Englewood Cliffs, N.J.: Prentice Hall, 1971), pp.190-193.

stem from the mental phenomena themselves. No restrictions were placed on the use of behavioral criteria. The consequent impression that behavioral criteria for the mental is available to everyone -- for use in one's own case as well as for others -- was deliberately created to reinforce the bonds between first and other person uses of mental terms. Yet this impression flies in the face of the non-inferential character of first person uses of mental terms. We issued no challenge to the 'criteriological' analysis of many first person ascriptions of mental terms as exempt from grounding in evidence or from the need for protection from doubt because of the irrelevance of both evidence and doubt for such uses. Nor do we intend to issue such a challenge. Since the impression was produced in order to back up our assigning a role to behavior so that the conditions for a first person referring use of mental terms might be fulfilled, we have ended by committing a *petitio principii* -- the assumption that behavior as evidence is relevant for first person uses of mental terms is bolstered by the impression of its relevance.

Matters are made worse by the suspicion that the difficulties posed by the private language argument were resolved by our assuming a referring use for first person ascriptions of the mental and then picking out a convenient means for securing that use. This suspicion is not too far off-base. This means that the assumption of behavior's relevance for one's own case derives from the assumption of a referential

function to which it is supposed to lead. Too much hinges upon the connection between first person ascriptions of the mental with the evidential use of behavior for us to rely upon any *prima facie* plausibility of such a connection.

Again, our defense for the assumptions regarding reference and behavior's relevance will fall short of complete conviction. The best we can hope for is to show that a referential account of first person uses of mental terms may provide a reasonable viable alternative to the non-referential approach. We will try, therefore, to show that the assumption of a referential use is not unwarranted. The reasonableness of this assumption will then be used as a stepping-stone for the repair of the ravages upon first person referring uses of mental terms caused by the private language argument. We can't be sure that with greater ingenuity some other, perhaps better, repair work, not requiring the connection between first person uses of mental terms and the evidential use of behavior, couldn't have been effected. The most we can offer is a description of situations involving the first person use of behavior to confirm the identification of the mental. Whatever credibility attaches to these situations will hopefully rub off on the assumption about the ties between behavior as evidence and first-person ascriptions.

General considerations about language endow a greater initial plausibility to those accounts which allow reference to first person uses of mental terms over those accounts

which withhold such reference. We have already had occasion to note the multiplicity of functions that may be performed by any individual linguistic discourse. Indeed, a duality of function is inevitably accomplished by the expressive use of linguistic terms. Since it is essential to language that it be used to talk about things outside itself, this use -- a referring use -- is invoked even on those occasions when language is used as expression. A crucial difference between such linguistic behavior as the utterance of "I am in pain" and non-linguistic behavior like crying is that, besides expressing my pain, I, with my words, am also talking about -- and can't help but be talking about -- something other than my words, i.e., in this case, my pain. Reference may not be paramount, it may stay in the background, but its presence can hardly be avoided by any piece of discourse.⁴⁹ Discourse concerning the mental is no exception.

The claim that we possess the ability to refer to mental phenomena is a well-entrenched assumption which permeates our daily discourse about each other. There is no temptation to regard other person ascriptions of the mental as essentially nonreferential. With such ascriptions, we describe the subject with respect to his mental processes. The truth of the description will depend on whether the subject is in the mental state that we attribute to him. Reference to the

⁴⁹The omnipresence of reference in language use is implicitly acknowledged by the popularity of attempts to identify reference with linguistic significance.

subject and his mental state is crucial to other person uses of mental terms. Our understanding of such uses must involve acknowledgment of this referring role. These reflections encourage us to circumvent the difficulties posed in the private language argument and allow a referring use for first person ascriptions of mental terms.

What we are looking for is parity in the treatment of first with other person uses of mental terms. The demand for parity should not entail the sacrifice of those oddities which led to the exemption of first person uses of mental from the treatment meted out to other person uses. We respect the insight into the commonly non-inferential character of most first person uses of mental terms. Parity will be observed and the distinctiveness of the first person use of mental terms will be preserved by way of the distinction between possible and actual verification.

Just as the problem discussed in the private language argument didn't deal with actual verification procedures but with the possibility of such procedures, so does our solution not depend on the actual use of evidence but on the availability of evidence for first person identifications of the mental. Verification procedures are provided in case they are ever needed. Their provision neither implies that, in the ordinary course of events (i.e., the everyday use of mental terms in the first person), we normally resort to these procedures to confirm our identifications of mental

phenomena nor that we commonly entertain doubts about our identifications in the first place. Abandoning privacy as inaccessibility by accepting the accessibility of the mental by means of behavioral criteria leads to an expansion of the alternatives open to us for the confirmation of our identification of the mental. We no longer have to settle for either correctness by decision or for apparent correctness. On account of the provision of behavioral criteria, we can opt to turn to the testimony of others and to external circumstances like behavior to check that our identification of a mental phenomena has not gone astray. The speaker may check that his use of "S" constitutes an accurate identification of his sensation by checking with others or seeing for himself whether his behavior and the attendant circumstances were in conformity with the existence of S.

The addition of a third method of verification via behavioral criteria introduces a referring use for the mental term employed in the first person. The presence of a referring role does not entail that the other two means of 'verification' have to be superseded by the new acquisition. Because of the admission of a third means of verification, even if either of the remaining two methods are chosen, the mental term will still refer. With just correctness by decision or seeming correctness, there was no way to obtain anything better than accidental coincidence between the use of a mental term and some mental phenomenon. The inclusion

of behavioral criteria supplies a way of establishing a connection between the term and the mental entity. Should it be decided that whatever the speaker says goes, his use of "S" could still refer to S. Such reference would occur precisely because we could determine (through behavior, etc.) that his use of "S" and S coincided with significant frequency. It is enough that the connection can be established for referring to occur. It does not have to be established. A convention which can be shown to mirror reality -- whether it be shown or not -- is not merely a convention. Reference does not require actual verification: it demands only that verification be possible.

In order for the referring use of first person ascriptions of mental terms to be allowed, the speaker is not required to make use of behavioral evidence to check on his identifications. What is necessary is that such evidence be available. The denial of the actual employment of evidence for first person identifications of the mental does not rule out the availability or the possibility of evidence for such use. That gives but small comfort to anyone who desires to display the relevance of evidence for these uses. Therefore, could we but show the actual employment of evidence in one's own (mental) case, the possibility of such evidence would be established beyond doubt. Once more, we remind ourselves of the usual non-inferential character of most first person uses of mental terms. As a result, we must look for the employment of evidence for one's own case

to emerge from special circumstances rather than ordinary ones.

The actual use of verification procedures can be expected to occur in cases of genuine doubt concerning one's identification of a mental phenomenon. It has been argued that such cases are not possible: If doubt depends on the possibility of honest mistakes, then there would be no doubt according to Rorty because there is no way of distinguishing confusion about the nature of the mental from unfamiliarity with language. The value of Rorty's generalization is limited by the situations from which the generalization emerges. These situations involve the conflict between well-entrenched criteria for some mental phenomena: the testimony of the subject regarding his experience is contradicted by his circumstances and behavior.⁵⁰ As has already been indicated our concepts of the mental presuppose an agreement among criteria for the attribution of mental qualities. No guidelines are offered for cases of conflict between sets of criteria. Until decisions are made on how to adjudicate such conflicts, confusion about what to say will reign. Situations where criteria conflict will then not give us cases of genuine doubt over the nature of some mental phenomenon. Instead, we must look to more open-ended situations, in other words, to situations where the set of criteria for applying some mental term is incomplete.

⁵⁰Rorty, "Mind-Body Identity...", op. cit., pp.

When the available criteria are insufficient to warrant the application of a particular term, we will have to turn to other considerations in hopes that they will tip the scales one way or another. Evidence other than criteria (which is established only by correlations and not conceptually related to the phenomenon in question) will become relevant. We might even institute procedures which will generate evidence or additional criteria. Since what one says one experiences is an important criteria for applying a mental term, the open-ended situation will lack such testimony. What this amounts to for one's own case is that consciousness leaves one uncertain over how to classify some experience. Certain classifications are considered obvious -- problems with them would be taken as indicative of deeper conceptual confusion. Given the dissimilarity in all but their most general properties, it is difficult to see how anyone could confuse a frog with a cloud. Thus we would interpret such confusion as inadequate acquaintance with the concepts of frogs and clouds. Confusing frogs with toads, though, makes a good deal more sense. To the untutored eye, the resemblance between them may well overwhelm the differences which separate the two species. The solution to this confusion is a closer look at the animal rather than an English lesson. Classification is a more subtle problem here than in the case of frogs and clouds. In one's own case the inadequacy of consciousness will be acceptable when the classification is problematic because the distinctions to be

made are subtle. In general, it is hard to believe that a person can be uncertain over whether he is in severe pain or not. Because of the close alliance between feelings of pressure and pain, we can see how someone can have difficulties discerning between them. As the mental phenomena become more complex, confusion over how to classify them also becomes more believable. Being in love has so many ramifications, we have no problem understanding why a person may be uncertain about whether he is in love or not. In the face of such doubt, consulting our behavior as a means of resolving our dilemma would not be wondered at. For instance, Jill, finding herself apprehensive about accepting Jack's hand in marriage, may well begin to entertain doubts about the state of her feelings. She may wonder if she has confused complacency with love; if it is not a mistake for her to describe herself as being in love. Consideration of her spontaneously solicitous behavior towards Jack when injured may then come to the fore as favorable evidence for the affectionate state of her feelings and so decide the issue.

In sum, the relevance of evidence for first person identifications of the mental arises in the context of the incompleteness of criteria for the application of some mental form. We will do well to remember that the debate concerns which mental term to apply to the subject, not to which subject to apply the mental term. Circumstances are inconclusive regarding the appropriateness of applying some mental term -- the identification of the mental phenomenon

is in question because of the subtleties of classification. The subject is undeniably oneself. The appeal to evidence can be a factor in helping to decide between alternative mental phenomena: the evidence will be instrumental in identifying, so to speak, the referent. In such wise, bona fide instances of a referring use of mental terms in the first person voice come about.

We can now extrapolate from situations leading to first-person referring uses of mental terms to situations generating descriptions of the mental that are couched in the first person. It has already been pointed out that the extension of the term "description" is not limited to any particular class of sentences. A sentence may or may not function as a description depending on its context -- that is to say, depending on the particular circumstances leading up to it, surrounding it, and issuing from it. In short, it is the use to which a sentence is put which qualifies it as a description.

Describing my state of mind (of fear, say) is something I do in a particular context. (Just as it takes a particular context to make a certain action into an experiment.) (PI, p. 188)

Is it, then, so surprising that I use the same expression in different games? (PI, p. 188)

Regarded in this light, description need not be restricted to sentences: whatever may be put to such a use will be a candidate for description.

(But here is the problem: a cry, which cannot be called a description, which is more primitive than any description, for all that serves as a description of the inner life.) (PI, p. 189)

The context for description is such that the remarks (or cries or what have you) made by the subject yield information about the subject.

Wittgenstein goes to some trouble to expose the claim "I am conscious" as non-empirical (PI, 418).⁵¹ Yet he considers the remark informative (PI, 416) if it is said for a certain purpose -- in this case, to give someone a piece of information that he might not have. Ordinarily, consciousness is considered a sine qua non of my being a functioning human being. Thus the fact of my consciousness will not, in general, contribute to anyone's store of knowledge about me. It takes special circumstances to lift my remarks about my consciousness above a mere flourish. We require circumstances which create doubts about my consciousness in someone, e.g., following my fainting. The situation rendering "I am conscious" informative provides a contrast for the truth of the remark: the circumstances suggest -- or emerge from -- other circumstances (e.g., my fainting spell) where the attribution of consciousness to me wouldn't have been true. During a faint, one is not conscious. Description has emerged from the possibility of misdescription.

⁵¹Also see PI, 419 and 420.

The above conditions do not yield 'self-description,' ie., a case of someone describing himself to himself. We would be hard put to discover the purpose served in telling oneself a first person mental statement. Normally, such statements are not made in order to learn about oneself. The peculiarity of most first person mental statements is that to the extent to which they inform anyone, they stop short of informing oneself. The circumstances described above (in the consciousness case) are such that doubts about applying a mental term to me are aroused in the spectator and my remarks on the matter settle these doubts. To get the desired case of 'self-description,' we would need to construct a situation where being informative to oneself enters in as a special case of being informative to someone. A consideration of language will provide some useful guidelines.

Language, we have argued, is a social institution. It is a medium of interpersonal communication. Yet, adopting this view of language does not rule out soliloquizing. The reason for this accommodation is not far to seek. We need only consider sound, the original stuff of language. People are both sound-producers and sound-receivers. We produce sounds so that others may hear us. Our ability to hear sounds encompasses not only sounds manufactured by others but also sounds that we make. Thus, we can be included in the audience of our own speech performance.

Our role as audience to ourselves is usually submerged -- after all, we don't have to hear ourselves to make sounds, though a necessary prerequisite for speech (as the communication of information) is that someone else hears us (only consider the speaking deaf). Once sound becomes speech by virtue -- in part -- of someone else listening, speech will not later reduce to mere sound by the reduction of the audience to the author of the speech. In talking to oneself, our role as audience comes to the fore. Our dual role with respect to sound is reflected in our dual role with respect to communication: we can both purvey and receive information. At times, it may happen that we occupy both roles with respect to the same piece of information. This is not an uncommon outcome of our placing ourselves in the predicament of finding the answer to a question we have raised about ourselves.

A bona fide case of 'self-description' may occur, then, when the doubter and the appeaser of doubt unite in one person, in oneself. Suppose a situation where we find ourselves uncertain over what to say about our mental state. Only one mental predicate is true of me, yet I run the danger of choosing the wrong one. Confusion over whether I am awake or dreaming would be a case in point. We will have to take some measures to settle our uncertainty -- I decide to pinch myself. On the basis of this further investigation, we may come to some conclusion about our mental state. Of course, our doubts may recede in the face of these measures without the

the conclusion being drawn -- "Ow!" followed, say, by a feeling of relief and the alleviation of my anxiety. We may draw the conclusion without verbally articulating it. Should verbalization occur, the conclusion may be couched in the form of a first-person mental statement -- "Ow! I'm awake." This statement articulates what I have discovered about myself that was previously unknown to me. In itself, the statement does not settle our doubts. It expresses the settling of our doubts. We do not learn from the first-person psychological statement. We use it to express what we have learned about ourselves. It expresses information gained, a conclusion reached rather than the evidence for a conclusion. As such, the first person mental statement is informative and thus may be considered a 'self-description.' Just as sense observation is given the function of furnishing descriptions of physical phenomena, introspection has been assigned the role of supplying descriptions of the mental. The fruit of introspection -- introspective descriptions -- are descriptions of the mental. The benefits attached to our construction of occasions endowing a describing function to first person uses of mental terms is the creation of the possibility of a sub-set of introspective descriptions. And the construal of situations where evidence becomes useful for first person identifications of the mental indicates just how such introspective descriptions might arise.

To recap: The consequences of adopting one particular view of the mental, i.e., something which was private in the

sense of inaccessible, were discussed in this chapter. It was pointed out that such a view of the mental implied the absence of procedures for verification of the use of mental terms which, in turn, counterindicated a referring role for such terms. This point was illustrated in Wittgenstein's private language argument via a failed attempt to construct a language which would denote inaccessibly private phenomena. Because describing was found to presuppose referring, the attempt to arrive at introspective descriptions of private (that is, inaccessible) mental entities was acknowledged to be doomed.

The consequences of privacy (as inaccessibility) for introspection did not stop there. It was also found that, within the framework of such privacy, introspection could not be counted on to yield evidence concerning the mental. Not only did this feature of privacy render the truth conditions of claims to introspect non-introspectible, but it also limited the availability of experiences of the falsifying conditions for such claims. Moreover, the failure of privacy (as inaccessibility) to characterize a number of mental phenomena -- e.g., beliefs, understanding, desires, intentions, other mental activities -- rendered such privacy unsatisfactory as a mark of the mental independently of the merits of the private language argument. Although Locke's views of the mental could be construed as involving privacy (as inaccessibility), we ended by opting for an alternative interpretation of Locke's views which left out this feature.

In other words, as a result of this discussion, we relinquished our commitment to the mental as inaccessibly private.

The next problem in this chapter was to provide an account of the mental which, while rendering it accessible, did not, at the same time, give up the non-physical character of the mental. Wittgenstein's suggestion that behavior exhibited under the appropriate circumstances could be considered criteria for the attribution of mental features was adopted. Although this approach solved the problem of public access, other difficulties arose in its wake: The mental was apparently reduced to behavior and a schism was created between first person and other person ascriptions of the mental. These difficulties were overcome by following Locke's lead and choosing consciousness as distinctive of the mental. Besides delineating a certain subject matter as nonphysical, consciousness, considered as that special access the experiencing subject has to his mental phenomena, complements behavior as a route to the mental. It does not replace behavior for, although consciousness is an avenue to the mental which remains open even though all behavioral manifestations are absent, such suppression of behavior can only be occasional and atypical of the experience of mental phenomena. Behavior and consciousness combine to reveal the mental because, at the very least, they are causally related to the phenomena they disclose. Quite

possibly, this causal kinship is partially responsible for their conceptual integration into a single concept of the mental.

Once the mental was granted public accessibility, a means of verifying the ascription of mental attributes -- namely, behavior -- was at hand. With the possibility of verification, reference and therefore descriptions using mental terms can occur. Normally, the operation of consciousness will render the use of behavior or, indeed, any evidence, to verify the attribution of mental features in one's own case superfluous. Thus, it requires special circumstances to make evidence relevant for the self-ascription of mental terms. These are the circumstances which were found to give rise to those first person mental statements which are descriptions. When the evidence is provided by introspection, these statements may constitute introspective descriptions. The circumstances consist of situations where doubt about which mental predicate to assign to oneself arises. More specifically, evidence and the entertaining of doubt are beside the point for the use of a subject term in a first person ascription of a mental term. We have ruled out the possibility of other candidates for the subject role -- of some other subject being in the mental state under consideration. Doubt besets the ascription of the mental predicate. The threat of falsehood is raised by the openness of circumstances. The latter begets doubts about

whether the subject is indeed in a certain mental state. The initiation of additional procedures can generate evidence to determine the identification of the mental phenomenon. When the concepts are largely dispositional, in that they have implications for our behavior, sense observation may be used in deciding the issue. Should the past be involved, memory will come into play. When phenomena are clearly mental, characterized by consciousness, whatever other measures may be employed, introspection may come into its own. It (perhaps in company with other procedures) is a process we would undertake in order to determine the appropriateness of applying some mental term to oneself. Introspection can be helpful in fixing the referent of the mental term.⁵² Isolating those elements in a first person mental sentence for which evidence is relevant from those which are not may be more complex than separating the mental predicate from the subject. Sometimes 'evidential non-relevance,' to coin a phrase, will attach to an entire first person mental sentence (in which a mental predicate is attributed to the subject), while the feature of 'evidential relevance' will be contained by the elaboration (or qualification) of the mental predicate. To illustrate, consider Jack's medical examination after he breaks his crown. The

⁵²It may be objected that we can't tell whether one's doubts about one's mental state are settled by investigation or by decision (e.g., it may be that my deciding that I'm angry creates my anger). But dreaming that I pinch myself may delude me in supposing that I'm awake. We are currently only concerned to delineate the circumstances wherein introspection might have a role.

physician asks Jack to be more specific about his pains, to describe them. Uncertain at first, Jack introspects and informs the doctor, "I have sharp, searing pains." This introspective description may be considered a union of the expressive statement, "I have pains" and the descriptive statement, "the pains are sharp and searing." Generally speaking, the attribution of a mental term in the introspective description indicates that the doubts have been laid to rest via introspection. Introspection has been employed to correct any misapprehensions about our mental state under which we may have been laboring.

The case for introspective descriptions rests, to a large extent, on the acceptability of the scenarios we have constructed. Should the reader find the scenarios plausible, then a positive response will be elicited by the question, "can introspection fulfill the purpose assigned to it -- that of describing mental phenomena?" To reject these scenarios is to find introspection barren. There will be one less similarity between introspection and sense observation and one less reason for classifying the two under the single heading of "observation." Moreover, without something to explain, our motivation to discover a process of introspection will be reduced. Notwithstanding, even without verbal manifestations, introspection may still exist -- unless reasons indicating otherwise (discussed in the next chapter) are found decisive.

CHAPTER III

PROBLEMS THAT CONSCIOUSNESS POSES FOR INTROSPECTION

The existence of introspection need not be impugned by either the fulfillment or non-fulfillment of the purpose assigned introspection: The introspective process can occur without yielding descriptions of the introspector's mental processes. And there can be description of one's mental processes in the absence of introspection as long as the descriptions do not have introspection as their source. Questions about the purpose and existence of introspection may be considered independently of one another. Having dealt with the question of introspection's purpose, we can now inquire whether there can be introspection as conceived on the model of sense observation. This inquiry will be pursued via a discussion of the objections to a favorable response to the question of introspection's existence as a form of sense observation. In the process of discussing these objections, consciousness will emerge as the major obstacle to introspection's existence.

We first encountered consciousness in presenting Locke's views on reflection as our historical paradigm for introspection. Consciousness was designated as a necessary

condition for the existence of such mental phenomena as ideas and the mind's operations. At the same time, we got an initial taste of the problems consciousness could raise for a sense observation model of introspection in the difficulty that we experienced in disentangling reflection's function from that of consciousness. Consciousness emerged again in our discussion of the possibility of introspective descriptions. As a consequence of that discussion, we welcomed consciousness into our account of introspection as a means of distinguishing mental from non-mental phenomena. Besides allowing us to bypass the problems set forth by the private language argument, consciousness had the added virtue of characterizing mental phenomena instead of just linguistic practices. Sense observation is a process by which we come into contact with physical phenomena. Parity demands the same of introspection with respect to mental phenomena. Consequently,

...if there is introspection, our minds or certain states of them must be or seem to be objective constituents of introspective situations, just as physical events or things are or seem to be objective constituents of perceptual situations. These objective constituents of introspective situations must manifest certain apparent characteristics, as the objective constituents of perceptual situations manifest redness, hardness, etc. And introspective judgment must state explicitly the characteristics which the objective constituents of introspective situations manifest.¹

¹C.D. Broad, The Mind and Its Place in Nature, (New York: Routledge, Kegan Paul, 1968), p. 276.

We would expect consciousness, as a distinguishing mark of the mental, to aid introspection in its task of connecting with mental phenomena. In what follows, we will be exploring the different ways in which consciousness is found to interfere with the process of introspection.

The paradigm for sense observation involves a relationship between two disparate entities. Efforts to model introspection on sense observation will be deemed inadequate insofar as introspection does not also involve two entities. In presenting the various ways in which consciousness is supposed to be an obstacle to introspection, we shall find that they are all variations on a single theme: Consciousness undermines introspection as a form of observation by allowing the involvement of only a single entity. The first set of objections point to the absence of the introspecting subject. The second set of objections deny the presence of an introspected object.

1. The Elusiveness of the Subject

Our introduction to arguments denying introspection's classification as a relation between two entities was actually effected in the second chapter. The difficulties in the way of construing introspection as an investigative tool emerged from a comparison of the amenability of the concepts of both sense observation and reflection to the emergence of first and other person points of view: statements reporting the occurrence of introspection could be properly

couched only in the first-person whereas sense observation claims were not so restricted. Oddly enough, considering how the first person is regarded as the prime grammatical vehicle for the subject -- this restriction of introspection statements to the first person may be taken to be symptomatic of the elusiveness of the subject in introspection. In considering sense observation solely from the first person point of view (I just worry about what I observe), we realize that all that is manifested in sense observation is the observed object. What is doing the observation is precluded from its own observation. While I have to be on the scene to observe the scene, I don't see myself in the scene.² I see the scene without me. Ask someone -- gazing at a landscape, say -- to draw what he sees. The picture will be of a landscape and he, the beholder, will not be in the picture. As Wittgenstein remarks:

The subject does not belong to the world: rather it is a limit of the world.

Where in the world is a metaphysical subject to be found?

You will say that this is exactly like the case of the eye and the visual field. But really you do not see the eye;

And nothing in the visual field allows you to infer that it is seen by an eye.

For the form of the visual field is surely not like this

Eye -  3

²We are excluding seeing oneself in a mirror, since the object of sense observation in this case is actually a mirror image.

³Ludwig Wittgenstein, Tractatus Logico-Philosophicus, trans. D.F. Pears & B.E. Guinness (London: Routledge & Kegan Paul, 1971), p. 117.

This is not to say that I can see no part of myself: parts of my body may intrude upon my view of the scene -- an arm, a foot. They should be included in the landscape drawing. Certain parts of me will never intrude -- my back, my face (excepting occasionally the tip of my nose and my puckered lips). What I observe will never include me in my totality. There is nothing presented in a first person picture of sense observation which justifies the distinction between the subject and the object of sense observation.

The same goes for introspection. An introspection statement is normally couched in the first person. Like first person sense observation reports, the introspection statement can only be based on the object introspected. When I introspect my anger, it is my anger which is revealed.

To claim truly that x observes y , there has to be an x , a y , and they have to be related in such a way that it may be truly said that x observes y . We need a picture of sense observation which not only permits but insists upon the distinction between observer (subject) and observed (object) since it is the fact that the relation between observer and observed holds that constitutes the truth condition for the sense observation claim (the claim that a sense observation relation obtains). In order for us to know that this condition is fulfilled, we have to introduce the observer into the picture. The way the observer becomes part of the picture is to make the observer part of what is observed. And that

is accomplished by making him and what he is observing the object of someone else's sense observation. This, a third person picture of sense observation, depends on the public nature of sense observation, that is, that both observer and observed may be observed by another.

The same option is not available for introspection. Introspection was classified by Locke as an internal sense. Sense observation, by contrast, was characterized as an external sense. Whereas, in sense observation, we traffic with the external, physical world, in introspection we turn inwards. The world of introspection is contained within oneself. As a result, we cannot generate a third person picture of introspection by having one individual introspect another's introspecting. Such a case of third person introspection would have as its object something external to, independent of the subject. The focus of such introspection would be outwards, towards someone else and their experience. As we have indicated, these circumstances are ruled out by the very concept of introspection.

The state of affairs where x observes y is observable-- by someone else. The situation involving the introspection of an object by the subject is not introspectible. The state of affairs facing us is that all that an introspection report may be based on is the introspection of the object. The subject is not introspected. Thus, what section 2 of the second chapter has further introduced us to is the theme

of our first set of arguments, viz., that the elusiveness of the subject occasions the downfall of introspection as a two-term relation on par with sense observation. This is not to say that the non-introspectibility of the subject, by itself, establishes introspection as not being a two-term relation. However, in the following arguments we are given reason to regard such non-introspectibility as a straw indicating which way the wind is blowing.

The amenability of sense observation to both first and other person points of view provides us with the materials to distinguish between the objective and subjective elements in sense observation. In sense observation, the subjective becomes objective when the object that I observe becomes the object of another's observation. In other words, this ability of the (physical) object in sense observation to enter into an observation relation with a number of observers gives it public, or objective, status. In comparison, introspection was found to accomodate only the first person point of view. We are not offered the wherewithal to create a subjective-objective distinction as we were for sense observation. The following arguments purport to show that introspection is exclusively subjective in character. Apparently, it is the nature of consciousness which creates the difficulty.

When we introspect, we introspect mental phenomena.

According to C.A. Campbell,⁴ the mental is essentially subjective. As he puts it, the mind is "something for itself" (Campbell, 1957, p. 37). Since being "something for itself" is achieved through consciousness, the mind is something for itself when it is self-conscious. And the mind is, to some degree, self-conscious whenever it is conscious (Campbell, 1957, p. 113). In short, the essentially subjective character of the mental amounts to the claim that any adequate description of mental experience necessarily involves reference to the self having the experience, to the experiencing subject.

Campbell argues⁵ for this subjectivity of 'self-consciousness' on the grounds that it is implied by the apprehension of objective reality. He notes that in the activity of judging there must be a contrast to what is objective, that the necessity for such subjectivity arises from defining "objectivity" as "independence from an apprehending mind." "Hence a mind that is aware of objective reality is always also in some degree aware of itself as subject" (Campbell, 1957, p. 74). One has only to

⁴On Selfhood and Godhood, (London: George Allen & Unwin, 1957). Further references to this work will be given in the text by "Campbell, 1957."

⁵The above version is not entirely fair to Campbell. This argument is actually subordinate to Campbell's main argument which is that the fact that there is an object of a cognitive process implies that there is a subject engaged in subjecting that object to the cognitive process (Campbell, 1957, p. 71). When the cognitive process is judging, the object would be reality.

recall Berkeley's construction of objective reality in terms of a divine mind to suspect that independence from mind may fail to characterize our so-called objective reality altogether. Furthermore, there is an argument offered by Thomas Nagel⁶ which does much to weaken Campbell's claim that objectivity demands subjectivity as a contrast.

In his argument Nagel tries to show that clinging to the subjectivity of experience cannot save the day for dualists. Dualists use subjectivity to shore up their position against the onslaughts of materialistic reductionism by pointing out that nothing which is (merely) physical can give rise to this subjectivity. More specifically, the peculiarly intimate relationship which is expressed by the statement that I (the self) am the subject of my mental states (as in, e.g., "I am in pain") cannot be equaled by the subject role that a physical thing may fulfill with respect to its properties (e.g. "the ball is green"). Subjectivity, then, constitutes the crucial difference preventing the identification of the self (I) with anything physical and mental states with physical properties. The physical housing of the self is not considered an exception. Although a particular body and its physical attributes will count as mine, it will do so only because of the special

⁶"Physicalism" in Materialism and the Mind-Body Problem ed. David Rosenthal (Englewood Cliffs, N.J.: Prentice Hall, 1971), pp. 96-110. References to this work will be given in the text by "Nagel, 1971."

relationship this body has to the subject of my mental states that other bodies do not have. The relationship between myself and this body (which I express when I call it mine) is dependent upon the relation between me and my mental states. Therefore I cannot be my body (Nagel, 1971, p. 108).

What we see assumed in this argument is that the physical -- a paradigm of what is objective -- does not give rise to the subjectivity characteristic of the mental. Nagel attacks this argument by showing that from the objective (and not just the physical) we cannot derive the subjective. He does this by first equating subjectivity with the use of token reflexive expressions.⁷ Suppose we describe the world and everything in it (and this could include mental, as well as physical, phenomena) without using token reflexive expressions. Subjectivity barred, such a description could be considered objective. By barring subjectivity in this way, the description leaves out the information about which part of the world I am, it leaves out "...the fact that I am the subject of these experiences; this body is my body; the subject or center of my world is this person...." Nagel's conclusion is that subjectivity emerges neither from the physical nor from the mental when their description excludes the elements of subjectivity (Nagel, 1971, p. 109). With

⁷Token reflexive expressions are those which employ terms involving reference to the speaker. Other such expressions besides "I" are "here," "there," "this," "that," among others.

these considerations in mind we may dismiss Campbell's argument as inconclusive and still appreciate the insight offered.

Subjectivity is not derived. Rather, the mental feature of "being something for itself" is manifested in our experience as subjects. What is required is that we acknowledge that we are experiencing subjects. Such recognition is forced on us, not by way of argument, but by experience itself. Persuasion of the skeptic will depend upon our success in evoking in him some realization of what we are talking about here.

The skeptical reader might try, as Nagel suggests,⁸ to put himself into alien shoes, e.g., to imagine what it is like to be a bat. Acting like a bat does (or imagining that one acts bat-like) doesn't go far enough. What I achieve by this 'thought experiment' is imagining what it would be like to be me and behave like a bat (Nagel, 1974, p. 439). As an example of such failure, consider "Metamorphosis" by Kafka. In this story, the main character is transformed into a dung beetle. The story is about a man trapped in the body of a dung beetle and what happens to him as a consequence. Narrated in the first person, the voice does not change with the body. "Metamorphosis" is not a dung beetle's account of his life. Success is attained only by

⁸Thomas Nagel, "What Is It Like to Be a Bat," Philosophical Review 83 (October 1974): 435-450. Hereafter, references to this work will be given in the text by "Nagel, 1974."

abandoning one's point of view for "I want to know what it is like for a bat to be a bat" (Nagel, 1974, p. 439).

Thus "...even to form a conception of what it is like to be a bat (and a fortiori to know what it is like to be a bat) one must take up the bat's point of view" (Nagel, 1974, p. 442). In our efforts to imagine ourselves as a bat what we are doing is, in Nagel's words, trying to capture what is characteristic of conscious experience, i.e., the "subjective character of experience," the "something it is like to be that organism," "...for the organism" (Nagel, 1974, p. 436). Our failure to capture this subjective character should not lead us to suppose that there is nothing to be captured here. Our failure is instructive.

If anyone is inclined to deny that we can believe in the existence of facts like this whose exact nature we cannot possibly conceive, he should reflect that in contemplating the bats we are in much the same position that intelligent bats or Martians would occupy if they tried to form a conception of what it was like to be us (Nagel, 1974, p. 440).

We know they would be wrong to draw such a skeptical conclusion because we know what it is like to be us. And we know that while it includes an enormous amount of variation and complexity, and while we do not possess the vocabulary to describe it adequately, its subjective character is highly specific, and in some respects describable in terms that can be understood only by creatures like us (Nagel, 1974, p. 440).

We can use our failure as a pedagogical device for recognizing this subjectivity in experience: the failure heightens our

sensitivity to this aspect of our experience. Let us consider some examples from our own case.

Our experience as subjects is best exemplified, according to Campbell, by our activity. Activity involves, say, A doing something. Passivity signifies something happening to A (Campbell, 1957, p. 67). Passive, A is an object. Active -- A must be a subject. Campbell argues that activity implies an agent (Campbell, 1957, p. 71), that "...that which is active in activity cannot possibly be the activity itself" (Campbell, 1957, p. 70). What is more to our purpose here is that when we are active we experience ourselves as agents, i.e., as subjects.

Let us consider a concrete example. Suppose I am sitting, eyes closed, listening to music. What am I experiencing? Obviously, the music. The music, we'll say, is the object of my experience. Let the music be the sole object with which I am presently involved. Insofar as there are other objects besides the music which I am experiencing (a foot going to sleep, thoughts of unfinished projects, the bursts of color occupying my field of vision), I will be distracted. Sitting there, enveloped in sound, absorbed by the music, I, who listen, am still part of the experience. Not as object -- I do not compete with the music. I am not experienced as an object but I am the subject who experiences. I am part of the experience of the object in that the object is experienced as related, related to myself as an experiencing subject. In other words, my awareness of being

something other than, separate from the music, of being the agent who listens, structures this musical experience.

Contrast the above way of listening with the situation where it is said one is lost in the music. Boundaries between oneself and the music dissolve: all is sound. Admittedly, such absorption is rare. Yet, it is precisely the sense of detachment, of being other, which was present in the aforementioned situation which is missing from this one. The aspect of agent and action -- of I, subject, listening -- if not entirely eliminated, is subdued here. While Campbell would say that in this situation the experience contains a very low degree of self-consciousness, rather than none, these examples hopefully give the reader an inkling of what is meant by the claim that the subject is contained in experience.

We have seen that the subjective character of experience may be evoked. Indeed, we have relied exclusively on evocation to engage the reader's sympathy with this view. According to Campbell, we are necessarily limited to this tactic, for this subjective aspect can never be analyzed (or described). Analysis or description, he points out, involve treating something as an object. In other words, one is dealing with the analysandum from the standpoint of that which is apart from (other than) the analysandum. We adopt what Campbell calls "the standpoint of the external observer." To treat something as an object is, by implication, to disregard its subjectivity, its being something for

itself, since we are not, then, taking the point of view of the object. Thus, any description of mental experience must fail to reveal the subjectivity inherent in the experience.

We have described observation as a process which is undertaken in order to yield descriptions of the world. Sense observation employs the senses in this task. Introspection is presumably the mechanism by which this task is pursued for the mental features of the world. If introspection be considered as an avenue leading to descriptions (of a certain type), then it is reasonable to assume that by engaging in introspection we adopt the point of view of an external observer. But if what we are describing is essentially subjective, then to embark on introspection in order to discover it is to engage in an exercise in futility. Introspection can only reveal the objects introspected: "We may agree that the introspected object can never be the subject in its subjective functioning at the moment of introspecting" (Campbell, 1957, p. 112). Mental experience is subjective on account of its reference to the self. The self is the introspector; during introspection, the introspector introspects, it is not introspected. "It is of the very essence of the self qua self to be an experiencing subject" (Campbell, 1957, p. 112). Any analysis of mental experience, including an introspective one, must fail to reveal the subject of the experience

(Campbell, 1957, p. 37). Only consider mental activity: Activity implies an agent (Campbell, 1957, p. 71). That agent is the self. The self is, then, manifest in activity (Campbell, 1957, p. 82). "For activity, if it is anything, is a function of the subject. It cannot be objectified." Analyzing activity from an external point of view, e.g., introspecting activity, is eliminating it (Campbell, 1957, p. 132). Introspection excludes the subject. And that which is essential to the mental forever eludes our introspective grasp.

To regard introspection as a species of observation is evidently to fall into the error of

...supposing that 'experience' is reducible without remainder to consciousness of something before the mind, something presented to the subject. The error is in part, explicable, no doubt by the fact that it is not his subjective activity, but the objects to which it is directed that commonly interests the experiencing subject, and that thus lies in the focus of his attention. The subject's consciousness of his own subjective functioning, is, as a rule, very faint and inexplicable by comparison with his consciousness of his object (Campbell, 1957, p. 133).

In sum, Campbell warns us that styling introspection on the model of sense observation entails the loss of the subject via the latter's transformation into an object. In Nagel's words, we are abandoning the single point of view for a pluralistic one.

Campbell's admonition gets its force from the assumption that subjectivity and objectivity are incompatible. That is why, one would gather, that which becomes the object

of introspection can no longer be a subject. Since it is, on general principles, not always impossible to do two things at once, why should Campbell maintain that the subject can't be both subject and object? After all, there are those of us who can sing and dance concomitantly. Participating in an activity doesn't always prevent us from being a spectator too -- consider baseball. Why can't we maintain an external point of view and a subjective point of view at the same time? Surely, the point of view which is accessible to many can accomodate the single point of view (perhaps, is even composed of a number of single points of view). We may look to Nagel for a reason.

Nagel argues that consciousness proves the downfall of attempts at a materialistic reduction of the mental. The physical is available to many and different points of view whereas the mental is "accessible only from one point of view" -- that of the experiencing organism (Nagel, 1974, p. 442). This accessibility on the part of the physical means that when we relinquish one point of view, we do not thereby forsake the physical phenomenon. E.g.,

lightening has an objective character that is not exhausted by its visual appearance, and this can be investigated by a Martian without vision. To be precise, it has a more objective character than is revealed in its visual appearance (Nagel, 1974, p. 443).

This same does not seem to be true of mental phenomena:

"After all, what would be left of what it is like to be a bat if one removed the viewpoint of the bat?" (Nagel, 1974, p. 443).

If the subjective character of experience is fully comprehensible only from one point of view, then any shift toward greater objectivity -- that is, less attachment to a specific viewpoint -- does not take us nearer to the real nature of the phenomenon: it takes us further away from it (Nagel, 1974, pp. 444-445).

Presumably, an observational view of introspection involves this crucial shift in viewpoint which signals the turning away from the mental. In sense observation, as we have seen, the observed object occupies the public domain, that is to say, it is subject to the gaze of anyone who is properly placed. This accessibility to different points of view is reflected in the linguistic accessibility of sense observation statements to any grammatical person. Reports that an object is under observation may be couched in the third and second person as well as the first person. If an observational model of introspection commits us to the possibility of other person introspection reports as well as first person introspection reports, then we have rendered the referents of introspection reports open to points of view other than that of the experiencing subject. As a result, the referents could no longer be characterized in terms of their subjective character. And this loss further entails the loss of their mental status. Insisting upon the subjectivity of the mental apparently rules out any objectivity (and observation-like introspection).

The arguments advanced by Nagel and Campbell suggest that the requirements for mental status (i.e. consciousness)

and those for a sense observation-like introspection are irreconcilable rivals. When we remind ourselves of the view of consciousness that we have settled for -- that of Locke -- our worries are not alleviated. The combination of Locke's view of consciousness with our selection of consciousness to distinguish the mental yields consciousness as a necessary condition for the existence of any mental entity. For something to be a mental phenomenon, it must be the subject of consciousness. However, because of the connection, in Locke's theory, between consciousness and personal identity, we can rephrase the latter conditional. In other words, for something to be a mental phenomenon, someone must be conscious of it (it must be the object of someone's consciousness). Unconscious mental experiences are not allowed. By the same token, consciousness cannot come up empty. There is no room for consciousness which is contentless. Consciousness must have an object inasmuch as it (consciousness) is the presentation of that object (the mental experience). The object -- the mental experience -- is not all that consciousness has to offer. The subject, too, is present. What consciousness does is present the mental experience to oneself, that is to say, present the mental experience as possessed by the subject. Consciousness inextricably weaves the mental experience into the subject. What consciousness tells us is that the mental experience is part of the person who is experiencing it.

Introspection contributes to a person's self-identify by allowing him to consciously include the operations of his mind. For introspection is basically a mechanism whereby we become aware of our mind's operations. Engaging in an unintrospected operation of the mind (an impossibility) would deliver only the results of that operation to our consciousness. It would be somewhat as though we came up with the answer to the problem of dividing 39,432 by 941 without being aware of going through the process of division. Introspection lets us know we're dividing. Secondly, the concept of introspection was used by Locke to cover the products of introspection, i.e., our awareness of our mind's operations. Characterizing introspection as a mechanism of the sort described above is tantamount to defining it in terms of its function of bringing our mind's operations into our consciousness. The secondary view defines introspection as a sub-class of objects of consciousness. In both cases, introspection is conceptually linked to consciousness. Inherent in the process of introspection (at least in terms of its results) is the interweaving of subject and object which characterizes consciousness. The presentation of the object ineluctably brings the subject with it.

Your standard case of sense observation involves the intersection of the histories of a physical object and a sentient observer. It may be only by the sense observation relation that their paths converge: then, for the time

that the sense observation relation endures, that relation becomes part of their history. The part that the sense observation relation plays in their respective histories is different. The impact of the object on the observer -- the sensations aroused, for example -- forms part of the subject's history. That this impact was had on the observer (by the object) is part of the history of the object; the impact that was had (the sensations, say) is not. Up until the sense observation takes place and after it has occurred, the paths of the physical object and the observing subject may diverge. Their life histories for those periods need not contain any mention of one another.⁹ Their identities are separate; they can exist apart. A case of Lockean introspection would consist of the emergence of the awareness of a mental activity into the psyche, the emergence of the agent's awareness of his mental acts. We would be ill-advised to regard such introspection as the convergence of the history of a mental activity with that of the agent. The inseparability of subject from object in consciousness renders the metaphor of convergence and divergence inapplicable to introspection. To illustrate: let us construe the self as some finite set of conscious mental experiences. In so doing we are utilizing the notion of the self as a bundle without, at the same time, implying that the self is

⁹Except as leading up to the incident and proceeding from it.

something which is neither constant nor unified.¹⁰

(Remember, in Locke's theory, the self is not something which eludes discovery as it does for Hume. Rather, the self is present in every act of consciousness: consciousness displays the mental entity to oneself.) Let the self, S , equal (a,b,c,d) . If we want to represent the self participating in a sense observation relation, we will have to add time as an additional factor. Thus, when $S = (a,b,c,d)$, S is at time, t_1 . Now let us suppose that at some later time, t_2 , S enters into a sense observation relation with some physical object, O . We can represent the meeting of S and O via sense observation as the intersection of their respective histories. This intersection will contain, at the very least, a sensation -- the sensation of O (which we will symbolize with "e"). e belongs to both the histories of O and S insofar as it embodies the causal interaction between O and S , called sense observation. At t_2 , $S \cap O = (e)$. The way that sensation enters into the history of the self, according to Locke, is as an idea. Thus, the observation by the self of some object creates in us a mental entity, i.e., a sensation. And, as an entity which is contained in consciousness, the sensation becomes part of the self. The observing self, S at $t_2 = (a,b,c,d,e)$. By virtue of its augmentation by

¹⁰Since a mental state brings with it the experiencing self, no harm is done by momentarily considering just the self's mental states as long as we are careful to say nothing about the collection of mental states which is inconsistent with the concept of self.

the sensation, e, S at t2 is, in a sense, different from S at t1.¹¹ The same is not true of the introspecting self.

Consciousness of any mental state entails that that mental state is part of, belongs to, oneself. Introspection operates within the realm of the mental, that is, within the conscious realm. Therefore, introspection operates on mental states of the self. Again, let us consider the self as a finite set of experiences. Let the self, $S = (a,b,c,d)$. In order for something to be an object of introspection, it must be mental; if mental, it must be conscious and if conscious, it must be part of oneself. It is not then the case that it takes introspection to introduce the introspected object to the self. Unlike observation, introspection does not signal the convergence of the life histories of two independent entities. The existence of the candidate for introspection is tied (via consciousness) to the existence of the self. The subject is restricted to introspecting either a,b,c, or d. The history of the self must include any candidate for introspection in order for the introspection of that candidate to take place. Subjectivity characterizes Locke's notion of consciousness and the mental just as it does Nagel's and Campbell's. It does not bode well for our efforts to distinguish the subject from the introspected object.

¹¹They are different in the sense in which we construe the self as a bundle. Strictly speaking, in Locke's theory the self is not different in any essential respect. What is referred to by each member of the bundle remains constant.

2. The Elusiveness of the Object of Introspection

The expenditure of all this energy to pinpoint those features of introspection which render the subject elusive might lead us to repose confidence in the availability of the introspected object. As we have already indicated, there is nothing obviously untoward about claiming to introspect some particular mental experience. After all, "introspect" is a transitive verb and can take objects. Broad, for instance, regards the fact that the verb "introspect" (or some suitable substitute) takes a direct object as a grammatical indication of the feature of "direct cognitive contact" which he considers to characterize the introspecting of an object.¹² Nevertheless, a number of objections to modeling introspection on sense observation rest on the failure to discover the object of introspection. The fact that it is not ridiculous to claim to introspect some mental experience will not help us. Given that there are quarks, there is nothing obviously nonsensical about the claim, "A observes a quark." However, according to one theory, such a claim must always be false.¹³ In the nature of things, single quarks cannot be observed in principle. Contingency attaches only to observation claims about

¹²Broad, op. cit., pp. 141-144.

¹³This theory is advocated by S.L. Glashow, "Quarks with Color and Flavor," Scientific American, 232 (October, 1975): 38-50.

(groups of) quarks (i.e. bound states of quarks, e.g. pairs or triplets of quarks). The objections to introspection which we will now concern ourselves with try, in their various ways, to show that, in the nature of things, introspection cannot have an object.

In discussing what introspection reveals -- the object of introspection -- we will concentrate on mental states.¹⁴ We will, unless circumstances dictate otherwise, bypass the question of whether introspection reveals the self qua self. This strategy will enable us to avoid certain serious problems.¹⁵ For instance, should the concept of the self be that of an enduring, stable mental entity which is not a mental state but to which all members of some set of mental experiences stand in a particular relation (e.g., that of ownership),¹⁶ then such a self is not discoverable in any particular instance of introspection. The most that any introspection would reveal is a segment of such a self's history. Since no such segment reveals a self unaccompanied by a mental state, doubts have been raised about the existence of such a self. Limiting introspection to discovering this

¹⁴Again, we will be talking about mental states, mental processes, mental phenomena, mental experiences, mental events without distinguishing among them. The only distinctions to which we will attach any weight will be among mental activities, the mind's operations, and mental phenomena which are neither of these.

¹⁵An excellent overview of these problems is provided by C.D. Broad, op.cit., 1968, Chapter VI, particularly pp. 277-283.

¹⁶Broad calls this a unity of centre, ibid., p. 213.

self renders introspection null and void for we will have eliminated the objects it was to have worked on. Adopting Hume's suggestion -- that the self be considered as merely a set of mental experiences bound together by the common relation that each has to at least one another.¹⁷ (e.g., by causation and resemblance if Hume is to be believed) would not make the self any more acceptable an introspectible object. Upon this view, the self in toto would extend beyond the current introspection period to past and future mental states which may not exist at the time of introspection. Inasmuch as any particular temporal segment of the self's history (however the self be construed) contains some mental state and its qualities, we will stand a better chance of legitimating an observational view of introspection if we steer clear of controversial candidates for introspection. Restricting the objects of introspection to mental states simplifies our task. As we shall see, it does not make our task trouble-free. Even when the object candidate for introspection is limited to some aspect of the self, it still seems to escape our introspective grasp. The object of introspection slips through our fingers because, it is suggested, of the involvement of an infinite regress. Some blame our single-mindedness. Others charge that the fault lies in interference. As we shall soon see, we need not take all these

¹⁷Broad calls this a unity of system, ibid., p. 213.

versions of the problematic nature of the introspected object with the same degree of seriousness.

Ryle offers an argument purporting to show that consciousness, considered as an investigative method, involves an infinite regress.¹⁸ The concept of consciousness is consequently accused of being confused. While this argument fails as an indictment of consciousness, it may give rise to apprehensions concerning the concept of introspection.

The concept of consciousness is supposed to involve an infinite regress as follows: When we ask how we come to know about some mental activity of ours, "consciousness" is the answer -- that mental activity is the object of (so to speak, 'illuminated by') consciousness. It is brought to our attention that the object of consciousness is different from the object of the object of consciousness, "...what I am conscious of in a process of inferring, say, is different from what the inferring is an apprehension of" (Ryle, 1967, p. 162). Consciousness has the relation -- having as its object -- to inferring and inferring has this relation, having as its object, to some conclusion. Acquiescing to this analysis brings with it the possibility of the consciousness of consciousness, for how else could we come to know of our being conscious of anything except through consciousness? We have been cornered into postulating a second level

¹⁸Gilbert Ryle, The Concept of Mind, (New York: Barnes & Noble, 1967). References to this work will hereafter be given by "Ryle, 1967."

consciousness, a meta-consciousness, by the same maneuver which justified our turning to a first level consciousness. Since the maneuver produces the very results which led to the employment of the maneuver, it can be repeated without an end in sight. The possibility of knowing about some mental process forces us to admit consciousness as an explanandum of this phenomenon. As long as we lay claim to knowledge of a succeeding level of consciousness, consciousness enters into the picture as the means or, at least, as a necessary condition by which this knowledge is attained. For instance, the cornerstone of Locke's argument for the necessity of consciousness to thinking is his dictum that "...it being impossible for anyone to perceive without perceiving that he does perceive" (II, 27, 9). Although he uses "perceive" the context suggests that Locke is talking about consciousness. Apparently, he is allowing us to be conscious of our consciousness. This dictum presumably expresses our knowledge of the consciousness of our consciousness and it seems most reasonable to assume that it is consciousness which accounts for such knowledge. If we allow this third level of consciousness to become evident, we may account for it via a fourth level of consciousness and so on ad infinitum. As a result, we have the beginning of an infinite regress for there seems to be no reason to stop at any particular level of consciousness. It would seem to be the case that we will have to work our way through an infinity of levels of

consciousness in order for us to finally be conscious of what we are doing (and know it) (Ryle, 1967, pp. 162-163). Besides being a sign of confusion, this infinite regress forms a formidable (if not insurmountable) obstacle to ever arriving at the object of (the primary level of) consciousness.

We can stop this regress in its tracks by denying, at any point, that we experience a certain level of consciousness. Suppose we admit that we know we are inferring due to our consciousness of that activity. Presumably, by this admission we lay claim to know about the consciousness of inferring. We can refuse to account for this last bit of knowledge with a meta-consciousness -- the consciousness of the consciousness of inferring -- on the grounds that such a meta-consciousness is not manifested in our mental life. Hence, we are denying that knowledge of our consciousness is gained by way of consciousness. To protect Locke's theory from this infinite regress, his dictum requires reinterpretation. We can limit understanding "perceive" in terms of consciousness to the first use of "perceive;" the second "perceive" is to be understood literally (or as a stand-in for "think"). The context of the dictum (the contrast between consciousness and thought) can certainly bear this distinction between the two uses of "perceive." Thus Locke may be taken as claiming that any act of perception (or thought) must be accompanied by

consciousness rather than claiming that consciousness is necessary for consciousness when he insists upon the necessity of our perceiving that we perceive. Consciousness is denied access to consciousness. The ordinary use of "consciousness" as explanation fits in neatly with this position.

Ordinarily, to ask how we come to know about being conscious of anything would be considered a silly, pettifogging question. When the question is serious, then, it is a different question from the one for which "consciousness" is an answer. If we want to know why it is that we can see these words, appeal to the action of light helps to clear up the mystery. In the same way, consciousness explains how our mental actions may become manifest to us. Inquiry into how we see light would not be satisfactorily answered with "light." One way to approach the question is to show that it is misguided -- i.e., to disabuse the inquirer of the notion that he actually sees light. We can track down the phenomena which he calls seeing light, e.g., the beam of light in a dark space or the ray of sunlight streaming into a room, by showing that the phenomena is just an array of illuminated objects. An alternate approach would be to understand the question as a request for an explanation of our visual sensory apparatus and its operation. Similarly, a serious inquiry into how we come to be conscious is not to be answered with "consciousness."

The generation of an infinite regress has been short-circuited, but, Ryle claims, at a price. "...It will have to be allowed that some elements in mental processes are not themselves things we can be conscious of, namely those elements which constitute the supposed outermost self-intimations of mental processes; and then 'conscious' could no longer be retained as part of the definition of 'mental'" (Ryle, 1967, p. 163). Alternatively, if we insist upon characterizing the mental by consciousness, the level of consciousness which gets closed off to consciousness presumably must be considered non-mental. However, we may not be forced to pay this price. Consciousness distinguishes the mental. Consciousness is not, though, a feature of itself. That would mean that consciousness is not mental. Yet consciousness seems to be quintessentially mental. The peculiarity of these results may be brought out in an illustration using the concept of length.¹⁹ Suppose the concept of a length, say, a meter, is given by the way that length is measured. Further suppose that a meter is determined by comparison to some standard -- the wavelength of krypton of atomic weight 86. Something is one meter if it is as long as the wavelength of krypton. Inasmuch as the concept of a meter involves comparison to a standard -- the wavelength of krypton -- then it would seem that the standard is not itself one meter long (given the same concept of a meter). Yet the wavelength of

¹⁹This illustration was inspired by Wittgenstein, PI, 50 and Chihara and Fodor, op. cit., pp. 395-396.

krypton is our paradigm of a meter. And we find that we are using something which is not a meter long to determine that something else is a meter long. In the case of consciousness, we would be identifying the mental by virtue of a non-mental feature. In the case of the meter example, the problem lay in the concept of an acceptable analysis of length. We may extricate ourselves from this paradox by broadening the notion of a length so that it includes the standard length. In the case of the mental, we can stipulate that the mental may be distinguished by either being consciousness or by being accessible through consciousness.

Insofar as we are conscious of introspecting -- and it seems we must be for how else do we come by our knowledge of introspection? -- then introspection is the means by which we gain such consciousness. Remember, our consciousness of our mental operations is the product of introspection. In order to know that we introspect, we must introspect our introspecting. We seem to have the start of an infinite regress. Unfortunately, the latter may be the introspecting of yet another introspection which, in its turn, may take a further introspection as its object and so on, ad infinitum and ad nauseum. Each level is created because introspection accounts for our knowledge of any operation of the mind including that of introspecting. We have ostensibly created an impediment to our reaching the introspected object in the form of an infinite number of levels of introspection to get through.

We can cut this regress short by using the technique employed in the case of consciousness. We must rest content then with a meta-introspection (the introspection of introspection) whose existence has been inferred inasmuch as we are unaware of it. This meta-introspection has been closed off to consciousness. As Locke would have it, mental entities cannot be said to exist if we are not conscious of them. Therefore, if mental, unconscious meta-introspection would not exist. Since its existence is necessary for escape from the infinite regress, designating introspection as non-mental does not seem to be too high a price to pay. Unlike consciousness, introspection does not seem to be quintessentially mental. Nor does a Lockean view of introspection commit us to excluding all non-mental features from the introspection process. It becomes especially attractive when the alternative seems to be abandoning a causal interpretation of Locke's view of introspection (see pp. 216-217). But we are not limited to these alternatives. We can decide that introspection does not automatically mediate the awareness of our mind's operations. This second alternative, unlike the first, modifies Locke's view of introspection. We will defer discussion of which alternative is preferable until the next chapter.

Having established that introspection need not involve an infinite regress, we still have to contend with the claim that trying to introspect anything amounts to chasing a will-o'-the-wisp. Ryle argues that this is so specifically

because of sensation's role in sense observation. Ryle, too, takes the observation of physical entities (our sense observation) as a paradigm of observation. Since sense observation employs the sense organs as the medium for observation, the paradigm involves the sensation of the physical entity as a necessary condition for the observation of that entity.²⁰ In construing introspection as a type of observation and in admitting sensations as possible objects of introspection (which they would have to be for Locke since sensation is one of the mind's operations revealed by introspection), the introspection of sensation (the operation) turns out to presuppose the involvement of sensation (that is, the awareness of the attributes of physical entities produced by the operation of sensation) as an object of introspection and, hence, as an object of (a type of) observation. But, in order to observe a sensation (i.e., the awareness of a material entity) our paradigm dictates that there must be another sensation involved, the sensation of that sensation. As Ryle triumphantly notes, there is no such thing as the sensation of a sensation (or even the sensation of a sensation since it is physical properties, not sensations, which form the content of sensations). The observation (or introspection) of sensation is thereby eliminated (Ryle, 1967, p.207).

The above argument holds as well if the object of introspection (as a variety of observation) were to be any

²⁰Ryle, 1967, p. 106.

mental phenomenon. The paradigm of observation which was adopted behooves us to posit a sensation of the mental phenomenon in order that the introspection of the mental phenomenon occur. Since mental phenomena are not things which can be sensed, they do not interact with our sense organs; there can be no such thing as the sensation of a mental phenomenon. Mental phenomena, then, cannot be introspected either. Introspection, bereft of objects, is nothing.

By noticing the failure of introspection to accommodate sensation, Ryle is pointing to a discrepancy between introspection and sense observation. However, this failure on the part of introspection is due to the mental nature of its objects and to their consequent unavailability to the senses. With the paradigm of observation presented by the observation of physical entities, it should hardly be surprising that that which is not a physical entity fails to fulfill the role of the physical entity in observation. The differences between introspection and sense observation with respect to the presence of sensation is symptomatic of the differences between the mental and physical realms, respectively. On the other hand, the presence of sensations permits a distinction to be made between the observed physical entity and its effect on the observer, between the objective and subjective aspects of sense observation. It does not seem unreasonable to expect introspection to yield the same distinction.

Because introspection is only analogous to sense observation, it would be unrealistic to expect the former to contain all the elements of the latter. Analogies do require structural similarities. For the analogy to be as strong as possible, we would have to show introspection and sense observation to be as nearly isomorphic as possible. Although introspection would be free to exclude sensation, it would have to include something which plays a role in introspection which is like the role that sensation plays in sense observation. As we shall see, consciousness does not seem to allow this.

The pervasiveness of subjectivity in mental phenomena does further damage to our hopes of modeling introspection on sense observation by eliminating sensation as a possible source of error for introspection. Such elimination is achieved because of the failure of introspection to yield the distinction between subjective and objective elements characteristic of sense observation.

The objective element in sense observation would largely consist of those features true of the observed object while the subject element is found in those features which would not be true of the object were the observing subject not introduced into the object's history. (The reader may realize that we are referring to the existence of sensation as part of the subject's contribution to the sense observation relation.) In other words, the subjective aspect of an observation relation is attributable largely to the

subject. This distinction between what the subject contributes is, for instance, an important factor in Locke's analysis of secondary and primary qualities. We would venture to say, however, that the most prevalent use of the subjective-objective distinction in sense observation is as a source of possible error in sense observation claims. That is to say, when a sincere report of what I observe is inapplicable to the object presumably under observation, we explain this situation as the result of distortion caused by the peculiar circumstances of the subject. I claim that the world is rosy. My statement is not true; the world is proof of its falsehood. But curiosity arises over why I made this claim. We suppose that I did not lie: we want to know what accounts for my mistake. It turns out that I am wearing rose-tinted glasses. In a sense, such an observation straddles both truth and falsity. That is to say, this purported sense observation report is dismissed by relegating it to the status of a description of the subject (say, of his sensations) rather than the object.²¹ For example, were I to claim to see pink rats standing before me when, in fact, no such pink rats existed, my statement would be taken as true if

²¹This analysis is not entirely applicable to illusions which occur because of the peculiar situation of the object as well as the condition of the subject. For example, the optical illusion of a bent stick is created by the different refractive properties for light of water and air which envelop the stick in conjunction with the visual sensation of crookedness produced in the subject by this difference. Yet, if crookedness is attributable to anything, it will be to the contents of the subject's sensation rather than to the stick.

regarded as a description of the contents of an hallucination I was having. It is only when my claim is applied to the external world that error is introduced.

Because of the way consciousness is bound to personal identity and introspection to consciousness, introspection apparently cannot sustain this kind of subjective-objective distinction. Since what the introspector is introspecting is a current state of the introspector, there doesn't seem any way to disentangle the contributions of the subject from that of a subject-independent object in the introspective situation. Indeed, in Locke's theory, to sever a particular mental process from the consciousness of the subject is tantamount to eliminating the former. That a mental state cannot survive abandonment by the conscious subject is a consequence which goes beyond Locke's views on personal identity. Modern analyses of the relationship between mental process words and possessives have rediscovered this truth in finding that the identity of mental processes depends on the identity of the experiencing person.²² The conceptual impossibility of envisioning the mental object apart from the experiencing subject destroys our hopes of finding an objective element in the introspection situation.

Of course, there are statements which are true of the object of introspection which are untrue of the introspecting subject, viz., that the former is introspected

²²P.F. Strawson, Individuals (Garden City, N.Y.: Anchor Books, Doubleday & Co., 1963), Chapter III.

while the latter introspects and their ilk. Nevertheless, they are insufficient to create the kind of subjective-objective distinction that we are searching for. In sense observation, the objective element was identified in contradistinction to the subjective element, i.e., as a class of statements true of the object independent of the subject. The incorporation of the mental object by the subject means that the subject constantly intrudes upon any consideration of the object. Due to Locke's views on the dependency of personal identity upon consciousness, a mental object is incorporated by the subject with the consequence that a statement arising out of the process of introspection boils down to a statement about the subject. Consider, for example, the contrast between the claim "I feel cross" with "I hear a bell." If the first claim, "I feel cross" were a product of introspection, it would not describe a relation (that of being felt) between two entities, a self and a state of crossness. Instead, it tells how something (a self) is (feeling). "Cross" has an adverbial or adjectival function here. While it is true that, for the second claim, how the self feels is involved (via sensations), the situation has altered crucially to include another object (the bell) besides the self. To put it bluntly, there is only one entity involved in introspection. Sense observation typically involves two. Consciousness has gobbled up the introspected object.

It is claimed that introspection inevitably misleads us about the object of introspection. The reason given is that by introspecting some object we interfere with the object. Introspection can only reveal the object distorted by our introspecting. The object per se is beyond our introspective reach. Hume's example of this problem concerns the calming effect of introspection upon the emotions of the introspector: As Ryle puts it,

No one could introspectively scrutinise the state of panic or fury, since the dispassionateness exercised in scientific observation is, by the definition of 'panic' and 'fury' not the state of mind of the victim of those turbulences (Ryle, 1967, p. 166).

Presumably, this case of anger can be generalized to any mental state involving our wholehearted involvement. The detachment required by introspection -- that of taking the standpoint of an observer (more specifically, of an introspector) -- diminishes our participation and error inevitably intrudes. Introspection would then be rejected as an avenue to the object for it only leads us astray.

The short way to deal with this objection is to admit it (and avoid the temptation to make all sorts of distinctions between mental states based on the amount of involvement that they require). In so doing, we are following in the footsteps of sense observation. The interference that we are noticing in introspection is called observer error in sense observation. Observer error is the variation in observations of physical phenomena which arises from the

observer rather than from the phenomena observed. The prime historical example of observer error is afforded by nineteenth century astronomy.²³ A discrepancy between the times of stellar transits as observed by two astronomers, Maskelyne and Kinnebrook, was first discovered in 1795. Subsequent failure to repair the deviation led, in the short run, to Kinnebrook's dismissal. In the long run, it inspired another astronomer, Bessel, to investigate the discrepancy in the 1820's. His research established that deviations would arise for all observers (and not any particular one) because of the individual variations in observers. The need to determine and control observer error has been identified by several historians as physical science's major contribution to the development of psychology.²⁴

The importance of all this astronomical work for experimental psychology becomes evident when it is recalled that the most active period of experimentation upon the personal equation (i.e. observer error in astronomical observations) belongs to the 1860's and 1870's, the period of the birth of physiological psychology. It was already plain that at bottom, the problem is psychological, that exception, preparation and attention are factors in the explanation (parentheses added).²⁵

²³E.G. Boring, A History of Experimental Psychology (New York: Appleton-Century-Crofts, 1950), Chapter 8, pp. 134-156.

²⁴Heidbreder, op. cit., p. 74 and Boring, ibid., p.146.

²⁵Boring, ibid., p. 146.

By taking the short way, we, however, fail to do justice to the magnitude of the problem that interference poses for introspection. We avoid facing the fact that it is consciousness which brings about this interference. For instance, there is some doubt that we can legitimately distinguish between introspection and consciousness because of the way they poach on each other's functions. A. Falk, for example, prefers to equate introspection with consciousness.²⁶ He claims that the two terms do not signify separate modes of access to some object: rather, "introspection" is merely a generic term for specific modes of consciousness (somewhat the way "perception" covers the various means of gaining perceptions). Although "introspection" and "feeling" (the vernacular version of consciousness) are used in different contexts --

thus if I say of a pain that I feel it, that suggests that I'm likely to bemoan it, treat the location of it gingerly, and take steps to alleviate it. But if I say of the pain that I introspect it, none of these behavioral consequences are suggested. In fact, because of the history of the term, the suggestion is more likely to be that I cherish the pain, and with pen and paper in hand I take note of all its nuances, delighting in every excruciating discovery.²⁷

Falk regards such use as insufficient to support the claim that these terms denote separate paths of access. Falk's claim has obvious merits when we consider introspections.

²⁶More specifically, '..."introspection" is the generic term for any conscious attention, divided or not, to inner stimuli,' A.E. Falk, "Learning to Report One's Introspections," Philosophy of Science 237 (September 1975): 223-241.

²⁷Falk, ibid., p. 228.

They are the mind's activities of which we are consciousness (begot through the offices of introspection (the source).

Introspection signifies a class of ideas, of states of consciousness. Falk's challenge does not become serious until it is directed towards introspection, the source of our consciousness of our mind's operations.

At this point, the challenge may be picked up in the form of an analysis of the relationship between consciousness and observation offered by Cooke.²⁸ Consciousness (or, vernacularly speaking, feeling) discovers the mental -- necessarily. Suppose the statement "I am in pain" were to count as an observation claim. The object of observation is what I feel -- the pain. I come to observe my pain by feeling it. The only evidence for the claim would be one's feeling of, (i. e., one's consciousness of), pain. Unfortunately, this supposition about the pain statement is not as straightforward as it seems. For to grant that "I am not in pain" is also an observation claim means that we will have to come up with a feeling, a state of consciousness, which will constitute our evidence for that claim. Presumably, the object of observation will be the absence of pain. By parity, I must have come to this observation by feeling the absence of pain. Here, it seems, we have run into an insurmountable obstacle: "How, for instance, could one make out

²⁸J.W. Cooke, "Wittgenstein on Privacy," in Pitcher, op. cit., pp. 286-323.

the difference between not feeling for a pain and feeling for a pain and finding none?"²⁹ The consequences of applying Cooke's insight to Locke's theory are unfortunate.

Translated into the terms of Locke's theory, the obstacle we encounter is that of revealing the difference between not performing some mental activity and introspecting for but failing to find some mental activity. Suppose we are not conscious of comparing. This state of affairs, to the uninitiated perhaps, is susceptible of two explanations. One is that we are not comparing. The other is that something has gone awry with the process of introspection so that despite the occurrence of comparing, we remain oblivious to it. Faithfulness to Locke's theory and to consciousness as distinctive of the mental, however, rules out the second alternative. If comparing is a mental activity, then we are inevitably conscious of it. Introspection -- the causal mechanism -- though, is a necessary condition for our consciousness of our mind's operations (i.e., for our so-called introspections). It is therefore impossible for comparing to occur in the absence of introspection.³⁰ Failing to introspect some operation of the mind leads to our not being conscious of that operation of the mind, i.e. it amounts to the non-existence of that operation of the mind.

²⁹Cooke, ibid., p. 298.

³⁰Our causal analysis of introspection entails that if the appropriate cause-effect relations are not present, "introspection" is not applicable to the situation.

Unless we can discover an effect of introspection (as a causal mechanism) which does not also involve consciousness, the recommendation to opt for ontological simplicity by discarding introspection as different from consciousness in revealing the mental may prove well-nigh irresistible.³¹ The attraction of this move is heightened by the troubling influence of the role of sensation on the proposed analogy between introspection and sense observation.

Cooke used the argument attributed to him above to bolster his claim that "sensation words cannot be the objects of verbs of perception in first-person sentences."³² The following analysis of observation³³ reinforces his position: Observation is something which one sets in train as part of a cognitive inquiry into the world. The conclusion we draw from our observation is a description of the world. There is an evidential relation between observation and description.

Suppose that by engaging in observation, certain effects are produced in the observer. These effects would be integral to observation, causally speaking. They would not be our evidence for our description of the world. We are not observing the effects. Rather, we observe the world and

³¹The same argument would apply to consciousness and mental events. We retained consciousness on the grounds that it allowed us to retain the classification of mental for events that were allowed to have a 'criteriological' connection with the public domain.

³²Cooke, op. cit., pp. 295-296.

³³Wittgenstein, *PI*, part II, section ix, pp. 187-189.

various features thereof. Let us suppose a stronger connection between these effects on the observer and the world -- let us say, even, that the effects are the way in which the individual comes to observe the world. Still and all, the object being observed is the world. The effects are only the medium for observation. The object of observation is not one of observation's effects: "Observing does not produce what is observed" (PI, p. 187).

The medium of sense observation is the senses. Sensations are the effects produced by the interaction of the observer with that part of the physical world he is said to be observing. Sensations provide an opening into the physical world -- not to ourselves. Should Jack be observing a chair, we may be sure Jack has sensations of the chair. But the chair is not identical with the sensations of the chair. So, Jack, by observing the chair, is not also observing his sensations of the chair. Via our senses, we observe what is already there in the world and not what is introduced into the world by sense observation.

The problem becomes even more complex since it turns out that the presence, as well as the absence, of introspection eliminates the object to be introspected. This consequence comes about in the following fashion: If consciousness is necessary for the existence of anything mental, including the mind's operations, and if introspection is necessary for there to be consciousness of the mind's operations, then introspection

is necessary for the existence of the mind's operations. The implication is that the mind's operations do not exist unintrospected. There is no object to be introspected for any object which can be introspected must already be introspected in order to exist! This conclusion is disastrous for a causal theory of introspection inasmuch as such a theory presupposes unintrospected operations of the mind as initial causes of the introspection process. By adopting consciousness as distinctive of the mental, we are forced to choose between abandoning a causal interpretation of Locke's theory of introspection or classifying the mind's operations (which would include introspection, too) as non-mental. It is in anticipation of this latter possibility that we have restricted ourselves to the expression "the mind's operations" and avoided "mental operations," thus remaining neutral about whether to classify the mind's operations as mental or not.

We can account for the conflation between not feeling a sensation and failing to observe a sensation with the fact that feeling is both the mode of existence for pains as well as the mode of observation of pains. That means that one can't employ the means of observation without necessarily implying the existence or non-existence of the purported object of observation. Observation would, in the case of sensation, be producing what is observed. And that contravenes the understanding of observation which we arrived at earlier.

The problem of sensation for introspection discussed by Ryle earlier, we now realize, was only the tip of the iceberg. The Lockean account of introspection contains this same flaw.

We have already seen that the non-introspection of a mental activity implies the non-existence of that activity. This is because introspection is a causal prerequisite of the consciousness of mental activities. Indeed, "introspection," denotes the causal process leading to our consciousness of our mental activities. Should such consciousness not materialize, we would assume that some causal antecedent was missing. The circumstances, then, would be other than those denoted by "introspection." "Introspection" would be inappropriately applied to a situation where consciousness of mental activity was missing. The existence of the introspection of a mental activity entails the existence of that mental activity if introspection is causally necessary for our consciousness of mental activities.

The extreme case of interference may be called "single-mindedness." By "single-mindedness," we are referring to the criticism that introspection is impossible on the grounds that it involves doing two things at once. Comte objects that

The thinking subject cannot divide itself into two parts, one of which would reason, while the other would observe its reasoning. In this instance, the observing and the observed organ being identical, how could observation

take place? (For "observation" here read "introspection)" (parentheses added).³⁴

An obvious refutation is found in the successful undertaking of several activities concomitantly: driving a car and listening to the radio, singing and showering, dancing the mambo and conversing, studying and watching television, to mention only a few of the possible combinations of activities. It is not surprising that

In arguing, against Comte, that it is possible to observe ourselves in the act of observing, John Stuart Mill appeals to our ability to devote attention to more than one thing simultaneously (Brentano, 1973, p. 128).

As with the interference objection, a superficial view renders the objection of singlemindedness easily eliminable. The price exacted, however, is that we gloss over the deeper problem underlying the criticism. The principle behind the deep problem is not the inaccurate generalization that we can't do two things at once but the more modest one, viz., that we can't do certain combinations of things at once. "Can't" does not here indicate some level of difficulty as in "we can't read a book and run a race at the same time." Although it may be true we can't do them, they are not impossible to do together. Running a race and lying down,

³⁴Comte, Cours de Philosophie Positive, 2nd ed., Paris, 1864, 30ff. Quoted by F. Brentano, Psychology from an Empirical Standpoint, ed. O. Kraus, L. McAlister, Trans. A.C. Rancurello, D.B. Terrell, L.L. McAlister (New York: Humanities Press, 1973), p. 32. References to Brentano's work will hereafter be given by "Brentano, 1973."

on the other hand, is something we can't do because they are an impossible combination. These two activities are mutually exclusive: we can't perform them both at the same time. The reader will notice that, with this principle, we are linking the objection of interference to that of single-mindedness. This strategy amounts to the elimination of introspection for the reason that the latter interferes with its object to such an extent that doing one automatically precludes the existence of the other.

To illustrate how this objection operates, let us take mental activity to be the object of introspection. Our first move will be to consider Brentano's argument that observation cannot take itself as an object (Brentano, 1973, p. 128). When we observe anything, what we observe -- the object of observation -- must be the central focus of our observation. A shift in the focus brings us a different object of observation. Thus, "observation requires that one turn his attention to an object as a primary object." This makes sense inasmuch as a difference in observation is signaled by a difference in the object observed. Now in the observation of an object, the observing aspect is part of the entire act of observation. Where the object is primary, the observation aspect is a secondary feature of the act. Consider the following as a very loose example: we observe a landscape in order to gain information about the landscape. The information gained will probably include the

fact that we are observing a landscape. This piece of information is incidental to, a by-product of, our pursuit of knowledge about the landscape. Information about the landscape is our primary object; information concerning how we set about gaining this information is a by-product of this pursuit and so is secondary to it.

Our observation of the landscape accounts for our information about the landscape. Since we also know that we are observing a landscape, it is tempting to account for this piece of information also by an act of observation. Thus we might say that our observation of the landscape involved the observation of the observing itself. The focus of our observation is directed upon the landscape and upon itself. By accepting this account, we have settled for a *reductio ad absurdum*. In allowing that observation can take itself as an object, we are admitting that observation can take a secondary object as its object. Our first characterization of the objects of observation, however, disposed of this possibility. Instead of limiting himself to disallowing observation observing itself, Brentano applies this conclusion to the observation of one's own mental activities as well.³⁵ The argument does not apply to the observation of other acts of observation besides itself. By extension, Brentano is not precluding the observation of mental activities

³⁵"Thus we see that no simultaneous observation of one's own act of observation or of any other of one's mental acts is possible at all" (Brentano, 1973, p.128).

as long as the subject observing and the subject undertaking the mental activity are different. What Brentano is ruling out is the individual observing his own concurrent mental activity. As a result of construing introspection as a sort of inner observation of one's current mental activities, introspection becomes a target of Brentano's criticism.

Before we show how the above argument serves as a model for an argument against introspection, we will have to delve a little further into Brentano's views on mental activity. For Brentano, the terms "mental," "mental activity," and "consciousness" are synonymous (Brentano, 1973, p. 102). They signify, in Brentano's words, "reference to a content, direction toward an object (which is not to be understood here as meaning a thing)"³⁶ (Brentano, 1973, p. 88). In his editors' words, they denote 'reference to something as "object,"' i.e. "being concerned with something" (Brentano, 1973, p. 79). In short, intentionality characterizes the mental (Brentano, 1973, pp. 88 and 103). In order to make Brentano's objections to introspection as clear as possible, we will talk about the intentional character of the mental in terms of the presentation of an object (as content).³⁷

³⁶That is to say, the object referred to may or may not exist in reality.

³⁷Although Brentano regards the presentation of an object as only one among several classes of mental activity (Brentano, 1973, p. 88), it is the most fundamental category of mental activity. All other mental activities are based on presentation (Brentano, 1973, p. 80). Elsewhere, Brentano explicitly uses presentation to identify mental phenomena (cf. Brentano, 1973, p. 79). In preferring to characterize intentionality in terms of presentation for the sake of clarity, we do not thereby distort Brentano's views of intentionality.

Mental activities include thinking, judgment, recollection, opinion and every emotion as well as acts of sense observation (like "hearing a sound, seeing a colored object") (Brentano, 1973, pp. 78-79).

Any mental activity has two distinguishable features: the presentation and the object. In hearing a sound, hearing is the presentation, sound is the object. Thought is the way the object is presented. We may contrast mental activities by their different ways of presenting objects. Although the object is the same when we imagine some sound as when we hear the sound, these two activities diverge because they present the sound differently. By the same token, presentations are distinguishable by their objects. Even though the manner of presentation is the same, hearing music is different from hearing noise because the objects presented differ. Albeit logically distinct, presentation and object are in fact inextricably linked into an unified whole, i.e., into a mental act.

"Presentation" has been given the connotation of reference, of directionality. In addition, Brentano understands "presentation" in the sense of "appearance": "As we use the verb "to present," "to be presented" means the same as "to appear" (Brentano, 1973, p. 81). It is clear that by "to appear," Brentano does not just mean "to show up." "To appear" has the sense of "to become apparent" with its

implication of becoming an object of knowledge.³⁸ Thus, when an object is presented, it is not only that there is that object but also that we know about the object. Unsurprisingly, considering the unity of mental activity, we also know that the object is being presented. On hearing a sound we come into cognitive contact with both the sound (which allows us to say "there is a sound") and the hearing of the sound (entitling us to say, "I hear a sound"). Brentano describes this cognition or, as he would say, this inner perception, as direct and infallible. "Every mental act, therefore, is accompanied by a two-fold inner consciousness, by a presentation which refers to it and a judgment which refers to it, the so-called inner perception, which is an immediate, evident cognition of the act" (Brentano, 1973, p. 143). The presentation of a mental act accounts for our knowledge of the act. That a mental act is presented means that not only do we have the presentation of the object but we also have the presentation of the presentation of the object.³⁹ Consequently, using the hearing

³⁸One commentator notes that Brentano believes that "...every consciousness not only has something appearing to it but appears to itself (see Book II, Chapter 2)" (Brentano, 1973, p. 79, fn 1).

³⁹Brentano wants to prevent anyone from supposing that the presentation of a presentation is subsumable as a case of observation. And he does this by showing that if "presentation" is equivalent to observation, we would have an impossible case of observation observing itself. Equating the presentation of a presentation with the observation of a mental act gives us an equally impossible situation.

of sound as an example, Brentano states,

...the consciousness of the presentation of the sound clearly occurs together with the consciousness of this consciousness, for the consciousness which accompanies the presentation of the sound is a consciousness not so much of this presentation as of the whole mental act in which the sound is presented, and in which the consciousness itself exists concomitantly. Apart from the fact that it presents the physical phenomenon of sound, the mental act of hearing becomes at the same time its own object and content taken as a whole (Brentano, 1973, p. 129).

The presentation of the object is primary, of course. The presentation of the presentation in a mental act is secondary. For instance, "the act of hearing appears to be directed toward sound in the most proper sense of the term and because of this it seems to apprehend itself incidentally and as something additional" (Brentano, 1973, p. 128). It is by virtue of this distinction between primary and secondary objects in mental activities that introspection becomes as untenable as observation observing itself.

As we construe it, Brentano's criticism of introspection would be as follows: Introspection, as a variety of observation, would have to take its object as primary. The introspection of some mental activity would require that the mental object be the primary object of the introspection. Mental activity has been analyzed into the presentation of an object, *x*. Introspecting a mental activity is introspecting the presentation of *x*. In our mental act, *x* is the primary object, the presentation is the secondary object.

Now, when we introspect a mental act, which aspect is being introspected? It can't be *x* because *x* is not mental. What is mental is the presentation of *x*. As a result, by introspecting the presentation of *x*, we are not introspecting the primary object of the mental activity. By a process of elimination, we identify our introspected object with the secondary object of the mental activity. The introspection of a mental activity ends up being the introspection of a secondary object. Unfortunately, inasmuch as observation, which involves focussing upon a primary object, is the model for introspection, this maneuver has been ruled out. It seems that in concluding with this conflict we have gone too fast.

While it is safe to assume that one and the same object cannot be both primary and secondary for one and the same activity,⁴⁰ there is nothing untoward about that which is the secondary object of one activity becoming the primary object of some other activity, the latter description seems to apply to the introspection of a mental activity. The argument against introspection can't be the *reductio ad absurdum* we were led to expect from the argument against observation observing itself. The conclusion to reach from the argument we have set up does not concern a conflict with a previous characterization of introspection. Instead, we find that, by

⁴⁰This puts Brentano's admission of the presentation of a presentation in the light of a safety violation.

limiting the sphere of introspection to the presentation aspect of mental activity, we have illegitimately smuggled in a new mental activity. Introspection of a presentation means that the presentation is primary for us. The object which is also presented becomes incidental. The mental act which we are consequently introspecting is one in which the presentation is primary, the object is secondary. The mental activity having these characteristics is, as a matter of definition, the presentation of the presentation of an object⁴¹ and not the presentation of an object. Yet we started off by offering the presentation of an object for introspection.

Let us see how the above problem develops in a concrete example. Our candidate for introspection is thinking about a horse. The horse -- the primary object of our thought -- is not mental in and of itself. It cannot be introspected. What is mental is our thought of the horse. We are limited to introspecting the thought, which is a secondary object of our thinking of a horse. Our thinking is being considered as a primary object by being subjected to introspection. The thinking that we are introspecting is not contentless. It happens to concern a horse. But, that is by the way.

⁴¹This is not to be confused with Brentano's presentation of a presentation because there the presentation is of something secondary. We are positing the presentation of something primary -- which happens to be a presentation.

Our main interest concerns the thinking. Now we ask ourselves what it is which has thinking as a primary object and a horse as a subordinate object. Our answer is thinking about thinking about a horse. Obviously thinking about thinking is not the same as thinking about a horse. A horse is not a thought: they are very different things. Whatever mental activity we end up introspecting is different from the one we originally intended to introspect. This unauthorized smuggling of mental activities for introspection is, we think, what's behind Brentano's remark that "consequently, an act existing within us could only be observed by means of a second, simultaneous act, directed toward it as a primary object" (Brentano, 1973, p. 128). We don't share Brentano's confidence that "there just is no such accompanying inner presentation of a second act, however" (Brentano, 1973, p. 128). In any case, even if there were these second mental acts, it wouldn't help introspection much. We can show that the introspection of the second mental act does not count as the introspection of the original mental act.

Again we have been too premature in closing the case against introspection. The case is worse than has been shown. We stopped by criticizing introspection on the grounds that we need the presentation of the presentation of an object in order to introspect the presentation of an object whereas we are only allowed the presentation of an object. Even if we are given the presentation of the presentation of an object

so that the presentation of an object becomes available for introspection, we cannot be said to be introspecting a mental activity per se. We are actually introspecting the object of a mental activity. Despite the fact that the object is a mental activity, a mental activity qua object is not quite the same as the mental activity in itself. For one thing, the mental activity qua object is intentional in character and may not exist in reality. Allowing the introspection of a mental activity in its role as object, we could very well be introspecting a non-existent thing. For one, the mental activity qua object (i.e., in its role as content) can have the feature of inexistence: it may not exist in reality. And this is a consequence which the model offered by sense observation will not allow us to countenance in introspection. Although when we are both thinking about a horse and thinking about thinking about a horse, the object of the latter activity is no substitute for the former activity. Therefore, introspecting an object (even though the object is a mental activity) is not acceptable in lieu of introspecting a mental activity. The alternatives we are faced with are either to strike mental activities from the list of introspectible objects or to choose another model for introspection besides sense observation. That's if Brentano is right.

The arguments attributed to Brentano depended on his views of mental activities. Perhaps we can avoid reaching

his conclusion of we adopt a different account of mental activities, more specifically, if we adopt Locke's account of mental activities.

There are important differences between Locke's and Brentano's views of the mental. Unlike Brentano, Locke does not define the mental realm in terms of intentionality. Since Locke does not limit the mental to mental activities, intentionality is not obviously attributable to all the phenomena that Locke counts as mental. Unfortunately, hopes that a loophole will be provided by Locke's account of mental activities are short-lived. The conjunction of mental activities with consciousness in Locke's notion of introspection conspire to reinforce Brentano's conclusions about introspection and mental activities.

Although it cannot be said that all mental phenomena involve reference to an object in Locke's theory, both Locke and Brentano agree that consciousness characterizes the mental. A further similarity between their theories emerges upon consideration of consciousness as presentation. That "consciousness" may be interpreted as having this sense for Locke was previously indicated by the combination of the definition of "consciousness" as the "perception of ideas" and the role that consciousness plays in establishing personal identity.⁴² Furthermore, although Locke has introspection concerned

⁴²Chapter I, section 3, particularly pp. 36-37.

solely with the mind's operations and not just mental activities, we may ignore other mental phenomena in this discussion of the feasibility of introspection. This restriction means that we will be considering only those mental phenomena to which intentionality does apply inasmuch as Locke's notion of mental activity can sustain the distinction between primary and secondary objects.

The primary-secondary object distinction arises most obviously from our consciousness of our mental activities. The mental activity itself forms the primary object of our consciousness. The content or object of this activity will be a secondary object. The consciousness of a mental activity lets us know that we are doing (what we are doing). Conscious of believing that good will ultimately triumph over evil, my believing -- that I believe -- is the primary object whereas the content of my belief -- the ultimate triumph of good over evil -- is the secondary object of my consciousness. Notice how the distinction between objects has arisen: it emerged, not as Brentano would have it -- from consciousness which takes the mental act as secondary to the object of the mental act, but from consciousness which takes the mental act as primary.

Our previous discussion of Locke's account of the contents of consciousness may lead us to suppose that it has no room for a consciousness which has the object of mental

activity as primary and the mental act as secondary. In this discussion, we only described mental activities in terms of their subjection to introspection. Our consciousness of our mental activity (as discussed above) arises from the introspection of our mental activity. Let us now consider the relationship between our consciousness and non-introspected mental activity (supposing, per contra, that there can be such a thing). We pointed out that, previous to introspection, we would only be conscious of the object of our mental act, we would be aware of what was being acted upon. We would have no inkling of the mental activity we are engaged in. We would be acquainted with the object of our mental activity and would not know that we are engaging in the mental activity itself. I can express my non-introspected belief about the conflict between good and evil with "good will ultimately triumph over evil." Unless I introspect my belief, I can not proclaim "I believe that good will ultimately triumph over evil." Although engaging in non-introspected mental activity brings with it a consciousness of the object (of a mental act), it is not a consciousness of the object as an object (of a mental act). Reference to an object apparently does not characterize what we know about our non-introspected mental activities. Without the consciousness of mental activity as a secondary object, Brentano's criticism will not be applicable to Locke's account of introspection.

Unfortunately, Brentano's criticism may apply to introspection as presented by Locke. The picture of

consciousness given above is a distorted one -- distorted for the purpose of clarifying the contribution of introspection to our conscious life. We are thereby given wrongly to suppose that there can be non-introspected mental activity. Because consciousness is necessary for the existence of the mental, no such thing as non-introspected mental activity can, in fact, exist. Our mental activity must be accompanied by introspection. Consequently, our consciousness will never contain as object just the object of mental activity. It will also contain the activity as an object. When we engage in mental activity, our consciousness will have as co-existing objects both the mental act and the object of the mental act. This does not mean that we can no longer refer to the consciousness of the object (of a mental act) as opposed to the consciousness of the mental act per se. We can do so as long as we realize that this position merely heralds a shift in emphasis, that in talking about the consciousness of the object (of a mental act) we are taking the mental act as a secondary object, as a bystander, so to speak, to our taking the object of the mental act as primary.

By detaching the contributions of introspection from those obtained from our engaging in mental activities, we can identify the proper concern of mental activity. And this concern is to bring the object of the mental act to consciousness: we act to know what we do. We can say that engaging in mental activities, irrespective of their being introspected,

involves taking their objects as primary. (Since such an engagement is inevitably accompanied by introspection, we will also know that we are acting, but this will be a byproduct of our activity.) If we are to understand introspection as a type of observation of mental activities and if we characterize mental activities as taking their objects as primary, then it is natural to expect introspection to yield information about the mental activities involved. However, in Locke's theory introspection is the source of our consciousness of our mind's operations. Contrary to our expectations, introspection ultimately leads to knowledge of phenomena which take mental acts as primary. Locke's theory lets us down in just the way we would expect if Brentano's criticism of introspection were true.

We can undercut Brentano's criticism in either one of two ways. One is to deny that primary objects are at the forefront of both observation and introspection. We could then allow observation and, hence, introspection to occupy themselves with secondary objects. This move seems counterintuitive. Both observation and introspection are undertaken in order to acquire more information about some phenomena. In view of this purpose, it will be counterproductive to relegate the phenomena to the background while focussing upon something else (unless, of course, it is formation about the phenomena solely as background in which we are interested). On the other hand, we could restore mental activities to introspection by dethroning intentionality as

characterizing the mental and restoring consciousness to its original place. But then we must also be prepared to abandon the intimate connection between mental activity and introspection established by Locke's notion of introspection. Whether we choose Charybdis or Scylla will be determined by the next stage in our discussion of a subject-object distinction for introspection.

We have canvassed arguments aiming to demonstrate the inevitable disparity between introspection and sense observation when consciousness is allowed a role in the case of the former. We have done our best to locate the weaknesses contained in these arguments with the result that some of them -- e.g., the infinite regress encompassed by the concept of introspection, the presence of observer error in introspection -- are no longer threats. However, we were careful not to overlook whatever insights the arguments had to offer. Thus, a number of objections remain unanswered. We have still to provide an account which renders the mental accessible to a pluralistic point of view (i.e., which renders the mental accessible to a number of observers) without sacrificing its single, subjective viewpoint: in addition, it must be an account which pays more than lip service to the distinctiveness and separateness of the subject and object in introspection. For example, not only does it have to distinguish between the contributions of the subject and those of the object in introspection but it must also provide for the existence of

introspected objects that do not require introspection as a necessary condition of their existence. Furthermore, this account will be expected to explain how mental activities can be introspected objects. And if such an account is not forthcoming, some explanation of why such an account is unnecessary will be expected. In short, our next step is to consider whether we can't solve the problems that consciousness poses for creating a subject-object distinction for introspection and still keep consciousness.

CHAPTER IV

KINESTHESIS-PROPRIOCEPTION AND EXPERIMENTAL INTROSPECTION

In our first chapter, we met consciousness as a potential problem for introspection insofar as there was the danger, in Locke's theory, of confusing one with the other. The second chapter was devoted to circumventing the threat posed by privacy as inaccessibility to the construction of introspective descriptions paralleling sense observation descriptions. This involved committing ourselves to a view of consciousness which, while retaining a number of features advocated by Locke, abandoned the implication of the inviolable inaccessibility of mental phenomena to all but the experiencing subject. Chapter III was an exploration of the obstacles to construing introspection as a two-term relation on the order of sense observation which were created by this commitment to consciousness. Consciousness has been the problem all along.

Since we have designated consciousness as the distinguishing characteristic of the mental, this identification of the problem is tantamount to complaining that introspection can't be like sense observation because it deals with the mental. Such a complaint misses the point when we consider

that the purpose of our endeavor is to discover whether we can model introspection on sense observation even though the former involves the mental. Nevertheless, objecting to an observation-like introspection because of the involvement of the mental does much to explain the force behind the arguments against considering introspection a two-term relation. Attempts to regard introspection as a two-term relation like sense observation run up against the hostility towards mental substance. The paradigm of sense observation that we have been working with involves the interaction between two existentially independent physical entities -- a percipient organism and some other physical entity (a boat, a ball, a landscape, another percipient organism). In order to make sense of introspection as the interaction of two independent mental entities, a substantial view of the mental seems to be called for. Seen in this light, we can't help but sympathize with the reluctance to explain introspection as a two-term relation. We are as unwilling as the next philosopher (reared in the analytic tradition) to hypostatize the mental as something separable from the person (to whom corporeality as well as mentality is attributed). Thus, we will explore the possibility of an alternate paradigm of sense observation, one which will preserve sense observation's character as a two-term relation yet will relinquish the (existential) independence of the unrelated terms. Should success crown

our efforts, we will go on to consider whether introspection can conform to this changed paradigm.

1. Another Sense Observation Paradigm

The unsolved problems remaining from Chapter III may perhaps be disposed of in one fell swoop by arguing that sense observation need not necessarily be considered a relationship between two entities. The difficulties in the way of construing introspection as a two-term relationship would, then, no longer constitute a barrier to modelling introspection on sense observation. This is the solution that will now be investigated. We will go about it first by examining various examples of the uses of sense observation verbs. As a result, we will be extending our understanding of sense observation beyond the single paradigm of the subject observing some independent, material object to a variety of cases of sense observation. By thus broadening the model of sense observation with which we will be working, we hope to demonstrate that the concept of sense observation is flexible enough to accomodate even one-term relationships of the sort typified by introspection. These hopes depend on our finding a common use of a sense observation verb where subject and object are not two independent entities. We discover such a use for verbs of kinesthesis-proprioception.

The second part of this discussion involves the

examination of the viability of using kinesthesia-proprioception as a model for introspection. The ultimate question facing us in this chapter (indeed the primary question behind our entire discussion of introspection) is whether there can be introspection conceived on the model of sense observation. Since kinesthesia-proprioception is a species of sense observation, we will be answering this ultimate question by considering whether introspection may be satisfactorily modelled upon kinesthesia-proprioception. We will proceed to do this by applying the model of kinesthesia-proprioception to purported cases of introspection.

The second chapter emphasized the need for evaluating introspection from an ontological rather than a linguistic standpoint. Rather than concentrating solely upon linguistic practices, the importance of considering the phenomena talked about was recognized. Our current intention to compare sense observation and introspection via the use of sense observation verbs would seem to embody a retraction of the stance adopted in Chapter II. This is not so. The forthcoming linguistic discussion merely represents the other side of the coin. Acknowledging that influence between our beliefs and our experiences of the world is a two-way street allows us to wrest what insights into the world that we can from the beliefs embodied in the grammatical features of our discourse concerning the world. As Wittgenstein

has said "grammar tells us what kind of object anything is" (PI, 373). Still, it must be admitted that employing grammar as a guide to the world has its limitations: we may over-step our boundaries and illegitimately project the features of our beliefs upon the world. We can never be entirely certain that we are talking about the world and not about our belief structure. Nevertheless, the uncertainty is worthwhile if, in exchange, we gain a fresh approach to our problem. Our linguistic discussion has merit, then, since it brings verbs of kinesthesia-proprioception to our attention and consideration of kinesthesia-proprioception does furnish new insights into the problem of construing introspection on the model of sense observation.

In our discussion of the various uses of sense observation verbs, the grammatical feature of transitivity will be taken to represent our commitment to classifying sense observation as a two-term relationship. Verbs are transitive when they are regularly used with a direct object (e.g. "to hit"). The grammatical feature symbolizing introspection will be reflexivity. While introspection appears to be a two-term relation (between an introspecting subject and an introspected object), appearances seem deceptive. The objections presented in the third chapter suggest that, because of the elusiveness of either subject or object, there is only one entity (and not two) involved in introspection. A verb is reflexive when its use indicates that the agent is

directing his action towards an object -- with the proviso that the object be himself (as in "to worry oneself sick"). Reflexivity, like introspection, creates the illusion of two entities when only a single one is in fact involved. By discussing uses of sense observation verbs, we will be investigating whether the transitivity of sense observation verbs also allows a reflexive use for them. The outcome of this investigation will be taken as an indicator of the appropriateness of subsuming introspection under the concept of sense observation.

Let us compare sense observation verbs with introspection verbs. The members of the class of sense observation verbs contain words like "see," "watch," "listen," "taste," "touch," "feel" (in certain contexts), etc. The unqualified member of the class of introspection verbs is "introspect." Other verbs -- verbs like "notice," "feel," etc. -- are members of this class when they are used in appropriate contexts to signify introspection. We will take "introspect" to characterize introspection verbs.

Should someone ask what you are doing and you reply that you are watching, listening, tasting, or some other variety of sense observing, it would only be natural for the inquirer to feel that more information should be forthcoming from you. None of the aforementioned activities are accomplished in vacuo: for each, there must be an object to be acted upon. One could not hear if there were nothing to

hear; without something to taste, tasting could not occur. A more complete description of what you are doing, then, should include some specification of the object of your sense observation, e.g., you are listening to Mahler's Ninth. Grammatically, sense observation verbs are transitive -- they take objects. For the sake of satisfactory communication, such verbs are regularly used with (grammatical) objects. These objects are given by nouns or noun phrases. Some sense observation verbs can take propositional clauses as grammatical objects. For instance, the sense observation verb "see" can be used with both kinds of object: "I see the tree" and "I see that the paper is brittle." Because it is the involvement of two entities in sense observation which proves difficult to incorporate into a theory of introspection and since the propositional use of such verbs does not seem particularly relevant to this issue, this use will be ignored.¹ Sense observation verbs' grammatical characteristic of transitivity (which involves nominal objects) confirms our commitment to regarding sense observation as a two-term relation.

¹The decision not to deal with the propositional use of sense observation verbs is reinforced by Collins' argument to the effect that, in general, perception verbs taking propositions as objects are to be regarded as knowledge claims and not as perception reports while perception verbs used with objects other than propositions, although they are perception reports, are not to be considered knowledge claims. See Arthur W. Collins, "The Concept of Perception," Philosophical Review (October 1967) 76: 436-459.

Suppose, on the other hand, that inquiry into your activities elicits the response that you are introspecting. This might provoke interest in your reasons, in your results, even in the progress of the method. Few, however, would feel compelled to pursue the matter as far as asking for the introspected object. "I'm introspecting" may be regarded as a complete, albeit general, description of your current occupation. With the choice of the whole world before sense observation, it is important to indicate which actual portion of the world is its object. The only route for introspection to take is to turn inwards. By giving the subject of introspection, we generally indicate the object of introspection. These general remarks about the use of "introspect" reflect the fact that "introspect" is an intransitive verb. As such, it is not accompanied by a direct object.

Although we needn't specify the object of introspection, we can do so. "Introspect" is a transitive verb, too. Used transitively, "introspect" takes a direct object. However, the objects of introspection are restricted to the mental states of the subject. You may indicate that you are introspecting upon an afterimage, your feeling of anger, or what have you. Indeed, any candidate for an introspected object is limited to those mental features that you, the subject, have. Although the subject and object in introspection are no more identical than a whole is with any of its parts, we

would be reluctant to thereby infer that two entities are involved. Admittedly, an entity count may vary with different principles of individuation. A whole and its parts may be regarded as a single entity (the whole) or as any number of entities (as numerous as the various parts, or the various combinations of parts or either of these along with the whole.) When it is a question of the introspecting subject and his mental processes, we would ordinarily just count persons and therefore find that there is only one entity engaged in the process of introspection -- the subject. The transitivity of "introspect" does not imply the involvement of two independent entities in introspection.

We can distinguish between transitive and intransitive verbs -- those that can take grammatical objects and those that can't. Sense observation and introspection verbs can belong to the former class. By delving further into this matter, we come up with a third class of verbs -- reflexive verbs. The peculiarity of these verbs is that they signify activities wherein the subjects also play the role of object. Reflexive verbs take objects but the object-term indicates one and the same individual that is indicated by the subject-term. Reflexive verbs form a subcategory of transitive verbs.

Reflexivity is clearly marked for languages other than English. The verb phrases "lie down" and "lay down" are differentiated on the basis of whether it is a person depositing himself or some object (or person) being deposited

on a surface, respectively. In French, the difference is captured largely by the reflexive and non-reflexive uses of the relevant verb. To say that a person lies down, one would use either "se coucher" or "s'étendre" whereas "to lay (something) down" may be expressed with "coucher" or "étendre" (among other expressions, none reflexive). In both French and Spanish, reflexive verbs are fixed by the invariant accompaniment of an object pronoun ("se") whose declination mirrors that of the subject-term. Thus, in Spanish, "he washes himself" becomes "él se lava." And the Spanish version of "he washes his body" contains no ambiguity. The reflexive use is rendered by "él se lava el cuerpo" (note the absence of any possessive and the presence of "se") while the non-reflexive use is "él lava su cuerpo" (marked by the absence of "se" and the presence of a possessive).

Reflexivity is much less precisely delineated in English. It should not be confused with the logical relationship of reflexivity. If R is some relationship; then logical reflexivity may be given by $(x) (xRx)$. Grammatical reflexivity and logical reflexivity share certain affinities in that, for both, a relationship is posited even though only a single entity is involved. However, logical reflexivity applies to an individual in its entirety whereas grammatical reflexivity may obtain even in cases involving a relationship between an individual and some part of the individual. Although no distinctions between different ways of referring

to the individual can be taken into account in logical reflexivity, such distinctions are allowed in grammatical reflexivity . Identifying grammatical reflexivity and classifying verbs as reflexive or not is no simple matter.

Reflexivity , like many other English grammatical features, is not invariably indicated by one particular structure: exceptions occur. There is no strict one-to-one relationship between form and function for reflexivity. Generally speaking reflexivity is commonly signalled in English by the appendage of "self" onto the object pronoun, witness, "she talks to herself," "he hurt himself," "he perjured himself." A transitive verb may be reflexive if it can accomodate the accretion of "self" onto the object pronoun. The addition of "self" onto the object pronoun does not always indicate reflexivity. It may also be used to mean "alone" as in "I'd rather do it myself." A reflexive construction may be used in certain instances where we could also use a direct object with a possessive corresponding to the grammatical person: "he washed his body" for the obviously reflexive "he washed himself." In these cases the direct object indicates some portion of the individual that the individual is willing to identify himself with, e.g., in many instances, we willingly identify ourselves with our bodies. Given a sufficiently vague context -- or no context at all -- "he washed his body" is ambiguous about the number of individuals involved. "He

washed his body" can describe Joes washing Robert's body as well as Joe washing Joe's body. The addition of "own" as in "he washed his own body" eliminates the ambiguity and indicates that a reflexive rephrasal is appropriate. To divine the grammatical function of a piece of discourse, we can't be guided by the form alone: No dependence can be placed on an isomorphic relationship holding between any particular grammatical function and the appearance of a bit of discourse. We will have to determine the purpose or semantics of the relevant grammatical function and then investigate whether that purpose or semantics is carried through in the piece of discourse under consideration. These considerations dictate our account of reflexivity: Thus, to determine whether some use of a transitive verb is reflexive or not in English, we will content ourselves with the general rule of thumb that reflexivity is indicated by the addition of the pronoun "self" to the direct object under those circumstances where both subject and object roles are fulfilled by a single individual. When "introspect" takes an object, the restrictions on the objects may be adequately represented by the property of grammatical reflexivity.

Various combinations of transitivity and reflexivity may define different classes of verbs. Thus we can have a class of transitive verbs which disallows reflexivity (the grammatical object must be different from the grammatical subject as in "to win"), a class which encompasses only

reflexive verbs (e.g., "to pride oneself"); and a class of transitive verbs which includes those that may be used reflexively or not (e.g., "to trust"). The transitive use of "introspect" may best be represented by exclusively reflexive verbs. This is because we can rest assured that whatever the object of introspection, it is possessed by the subject. If the object-term is used with a possessive in an introspection statement, it is restricted to an adjective indicating ownership by the subject. As a result, the use of any possessive adjective is optional as its function has become nominal. Hence, it is more felicitous to say "I am introspecting a yellow after-image," though it is not clearly odd to say "I am introspecting my yellow after-image." "I am introspecting his yellow after-image" is not a permissible locution. What will now concern us is whether the class of essentially reflexive verbs form a subset of the class of transitive sense observation verbs. In other words, we want to know whether there are some sense observation verbs which has an essentially reflexive use.

The most straightforward way to indicate the inappropriateness of attributing a reflexive use to some transitive verb would be to show that a change in the verb's meaning would follow. The verb, in a reflexive guise, would no longer be the same as the verb used non-reflexively. The change of meaning would indicate the inability of the verb to accomodate a reflexive use. We realize that the

straightforward path is closed to us when we consider what reflexivity does to the verb "dress" (which has nothing in particular to do with either introspection or sense observation).

In the following sentence;

1. the mother dressed the child,

the referents for the subject-term and the object-term are different. In the sentence,

2. the mother dressed herself,

there is only one referent for the subject- and object-terms. The subject and object are the same person. The activity of dressing does not change with the object being dressed. In other words, we do not take the change in the reflexivity of "dress" to indicate a change in the word's meaning. That a transitive verb has both a non-reflexive and a reflexive use cannot be taken as guaranteeing that there are two different senses to the verb. The most one may infer is that the distinction between non-reflexive and reflexive uses of a transitive verb just reflects the restrictions on the scope of the verb's objects.

Instead of relying on mere reflexivity to do the trick for us, we will have to investigate the relationship between the meanings of sense observation verbs and their non-reflexive or reflexive use. We can try, for one, to show that the meanings of sense observation terms depend on the subject being different from the object. For example, consider "join."

It is permissible to use "join" transitively and non-reflexively, " e.g., to say,

3: Pauline joined me in singing Joe's praises.

The reflexive use of "join," as in

4: Pauline joined herself in singing Joe's praises, is nonsensical. "Join" has no reflexive use. Should sense observation terms be like "join," they could not tolerate (i.e., continue to be meaningful upon) the identification of subject and object. What we require are instances which display the inappropriateness of using a sense-observation term when subject and object are identical. The sense observation verb "watch" comes to mind. There are no problems with a non-reflexive use of "watch" --

5: I watched him eat.

The reflexive use, though, e.g.,

6: I watched myself eat,
is odd, even deviant.²

We can't afford to put too much weight on this maneuver. From our previous examples of reflexivity, we may note that reflexivity obtains even though the integrity of the subject is broached upon assuming the role of object. "Introspect" used transitively is a case in point. The

²This use is not considered deviant if what one is watching is an image of oneself (on television, say). This would not count as a case of reflexivity because the image is not oneself.

object of introspection was given as an aspect of the subject. A more common example would be the case where we say "he hurt himself" even when the actual truth of the matter is that only some part of the subject is injured. We must recognize that there are times when we are willing to identify ourselves with some aspect of ourselves. The subject-object identity which marked reflexivity must be extended to include those occasions where the subject is related to the object as whole to part and the subject may identify himself with (not as) the part. As our previous discussions of the first person picture of sense observation indicated, the subject is excluded from what he observes only if we insist upon including the subject in his entirety. Parts of the subject's body may be introduced into a first-person picture of sense observation. There is nothing at all odd about claiming to, say, touch oneself even though it is only some part of oneself which is being touched. We cannot therefore rule out the use of sense observation verbs under conditions of subject-object identity when such identity is understood in the aforementioned extended sense.

Given the extended notion of subject-object identity, we might try to sever any connection between sense observation verbs and reflexivity on the grounds that sense observation verbs used under the conditions of subject-object identity have a different meaning from when they are used when subject and object are independent of one another.

In other words, we could try to show that, when a sense observation verb is used reflexively, it can no longer be taken as signifying a variety of sense observation and must forthwith be excluded from the class of sense observation verbs proper. To illustrate with an example from the French: the non-reflexive and transitive use of "mettre," as in

7: Jean a mis des fruits sur le table

(John put some fruit on the table),

has the sense of "to put." When used reflexively -- e.g.,

8. Jean s'a mis à étudier hier

(John began studying yesterday) --

the meaning of "mettre" can best be expressed by "to begin." The concepts expressed by one and the same term differ. The sense observation verb "see" seems to supply some support for applying this tactic to sense observation verbs as a whole.

It might be argued that a reflexive use of "see," e.g.,

9: I see myself,

which actually involves the engagement of the visual process does not count as a case of seeing by our rule of thumb. The conditions which commonly give rise to a remark like 9 are such that what one sees is an image of oneself -- in a mirror, a photograph, etc. It is not literally oneself that is being viewed. What 9 amounts to, normally, is a claim to see one's image. 9 is shorthand for

10: I see (an image of) myself.

Inasmuch as an image of oneself is not even a part of oneself, we do not have a single individual undertaking both subject- and object-roles. An instance of a truly reflexive use of "see," where one entity fulfills both subject- and object-roles is exemplified by

11: I saw myself going through the motions.

But 11 does not involve a literal case of seeing: one is seeing oneself in one's imagination or memory. This actually reflexive use of "see" is not a real case of seeing. It is a case of imagining or remembering. Unfortunately for any hopes of generalizing the effects of reflexivity on "see" to other sense observation verbs, we must recognize that our account of the circumstances occasioning 9 is not complete. It is not unusual for 9 to be made when seeing a part of one's body. For instance, when someone enjoins me to look at myself, I will be regarded as having obeyed his behest if I look down at the front of my torso and legs. Such hopes are finally dashed by finding sense observation verbs which readily accomodate a reflexive use.

Only consider such sense observation verbs as "hear" and "smell." By using these terms non-reflexively, as in

12: I can hear you

or

13: I smell something burning,

we indicate that the source (or stimulus) of the object of the sense observation (the sound or the odor) is different

from the subject. The reflexive use of these verbs,

14: I hear myself

or

15: I can smell myself,

indicates that the object (the sound or odor) emanates from the subject. Here, the detection (hearing or smelling) of the object is not only logically distinct from the production of the object (the issuing of sounds or odors) but is also separable from the latter. For instance, the deaf person cannot hear himself make sounds. In these cases of sense observation, the perceptual process remains constant whether the subject both undertakes and undergoes the perceptual process or whether the subject undertakes the perceptual process and subjects something other than himself to it.

The class of sense observation verbs includes verbs which resist reflexive use (like "watch") and those which may or may not be used reflexively. This isn't enough to warrant confidence in a merger of sense observation verbs with introspection verbs into a larger set (of observation verbs). After all, the inability of "introspect" to accomodate objects external to the subject has been considered crucial to the concept of introspection. We must now ask ourselves if the class of sense observation verbs includes verbs which are exclusively reflexive, which cannot be used except under subject-object identity.

Our best case for a favorable answer lies in

16: I feel myself moving.

"Feel" is used here as a sense observation verb. It indicates that kinesthesia-proprioception is the species of sense observation being employed. The kinesthetic and proprioceptive senses -- sometimes called our sixth sense -- provide us with access to the internal workings of our bodies, to our body 's orientation in space, and to our bodily movement.³ Our legs move and bring into play, say, muscles and joints. The exercise of the muscles and joints excites receptors in those muscles and joints. The excitation of these receptors gets converted into nerve impulses which are relayed to the central nervous system. We do not pretend that this account of the mechanism of kinesthesia-proprioception is anything more than a very rough and exceedingly simplified sketch of what presumably happens.

We have allowed ourselves to become somewhat technical about kinesthesia-proprioception because the technical notion is needed to flesh out our ordinary notion of these processes. The processes of kinesthesia and proprioception are barely acknowledged in our conceptual framework. Unlike our other five senses, there is no verb whose use is reserved for the

³C. Osgood, Method and Theory in Experimental Psychology (New York: Oxford University Press, 1953), p. 29-33. Alike in their ultimate function, kinesthesia and proprioception apparently differ with respect to the location of the receptor organs. We shall treat them, to all intents and purposes, as a single process.

operation of these processes. We employ omnibus verbs like "feel" and, less frequently, "sense," to convey the fact that we are engaging in kinesthesia-proprioception. Ordinary communication is not generally handicapped by the lack of specificity since we, normally, find very few occasions warranting the communication of this fact. Our use of kinesthesia-proprioception is automatic. Deliberation is rarely involved or required. This may explain the shadowiness of the ordinary concept of kinesthesia-proprioception. Be that as it may, we are relying on the technical concepts of kinesthesia-proprioception to confirm that we have isolated kinesthetic-proprioceptive uses of "feel" from other uses of that verb. Furthermore, the technical notion of kinesthesia-proprioception clears up any doubts that we are dealing with a variety of sense observation and not merely with a species of feeling or experience. It identifies the stimuli and receptor organs, a distinction which the everyday notion of kinesthesia-proprioception lacks, yet which is common to the concepts of the other types of sense observation (e.g., in seeing, the stimulus is some visible entity, the receptor organ is the eye). We should not fail to realize that the stimulus is typically the object of sense observation and that the receptor organ belongs to the observing subject.

Our choice of 16 as an example of a kinesthetic-proprioceptive report was made deliberately because of its affinities

with more typical examples of sense observation. The story behind a kinesthetic-proprioceptive claim like

17: I feel dizzy

might talk of displacement of fluid in the inner ear exciting proprioceptors thereby providing a stimulus-receptor distinction, but even so we are disinclined to posit a subject-object distinction for these circumstances. We regard 17 as a description of the internal state of the subject, perhaps even as a description of the feeling had by the subject. We do not interpret 17 as signifying that the subject is relating to some object by way of this feeling. The same goes for claims that one is feeling ill, nauseous, off-balance, to mention a few. We are less reluctant to allow a subject-object distinction for such kinesthetic-proprioceptive claims as

18: I can feel myself relaxing (tensing).

(I can feel my muscles relaxing (or, tense).)

Without the use of sophisticated manipulations, the purported object is hidden from the naked eye. Due to this concealment, the temptation to dismiss the object-term as grammatical fortuitousness and proclaim the 'deep' structure of 18 to be that of a description of a feeling had by the subject lingers on. There is no question that the object of 16 -- my moving -- belongs to the public domain. Anyone -- and that includes myself -- with a normal sensory apparatus and under the proper circumstances can see or hear me move.

The object of kinesthesia-proprioception here is the equal of any of the objects of the other kinds of sense observation.

Doubts might arise about understanding the subject's role to be that of engaging in the process of kinesthesia-proprioception. Despite the physiological processes involved, it might be claimed that 16 is best understood as reducible to the claim.

19: I am moving.

The temptation to reduce 16 to 19 is understandable in view of the fact that for a normal individual, moving, automatically and invariably, engages the process of kinesthesia-proprioception. We seem to have a case of distinguishability combined with inseparability (if not de facto indistinguishability from the layman's point of view) which may lead us to suppose that feeling movement is virtually the same as moving. If we are in good shape, making noise will automatically set one's hearing mechanism in operation. Notwithstanding, there is no temptation to conflate 14 ("I hear myself") with "I am making noise." Partly this is because of the ease with which one may demonstrate the separability of these two processes in one's own case. All we have to do is plug up our ears and we become oblivious to the noise we make. In deaf individuals, the disengagement of the hearing process is involuntary. Mostly, the lack of temptation is due to hearing being attuned to

the noise produced by other individuals. Thus, examples of the separability of hearing and noise-making proliferate. If I move, there is no way for me to voluntarily suppress my feeling movement. However, this does not mean that there are no cases where one function exists without the other. A healthy individual can induce the feeling of movement in the absence of actual movement if he first whirls around rapidly for a period of time. And in a certain type of syphilis, a patient in an advanced state of the disease will lose proprioception. He will still be able to move his limbs, but only if he looks at them. What is unique to kinesthesia-proprioception and unlike the other modes of sense observation is that it is limited to one's own case. Examples of the separability of feeling movement and moving are, then, necessarily few when compared to the other, externally-oriented varieties of sense observation. There are fewer impediments to adopting the mistaken assumption of their inseparability.

The information I gain about myself through kinesthesia-proprioception may be available to someone else employing any of the original five senses. Should other persons rely on their so-called sixth sense to find out about me, they would learn nothing. When I feel myself blush, I know my face is reddening. Someone else can learn this by looking at me. I, too, can see the blush if I look at myself in a mirror. Should my skin be sufficiently dark,

when feeling myself blush, neither I nor anyone else would see any change in my skin tone. Should this other person rely on his kinesthetic-proprioceptive sense, all that the latter will tell him is whether his face is reddening. One's own body defines the range of objects suitable for observation via kinesthesia-proprioception.

In kinesthesia-proprioception, the subject and object are united in one individual. Whether the kinesthetic-proprioceptive use of "feel" is employed in a reflexive construction as in 16 or as in

20: I feel myself blushing,
or not, as in

21: I feel my face blushing,
the kinesthetic-proprioceptive concept of "feel" is essentially reflexive. This use of "feel" need not take an object -- remember 17 ("I feel dizzy") but when it does, that object must be contained by the subject undertaking the process of kinesthesia-proprioception. A statement like

22: I feel the plane moving
should not be considered a counter-example. It, 22, is as misleading about the object of kinesthesia-proprioception as the claim

23: I see my face
is misleading about the object of vision. The actual object seen is an image of my face which enables me to deduce a number of facts about the visible appearance of my face.

In the situation conjured up by 22, what I feel are tremors in my body , I feel off-balance, and, as a result, I infer that the plane is moving. A better rendition of 22 would be

24: I feel that the plane is moving.

Once the plane's speed is constant then I don't feel that the plane is moving. 22 is not an example of kinesthesia-proprioception employed with subject and object indicating different independent entities. The upshot of our discussion of kinesthesia-proprioception is to give us some degree of confidence in our assertion that the class of verbs which includes sense observation verbs must include exclusively reflexive verbs. The characteristic which leads us to denominate the kinesthetic-proprioceptive use of "feel" as exclusively reflexive are the same as those which led us to liken "introspect" to essentially reflexive verbs. This gives us grounds for optimism concerning the inclusion of "introspect" and its ilk.

2. Introspection in Practice

As a consequence of the example afforded us by kinesthesia-proprioception, we can amplify our initial characterization of sense observation as a two-term relation. We can now admit that insisting on exemplifying sense observation with a relationship between independent entities was somewhat short-sighted. We now realize that sense observation may be a relation obtaining between an individual and some feature of the individual. It is still a two-term relation: subject

and object are not only distinguishable, they may also be separable. When the subject is engaged in observing himself, then he is occupying two distinct and separable roles. Our optimism that the concept of observation includes introspection along with sense observation would be even better grounded if we could show that the reflexivity of "introspect" is no more a bar to considering it a two-term relation than it was for kinesthesia-proprioception. With this in mind, we will now turn our attention to introspection once again, only this time we will consider cases of purported introspection in operation.

The following four experiments with introspection will tell us more than we would expect from our everyday notion of introspection. Since our discussion of kinesthesia-proprioception leaned heavily on the technical concept of these processes -- on the expansion of the ordinary concept of these processes by way of its role in neurophysiological theory -- it is entirely appropriate that we base our conclusion about introspection on these special experimental uses of introspection. Moreover, these experimental uses of "introspection" may not really signal much of a change in the ordinary concept of introspection at all. One writer notes that "introspection" is not part of the common parlance. Rather it is a term of art in that its use is special to psychology and

philosophy.⁴ As such, "introspect" is a term deriving its meaning from its role in various theories and so would be understood as a technical concept.

Claims to introspect have proved one of the major stumbling blocks in the way of accepting the impossibility of introspection. After all, introspection can't be impossible if it is done -- and it was done (or so the claim goes) very seriously in the late nineteenth and early twentieth centuries.⁵ Experimental psychologists of the era (Wundt in Germany, Titchener in the U.S.A., Marbe and Ach of the Wurzburg school) used introspection as the major method for investigating the workings of the human mind. Debunkers of introspection deal with these instances of introspection by attempting to explain them away as instances of some other process. Of the candidates proposed to fill introspection's shoes, retrospection (a form of remembering)⁶

⁴Ordinary language is peculiar in including the adjective "introspective" but excluding the noun "introspection" and the verb "introspect." You rarely hear the noun and verb in colloquial talk....Nevertheless, many psychologists and philosophers have defended introspection as an indispensable source of knowledge. Unlike the ordinary man, they do ask "What are you introspecting?" and, unlike ordinary opinion, they do not equate "introspective" with "introverted." Gerald E. Myers, Self (New York: Pegasus, 1969), pp. 131-132.

⁵E.G. Boring, "A History of Introspection," Psychological Bulletin 50 (1953): 169-189.

⁶Among those identifying introspection with retrospection, we find such notables as C.D. Broad, William James, Gilbert Ryle and D.M. Armstrong.

and attention are the most popular. One critic went so far as to classify introspection as a type of hallucination.⁷ We shall proceed to present several examples of the use of introspection in psychological investigations. They will enable us to determine for ourselves what counted as introspection. We will then be able to judge whether it is introspection or some other process that is being employed. Furthermore, the features which emerge from this analysis will allow us to determine to what extent, if any, the process involved conforms to the requirements set up by our discussion of kinesthesia-proprioception.

One of the first psychological experiments employing introspection was conducted by Galton in 1880. In a study of the mental images of pictures accompanying remembering, Galton directed his subjects to "...think of some definite object -- suppose it is your breakfast-table as you sat down to it -- and consider carefully the picture that rises before your mind's eye."⁸ Galton's remark that "many persons, especially women and intelligent children, take pleasure in introspection and strive their very best to explain their mental processes" (Galton, 1880, p. 303) makes it entirely

⁷D. Hebb, "The Mind's Eye," in Readings in Experimental Psychology Today, ed. N.T. Adler, (Del Mar, Ca: Communications Research Machines, 1970), pp. 19-25.

⁸F. Galton, "Statistics of Mental Imagery," Mind 5 (1880): 301-318. Hereafter, references to this work will be given in the text by "Galton, 1880."

clear that with these instructions, he was urging his subjects to introspect. The subjects were then required to answer questions about their images. Typical questions were: "Is the image dim or fairly clear?" "Is its brightness comparable to that of the actual scene?" "Are all the objects pretty well-defined at the same time, or is the place of sharpest definition at any one moment more contracted than it is in a real scene?" "Are the colours of the china, of the toast, bread-crust, mustard, meat, parsley or whatever may have been on the table, quite distinct and natural?" (Galton, 1880, p. 302).

Galton used two methods to deal with the answers. The first consisted mainly of separating those who denied experiencing mental images from those admitting to such experiences. The second method was more complex and involved admissions only. The replies of each of three groups of subjects were ranked from best to worst according to the imaging ability exhibited. The ranked replies were then grouped into seven intervals and the responses of the middle subject of each interval chosen to represent his interval. The replies of these representative subjects plus those of the best and worst images of the group were compared with those of the corresponding subjects in the other two groups. The resultant data formed the basis of Galton's conclusions concerning the vividness, coloration and the extension of the field of vision of mental imagery.

After-images were considered a variety of mental images, too, and thus were legitimately prey to introspective investigation.⁹ A series of experiments on after-images involved the creation of after-images by way of the swift movement of light across the retina.¹⁰ As a consequence of the subjects' descriptions of their subsequent experiences, a typical pattern of after-images emerged. A very brief appearance by a positive after-image, the same color as the light, was followed by a period of darkness. This was broken by the emergence of another positive after-image usually bluish in color, though, for some subjects, the color of the second after-image was complementary to that of the light.

The work of Marbe at the junction of the nineteenth and twentieth centuries provides us with cases of introspection used to explore the activity of judging. According to Marbe, his experiments require that "one has merely to bring it about that the observer experiences the kinds of judgments required, and to ask him to describe his experiences (Erlebnisse) immediately after the judgments."¹¹ Comparing

⁹"The undergraduate, no doubt, finds introspection difficult when he is called upon to observe the negative after-image..."E.B. Titchener, "Prolegomena to a Study of Introspection," American Journal of Psychology 23 (July, 1912): 427-448.

¹⁰Cited by C. Osgood, op. cit., p. 185.

¹¹Quoted by E.B. Titchener, "The Schema of Introspection," The American Journal of Psychology 23 (October 1912): 501.

weights by positioning the heavier one, singing tones produced by a pitch fork, adding simple sums, translating sentences, stating propositions to oneself were only a few of the tasks set subjects in order to evoke their judgments. Marbe's study covered a wide range of instances of judging. Setting up specific tasks and restricting the medium of response (at times the judgments were vocalized, other times they would be indicated by a gesture) allowed the circumstances of the judging to be standardized and controlled. The introspection of all the subjects involved agreed in one respect -- they failed to uncover any characteristic mental process giving judgment its identity.¹²

Our last example of the experimental use of introspection is an investigation of the consciousness of the association process.¹³ In this experiment, subjects were asked to examine some chosen item, making sure to keep it hidden from the experimenters. The subject would then be told that the experimenter was

...going to show you (or pronounce to you) one by one, a series of words, and you are to give as soon as possible, in response to each, a word that is associated in your mind with my word; but do not,

¹²This account of Marbe's work may be found in G. Humphrey, Thinking (London: Methuen & CO., 1951), pp. 34-36.

¹³E.T. Burr and L.K. Geissler, "An Introspective Analysis of the Association Reaction Consciousness," American Journal of Psychology 24 (1913): 564-569. Hereafter, references to this work will be given in the text by "Burr and Geissler, 1913."

if you can help it, give one that is connected with your choice. Then I want you to describe as clearly and concisely as you can your state of mind and its contents from the time of the ready-signal until you gave your associated word. (Burr and Geissler, 1913, pp. 564-565).

The experimenters discovered certain features held in common by the introspections elicited from the various subjects. These shared characteristics constituted three stages in consciousness when the signal word was related to the chosen item. During the first stage -- recognition -- subjects reported "unpleasant blood pressure in the face," a "palpitation feeling," the thought "oh, that's dangerous," etc. Suppression, the second stage, involved attempts to escape the word sometimes accompanied by such emotions as anxiety and despair. Subjects reported a groping attitude, the feeling of time passing, etc. during the third stage (suspense/search). These three stages encouraged the experimenters to liken the consciousness of concealment (studied by them) with the consciousness of operating under a prohibition.

Our first conclusion is that these four experiments should lay to rest any qualms we might have about refusing to identify introspection with retrospection. True, the introspective descriptions in the judging and association experiments were issued after the events they described took place. Memory of the past event must then be evoked. The involvement of memory with the production of introspective descriptions, however, does not imply that introspection

is a form of remembering. A sense observation report, for instance, need not be contemporaneous with the sense observation. If the sense observation report follows the instance of sense observation which gives rise to it, then memory comes to have a role in the issue of the report. The contribution made by memory to the sense observation description is not reason enough to conflate sense observation with remembering. Any intelligent human activity which takes longer than an instant to perform involves memory.¹⁴ This does not mean that all human activity is reducible to remembering. In order for a description to qualify as a sense observation description, it has to be based on sense observation. Likewise, an introspective description is one that is based on introspection.

The role of memory in the production of the introspective descriptions in our experiments was not fixed. In the image experiments, vocal description could have been produced while the subjects were experiencing the images. Indeed, the timing of the introspective descriptions seems to have been determined by the conflict between participating in the experiment and expressing the descriptions. Translating a sentence aloud interferes with vocally describing the translating process. The latter task must await the

¹⁴This was argued by D. M. Armstrong, "Is Introspective Knowledge Incorrigible?," Philosophical Review 72 (1963): 417-432.

completion of the former. The experience of after-images would interfere with writing down one's description of the experience. The variability of memory's role with respect to the production of introspective descriptions counter-indicates memory (by itself) as the basis of such descriptions.

In none of the experiments we have cited were the subjects explicitly directed to introspect much less instructed on how to introspect. This lacuna is typical for most if not all introspective experiments.¹⁵ In a number of experiments, prior training of the subjects in introspection techniques was counted on to fill this gap in the experimental procedures. However, as our sample of experiments shows, trained introspectionists were not consistently used. Only some of the subjects in the association process experiment were trained in introspection. In Galton's study, all subjects were naïve. Their naïveté was dictated by the purpose of the study which was to investigate mental imaging in the general population. Their lack of introspective training is guaranteed, moreover, by the fact that Galton's work preceded the institution of formal training in introspection. Boring's study of introspection on the part of the mentally ill¹⁶ and Hunt's comparative study of the

¹⁵The fruitlessness of our search for such explicit instructions in the experimental design is responsible for this remark.

¹⁶E.G. Boring, "Introspection in Dementia Praecox," American Journal of Psychology 24 (1913): 145-170.

quantity and type of introspections of different classes of subjects (ranging from the psychologically unsophisticated layman to psychoanalysts and structural psychologists)¹⁷ indicate that no special training is necessary to induce introspection. These considerations allow us to assume that the conditions of the experiment -- including the instructions to the subjects -- are such that cooperative subjects are induced to introspect in order to comply with the requirements of the experiment. What characterized these experimental set-ups is that they led to the undergoing by the participants of certain mental experiences. In order to accumulate introspective accounts of some particular sort of experience, the subject was made to endure the experience again and again or a number of subjects were caused to undergo that type of mental experience. Even Galton's experiment, the least structured of the four, enjoined the subject to create for themselves the experience of a particular kind of visual memory image.

The importance of the introduction of actual mental experiences is revealed by Stout's perspicuous remarks on the difference between sense observation (perception) and memory.¹⁸ He noted that "roughly speaking, the essential

¹⁷W. A. Hunt, "Systematic Differences in Introspection," American Journal of Psychology 46 (October 1934): 659-660.

¹⁸G. F. Stout, Groundwork of Psychology (New York: Noble and Noble, 1927), pp. 11-12.

character of perception is that the actual existence of its object operates as a factor directly determining our cognition of that object." Memory is without this requirement. The actual tree is necessary for us to see the tree -- there has to be an interaction between the tree and one's eyes. On the contrary, when I remember the tree, the actual tree does not have this role. For one, the tree need not exist at the time I remember it in order for me to have that memory. Despite the non-involvement of the sense organs, Stout allows that the notice we take of our mental experiences, e.g., my feeling disappointed, may be considered perception if "...the feeling itself as it exists at the moment is a factor determining my apprehension of it. In a mere remembrance of having felt disappointment in the past, this would not be so." The provision of actual experiences for introspection in our sample experiments encourages us in hypothesizing that actual mental experiences are necessary to dictate the course of the introspection proceeding. This buoys our hopes of assimilating introspection to sense observation while distinguishing it from retrospection.

The emphasis on actual experiences should not be considered an accidental feature emerging because of our limited sample of experimental uses of introspection. Theoreticians, writing on introspection, insist on this feature. Wundt, who began the ball rolling for the use of introspection in experimental psychology, remarked that, for minimum

interference and maximum control, the experiment utilizing introspection "...creates external conditions that look towards the production of a determinate mental process at a given moment."¹⁹ Titchener, who brought Wundt's brand of structural psychology -- and the experimental use of introspection -- to the U.S.A., explains that the so-called qualitative experiment proceeds

via methodically controlled introspection with some type or kind of mental process; we live through, attentively and in isolation, some special bit of mental experience, and then give in words a report of the experience, making our report so far as possible, photographically accurate.²⁰ (Emphasis added).

Using the sensation 'blue' as an example, Titchener tells the instructor who has to teach his students to introspect that

if the student insists, as at first he may, that he cannot possibly think of a 'blue' that is not a 'blue something,' the answer is twofold. He is not to 'think of' a blue at all, but to be a blue; his consciousness is to be a blue consciousness, not a consciousness made up of ideas associated to blueness in the course of his experience.²¹

The effect of the instruction is to warn the subjects that they are not to rest content with merely living through certain mental experiences. They are to live through them

¹⁹W. Wundt, Principles of Physiological Psychology I, trans. E.B. Titchener (New York: The Macmillan Co., 1910, New York: Kraus Reprint Co., 1969), p. 5.

²⁰E.B. Titchener, Experimental Psychology (A Manual of Laboratory Practice), II, Quantitative Experiments: Part I, Student's Manual (New York: The Macmillan Co., 1905), p.v.

²¹E.B. Titchener, Experimental Psychology (A Manual of Laboratory Practice), I Qualitative Experiments, Part II, Instructor's Manual (New York: The Macmillan Co., 1901), p.4.

with a difference -- a difference which will manifest itself in the description they have to give. Not only must the subject undergo some mental experience but they are to undergo it in such a way that the experience becomes the primary object. Success in this matter eventuates in descriptions of these experiences. Presumably, the experience is being introspected. Exactly what introspection involves is nowhere explained -- the details of this process are left in obscurity. All we are sure of is that a shift in focus takes place.

During the process of introspection, mental processes, not usually experienced as objects, become objects. A rough way of characterizing the subject-object distinction in a transitive verb construction identifies the subject with the agent of the activity (signified by the verb) and the object with the recipient of the activity. The subject is active, the object is passive. Take the activity of judging as an example. Our experience of judging ordinarily involves the subject being active in a certain way. Should judging become an object -- as it apparently does for introspection -- the acting subject becomes passive. Passivity here is a grammatical feature which, however, may have an experiential counterpart. Titchener considers the features most desirable in an introspector to be that he "...yields himself as passively as possible to the impression...."²² Let us

²²L.W. Stern, Ueber Psychologie des individuellen Differenzen (Leipzig, 1900), p. 99ff. Quoted by Titchener, 1901, op. cit., p. xxv.

illustrate what happens with the experience of after-images. All of us who have had their picture taken with a flash camera have experienced after-images. We regard the after-images as obstacles to our vision and deal with them by trying to look through them or avoid them. In the after-image experiments, the subjects had to look at the images and not avoid them in order to give a proper description. Another example of this refocusing -- or, as Titchener (or even Locke!) would put it, this abandonment of the everyday practical attitude -- is presented in an optical paradox discovered by Helmholtz.²³ Two papers, one black, the other white, placed so that they reflect equal amounts of light (the black paper is directly lit while the white one remains in shadow), are ordinarily seen as black and white papers under different lighting. When you, the viewer, look at the surfaces of these papers through a peephole so that they are isolated from their surroundings, you will "...have pure sensations before you..." and there will be no discernible difference between them. A trained introspector could concentrate on his sensation without the aid of any device.

According to Titchener, introspecting the sensation 'blue' involves acknowledging that

The sensation 'blue' does not tell us of a blue object, does not even tell us it comes from the eye. It simply presents itself, as a mental

²³This is according to W. Köhler, Gestalt Psychology (New York: Horace Liveright, 1929), pp.77-78. Also see pp.74-76.

irreducible; and we have to examine it for its own sake, -- to watch its behavior under varying conditions, and, to trace it in all the compounds into which it enters.²⁴

During the introspection of a sensation, one is no longer trying to reach the external world through the sensation. In a sense, we become passive with respect to sensation. On the other hand, we get the sensation via our encounter with the world. We may be denominated active with reference to this encounter. The element of passivity in introspection is parasitic upon our activity.

Since all we have come up with in differentiating introspecting a mental experience from the mere having of the mental experience has been a change of focus, attention becomes a natural candidate for the job of introspection. In fact, Titchener defines introspection in terms of attention. Introspection, he maintains, is "...an attention from the standpoint of psychology, and a record in the terms and under the captions of psychology."²⁵

When Broad discards introspection in favor of retrospection, he is rejecting a form of attention. If our ordinary experiences are constituted by our attending to objects (as Broad claims they are when our experiences are mental activities), then, by introspecting the experience qua experience (i.e. the mental activity in itself), we are

²⁴Titchener, 1901, op. cit., p. 4.

²⁵Titchener, "The Schema...", 1912, p. 491.

attending to the attending of the object. Broad notes that this sort of meta-attention is impossible.²⁶ As we have seen, Brentano provides a rationale for this wholesale rejection of introspection as the attending to a mental activity. The problem of attention deserves more study than we are prepared to devote to it. However, there are certain considerations regarding attention which should discourage the identification of introspection with attention per se whether or not we find Broad's and Brentano's arguments palatable.

Suppose we are listening to a song. Whatever differences exist between attending to the music rather than the lyrics and attending to the lyrics instead of the music, they do not include the process by which music and lyrics are presented. Whichever aspect we attend to we hear. Both music and lyrics are heard -- only one is heard as background to the other, one is distinct whereas the other is indistinct, when we fail to attend to both.²⁷ The cash value of this difference in attention comes down to which one we can answer questions about and reproduce and which one we can't. The difference in attention is a difference, not so much in what we hear as a difference in the way we hear something.

²⁶Broad, op. cit., p. 311.

²⁷An experiment involving the introspection of attention reported it to be a matter of clarity, of the "patterning of consciousness" where the object of attention occupies the foreground. (Heidbreder, op. cit., p. 139.)

Attention is something we can bring to anything we do. It is not a separate process which has to be grafted on to what we are doing -- attention is a mode of activity. The temptation to regard attention as an activity in itself comes, perhaps, from all those occasions when obeying the command to pay attention involved substituting one activity by another. Paying attention to the teacher meant that we had to stop fooling around and sit up and listen quietly to what the teacher was saying. Paying attention when crossing the street meant walking and watching out for cars instead of just dashing to the other side. Note how in these instances, the substitute activity would fulfill the qualification for paying attention without being a special act identifiable as paying attention and nothing else. If attention characterizes introspection, then the latter must be, not attention per se, but something which is done attentively.

Introspection may encompass attention in either one of two ways. Introspection may be regarded, for one, as basically just the having of mental experience. Its claim to distinction would lie in the fact that it is a particular mode or way of having a mental experience. More specifically, in introspection, we have the experience in such a way that the object of the experience becomes background and the mental experience itself comes to the fore. For instance, when doing addition, the process of adding is normally subordinate to the goal of reaching the sum. Introspecting addition,

under this view, would be doing addition such that the process of adding is of greater concern than reaching the sum. The process is the same. Introspection merely signifies a change in emphasis. The Helmholtz paradox is another example of the change in viewpoint involved in introspection.

The refocussing involved in the Helmholtz paradox was obtained by wresting our visual experiences from the context. Gestaltists refused to regard the results of this technique as true to our mental experiences since they found that even

...natural sensory experience itself is not determined locally, i.e., the properties of any one part of the field depend normally on the conditions given in the whole field, or, at least, in a larger area of it.²⁸

They charged that the results achieved by the isolation techniques practised by the trained introspectionists of the structuralist school "...would not lead us back to the psychological world we live in; because this world is one of direct and naïve experience, and utterly foreign to these laws of pure sensory process."²⁹

It was felt that the shift in attention involved by introspection interfered with ordinary experience by making it unusual. The Gestaltists are not challenging the findings of trained introspection -- they are only challenging the

²⁸Köhler, op. cit., p. 95.

²⁹Köhler, ibid., pp. 86-87.

construction which structural psychologists put on these findings. The experiments on after-images involve an emphasis on the after-images uncharacteristic of our ordinary experience of such images. We may well wonder whether after-images don't last longer or have brighter, more opaque, even different colors when introspected than when unintrospected. Since we commonly try to avoid after-images, we can't be sure. And this may incline us to take the generality of the experimental findings with a grain of salt. We, however, have no reason to suppose that introspection changes the character of after-images in any crucial way: for instance, that unattended after-images are any less or more after-images than attended ones.

It is with purposive activity that we seem to get the kind of interference that Brentano complains of. For activities which are defined by their purpose, changing their purpose signifies a change in the activity. The answer might be that activities may be described in different ways -- describing an activity in terms of its purpose highlights one aspect of the activity. The possibility of other descriptions, highlighting other aspects, should not be rejected out of hand. These considerations should make us realize that the introspection of some mental activity may involve only certain aspects of the activity. We must be wary of supposing that introspection, as mental phenomena which is attentively experienced, is completely revelatory

of the mental phenomena. The Helmholtz example is a case in point.

As we have already indicated, sometimes the change in focus which attention brings brings into play a different activity from the one we started with. If we take introspection to involve attention of this sort, then the shift in focus brought about by the introspection of some mental phenomena signals the introduction of a new activity. Because of the limitations placed on introspection, viz., that it be determined by the mental experience introspected, introspection as a newcomer on the scene must continue to be intimately related to the mental experience which constitutes its object. Let us consider some examples where refocussing involves a change in activity.

If someone is asked to pay attention to his writing, there are, in fact, two features which can become the object of his attention. It may be that he has to formulate his letters so that they more nearly approximate standard letters. He is being asked to attend to his handwriting. Or, it may be that what he has to do is correct grammatical errors and achieve a more fluid prose style. He is being asked to attend to his writing style. Forming letters is necessary but not sufficient to write in order to express oneself. The former can be accomplished without the latter's involvement. Taking one feature rather than another as an object signifies engaging in one activity rather than another.

Another example of the modulation of one activity to another due in part to a shift in focus may be found by contrasting reading with proofreading. By reading, we take in the sense of a piece of writing. Proofreading presupposes an ability to read inasmuch as it involves detecting errors in what is written. We proofread by noting discrepancies in what we are reading -- breakdowns such as grammatical, spelling, and punctuation errors, etc. We still read when we proofread, but there is an important difference. Often enough, reading will hamper the detection of mistakes because our grasp of the sense of the written material will carry us over the hump of all but the more major aberrations. At times, our comprehension of sense will pull together with the searching out of errors. Other times, we will do the former and not the latter.

A third example of how a redirection of energies may represent a change in activity puts this redirection in terms of a passive-active distinction. When we concentrate our efforts on bringing about some (unwilling) person's death, we are committing murder. We are the perpetrator of the deed, he is the victim. A shift in the direction of our energy towards our own demise and we commit suicide. We are still killing -- but with a difference. A single entity plays both the role of perpetrator and victim. The concept of suicide may be likened to grammatical reflexivity: in fact, in French "to commit suicide" always has a reflexive

construction, to wit, "se suicider." These roles may be played apart from one another. Suicide, though, unifies the two roles through the act (comprehending both the intent to kill and the intent to die) of a single person. However, the role of victim depends on our assuming the role of killer: suicide is parasitic upon killing. It may very well be the case that the shift in attention involved by introspection is more nearly like the above examples and betokens a change in activity on the part of the subject. Upon introspecting an instance of judging, we would be doing more than just judging. Introspection would be an activity which involves (and not just refers to) the activity of judging.³⁰ That is to say, the act of judging is a component of the more complex process which is the introspection of judging (the way writing -- forming letters -- is part of the process of writing -- expressing oneself). In introspection, we would be passive with respect to the active role we take in judging. Judging would be necessary but not sufficient for the introspection of the judging to take place. Moreover, judging could be done independently of introspection. Introspection would be an activity distinguishable from, but dependent on, the mental states that it works on.

Unhappily, the paucity of information about the introspection procedure leaves us undecided at this point

³⁰This should eliminate the temptation to adopt Ryle's proposal to regard introspection as a higher-order activity which merely refers to some other activity.

about which account of the association between introspection and attention (i.e., viewing the introspection of some mental process in terms of experiencing the process in a certain way or viewing introspection as the modulation of the original process into a new experience) is the proper one. We can only be sure that introspection involves the participation of attention in some way.

The final characteristic which emerges from the introspection experiments concerns the treatment of data. The data consisted of introspective descriptions. The peculiar value of these descriptions arises from the conditions of their production. These conditions are noteworthy because they are experimental in nature. For example, the experience of after-images is a common one. Yet, the investigators of this phenomenon did not stop people on the street to elicit descriptions of after-images. Instead, they proceeded by way of an experimental format, that is to say, they reproduced the experience of after-images in a number of subjects under certain specified conditions. In all the experiments cited, attempts were made to standardize -- to one degree or another -- the conditions under which the mental experiences studied were lived through. Each experiment demanded the accumulation of a number of introspective descriptions of the mental phenomena experienced in the experimental conditions. This was achieved by placing a number of subjects in the same circumstances or by placing

a single subject in similar circumstances time and time again. By controlling external conditions and by obtaining a large sample of introspective descriptions, the influence of irrelevant (relatively speaking) variables were (hopefully) reduced. The investigators would then examine their data for features that the descriptions held in common. The discovery of such characteristics led to generalizations about the mental phenomenon experienced. The experimenters sought to uncover the general character of mental experience rather than its idiosyncratic nature. Because of the statistical treatment of the data -- which minimally involved the pooling of introspective descriptions -- these experiments yielded results which occasionally were contrary to expectations. Marbe's findings nonplussed the psychological community. What his subjects' introspective descriptions had in common was nothing!

3. Experimental Introspection and Kinesthesia-Proprioception

We are now prepared to face the question whether introspection can fulfill the requirements of a sense observation model as exemplified by kinesthesia-proprioception. The requirements that we are still doubtful about introspection's ability to satisfy are three: the creation of a subjective-objective distinction, the presence of a role in introspection which corresponds to that fulfilled by sensation in sense observation, and the establishment of the separability of introspection from its object. Besides, the question whether to assume introspection to be non-mental or to forego mental

activities as candidates for introspection has still to be answered. We will discuss these requirements using both Lockean introspection and experimental introspection and the model afforded by kinesthesia-proprioception and work our way backwards through the list. In the process, we will also tackle this question.

Our original paradigm for sense observation had us looking for two independent entities in introspection. The analysis of kinesthesia-proprioception has shown us that we may be warranted in denominating a process as a two-term relation if we can show that the entity undergoing the process is engaged in two separable functions. Because of the example afforded by kinesthesia-proprioception, the concern with independent entities has been replaced by the search for two distinguishable and separable processes in introspection. In kinesthesia-proprioception we were able to separate out the process which has public manifestations -- e.g., bodily movement -- from the process which constitutes the subjective aspect of the experience -- how the bodily movements feel. Normal kinesthesia-proprioception involved the combination of these functions. We had to look for special cases to demonstrate that their combination was not invariable.

In Locke's theory, the separation of introspection from the mind's operation can never in fact be realized. Introspection, when regarded as the awareness of some operation of the mind, may be broken down into two components,

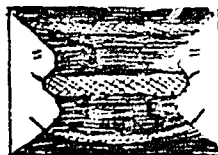
the awareness and the mind's operation. But because awareness, or consciousness, is necessary for the existence of the mental, there cannot be an instance of a mental operation existing apart from our being aware of that operation. One would expect separability to be readily achieved in the case of introspection of the causal process: the initial cause (an operation of the mind) may presumably be isolated from the successive steps in the causal chain which constitutes the introspection of the operation. As we noted earlier (pp.216-217) if we insist that the initial cause be accompanied by consciousness, then the initial cause cannot exist un-introspected. The operation of the mind is, then, inseparable from the introspection of that operation. The case would be otherwise if the initial causes were non-mental. Locke has already exempted the mind from consciousness. Were it not for Locke explicitly assigning consciousness to such operations as perceiving and thinking, it would be logical to extend the same exemption to the mind's operations.

A case for separability could perhaps be made if we are allowed to change the initial cause of introspection in Locke's theory. Inasmuch as mind is a substance, according to Locke, it becomes a cause when it exerts its powers to produce ideas (II, 22, 11). Since ideas are the fodder for the mind's operations, we may say that not only ideas but also the mind's operations are the effects of the mind's exertions of its powers. Of course, the mind's operations do not come

into being unintrospected. Be that as it may, the originating cause would be those occurrences in the mind (of which we are not conscious and, if consciousness distinguishes the mental, which are non-mental) which constitute the exertion of the mind's powers. The ultimate effect would be the introspected operation of the mind. Again, the mental operation does not exist apart from its introspection.

Experimental introspection was characterized primarily in terms of a shift in focus. Two different accounts of the nature of this shift were offered. We shall see that only one of them presents a view of introspection which satisfies the separability requirement. The account which does not allow separability describes the introspection of some mental process as a particular way of experiencing that process. More specifically, the process is experienced so that those features of the mental process which are normally paramount, e.g., its purpose, recede into the background and other features, e.g., the process itself, come to the fore. Viewed in this light, the introspected experience need not differ from the non-introspected mental process except for a change in focus. The differentiation between the introspected and the non-introspected mental process does not arise from examination of the introspected mental process alone. Experiencing something in a particular way is not two process -- a particular way and the experience. Rather, it is a single process which possesses certain special features. Experiencing

something one way is a different process from experiencing it another way. Possibly, there are experiences which consist of both ways of having the experience. The introspected experience as described cannot be among them. If something is experienced as background, it cannot, at one and the same time in one and the same experience, be experienced as foreground. We can illustrate this point with an example from vision. In the figure below, when the dark areas are experienced as background to the light areas, the figure becomes a picture of faces. Once the light areas recede into



the background, a different picture emerges -- a picture of a vase. The dark and light areas can both be foreground -- when, say, the surrounding area is background or the figure can become the background for the surrounding area. For any particular experience, as soon as any one of these possibilities become actual, the others are no longer available for that experience. Once the figure is seen one way, it is not seen in the other ways. When the model of kinesthesia-proprioception as a possible lifeline for introspection to reach observation was presented, separability was one of the requirements imposed by that model. Considering introspection as the experience of, say, a mental activity qua mental activity, we negate the whole separability issue. Let us consider the introspection of after-images as an example. Our ordinary experience of after-images involves ignoring them as best

we can. Introspecting after-images involves attending to them. One cannot ignore after-images and attend to them at the same time. Or, consider the introspection of the activity of adding. Reaching the sum is of primary importance for the process of addition. Introspecting addition reduces the sum to an incidental. When reaching the sum is paramount, we cannot concomitantly regard it as negligible. In conclusion, when the introspection of some mental event is distinguished from our usual experience of that mental event by the ensuing shift in attention, we are given two experiences which cannot coexist. This view of the refocussing encompassed by introspection alienates us from the kinesthetic-proprioceptive model of sense observation.

Our rejection of the above view of the association between introspection and attention does not rest on our preference for a sense observation model of introspection. It is dictated by the barrier between introspection and retrospection erected by the experimental use of introspection. It is evident that the concern of the introspecters was to reproduce certain mental phenomena and to induce introspection of those phenomena. As demonstrated above, the introspection of mental phenomena (considered as the experience of the mental phenomena per se) cannot exist contemporaneously with the mental phenomena. Inasmuch as the introspection experiments successfully give rise to the

mental phenomena under study, their introspection must succeed the experience of the phenomena. Suddenly, introspection has become a process which has reference to a past event. And memory is thereby endowed with a fixed place in introspection. Our argument that introspection is not to be conflated with retrospection because of memory's variable role is knocked for a loop. Introspection encompasses attention, then, in the guise of retrospection. As Broad remarks, if we want to introspect, say, some mental activity, M, we would have to make it into a memory. If it is only the case that M, we cannot introspect M. Upon introspecting M, what we would really be doing is introspecting the object (or "objective constituent") of a memory situation, which object is the (preceding) mental activity, M. Our introspected M would have features resembling those of M unintrospected with two exceptions. The former state is characterized by the absence of any practical response. Also the subjective features of the situation change. During introspection, that is to say, whatever qualities characterize the subject during M become features of the object when M is introspected (Broad, 1968, pp. 311-313). When an experience is introspected, the shift in focus that occurs rules out the possibility that that experience is concomitantly experienced with its original focus. Let us consider the introspection of after-images as an example. Our ordinary experience of after-images involves ignoring them as best we can. Introspecting after-images involves attending

to them. One cannot ignore after-images and attend to them at the same time. Or, consider the introspection of the activity of adding. Reaching the sum is of primary importance for the process of addition. Introspecting addition reduces the sum to an incidental. When reaching the sum is paramount, we cannot concomitantly regard it as negligible. In conclusion, when the introspection of some mental event is distinguished from our usual experience of that mental event by the ensuing shift in attention, we are given two experiences which cannot coexist. One cannot separate the experience from its introspection because the latter is the experience -- with an adjustment.

Our alternative way of understanding introspection with its shift in focus involves the institution of a new activity. How well does this "modulation" view of the association between introspection and attention fulfill the separability requirement? In the examples we gave of how a shift in attention may indicate a change in activity, it was clear that the original activity could exist without the second activity (which embodies the shifted focus) occurring. We can form letters without also expressing ourselves. However, we cannot write sense without forming letters. Writing, as a means of expression, depends on forming letters. Likewise, we can read and not be proofreading but proofreading cannot be accomplished in the absence of reading. We can become murderers and we can

become the victim of someone else's murderous intent. The role of victim, be it murder or suicide, requires a killer. This distinction between perpetrator and victim roles is not a mere conceptual flourish in our notion of suicide; they have real meat to them. As perpetrator, we wield weapons of death; as victim, we end by dying. Assuming that these examples illuminate attentive introspection, we are compelled to regard the introspection of a mental phenomenon to be parasitic upon the occurrence of the phenomenon. Yet, we must realize that the mental phenomenon could exist without introspection characterizing it.

The experimental use of introspection reinforces these conditions imposed by the examples of our "modulated" activities. The insistence on the creation of the mental processes to be introspected is an expression of the conviction that introspection depends on the existence of its objects. Introspection is used in an experimental format in the belief that more information about some mental phenomena will thereby be gained. The use of introspection is expected to enhance our knowledge concerning that mental phenomenon. This conviction presupposes the unintrospected existence of these mental processes.

The difference between the roles assigned experimental introspection and Lockean introspection also has implications for their suitability in producing introspective

descriptions. The conclusion of the second chapter indicated that introspective descriptions could be generated -- even though doubt about the mental phenomena to be described was emphatically not the order of the day -- in special circumstances giving rise to a genuine inquiry concerning the features of one's mental state. In Locke's theory, introspection is routinely engaged by the operations of one's mind. When it comes to attaining knowledge of the mind's operations, Lockean introspection is automatically involved. Experimental introspection, on the other hand, supplements our knowledge of some mental phenomena: the use of experimental introspection is apparently not an everyday matter. The circumstances leading to the experimental use of introspection are more nearly like the circumstances which were deemed appropriate for introspective descriptions than are the circumstances surrounding the employment of Lockean introspection.

Lest we wax overly enthusiastic about the "modulation" version of introspection, certain failures of this model must be acknowledged: this model does not achieve the degree of separability which our discussion of kinesthesia-proprioception led us to expect. We were able to discover cases where kinesthesia-proprioception occurred even though one's body was no longer moving and where one's body moved in the absence of kinesthesia-proprioception. Applying the example afforded by kinesthesia-proprioception to introspection makes us look

for introspection to occur in the absence of the mental phenomena which constitutes its object. That expectation is not met. Our acceptance of the "modulated activity" version of introspection eliminated this possibility. Moreover, these separable constituents of introspection do not divide along the lines suggested by kinesthesia-proprioception. We have no reason to classify introspection's constituents in terms of public and subjective processes (subjective in the sense of how the public process feels). Our comfort must be that some separability is better than none. As the example of suicide indicates, the credibility of the distinction between the role that the subject plays qua subject and the role that the subject plays qua object is such that even the limited degree of separability achieved makes more plausible the analysis of suicide as a two-term relation, a relation between a killer and his victim (which embraces the relationship between killing and dying). This assures us that even the limited separability (if it be like that between killer and victim in suicide) that we may expect from introspection encourages us to regard introspection as a two-term relation on the order of kinesthesia-proprioception.

Our previous mention of the occurrence of kinesthesia-proprioception without the accompaniment of one's body moving brings us smack up against the problem of the role of sensation in sense observation for introspection. If we

consider Wittgenstein's suggestions about how to understand our talk of sensations, we come to realize that by talking about the case of kinesthesia-proprioception which lacks a physical movement accompaniment, we are talking about kinesthetic-proprioceptive sensations.

Wittgenstein suggests that sensation talk is best understood as derivative from physical talk. Let us see how this is so. Suppose we roughly characterize our physical vocabulary as consisting of terms employed in descriptions of physical entities. Color words, for instance, may be used to describe the surface of physical things: e.g. the ball is red. The meanings of the terms in our physical vocabulary are to be found in the ways they function in the public domain -- e.g. we exhibit our understanding of the meaning of "red" by the way we operate with colored expanses. The question of accuracy in our use of color words is entirely pertinent: my mistakes are discovered by discrepancies between my handling of colored objects and the agreed upon way to handle them. My claim that the light was green (which was my reason for not stopping and for driving on) will be belied by the stationary motorists and their conflicting testimony.³¹

³¹We would leave too much out of the concept of, say, a color word like "red" if we were to limit its role to naming some property. Wittgenstein shows this by revealing the inadequacies of trying to capture a concept with an ostensive definition. Cf. PI, sections 33, 34, 73, 352 and 380.

There is another use of many of the terms included in our physical vocabulary whereby any implication concerning the existence of physical entities is short-circuited.³²

Our confinement to terms included in our physical vocabulary leads us to resort to a number of locutions to make it clear that what we say is independent of both "physiological and physical facts," e.g. statements describing

...personal experiences, as when the subject in a psychological experiment describes his sense experiences; say, his visual experiences independent of what bodies are actually before his eyes and, n.b., independent also of any processes which might be observed to take place in his retina, his nerves, his brain, or other parts of his body.³³

The locutions we might use are, "it looks (appears) to me like...", "I am having a sensation of ..." Sensation talk is not limited to talk about hallucinations because the lack of implication for the existence of a physical entity does not rule out the existence of that physical entity. Our discussion of the case of kinesthesia-proprioception occurring without corresponding bodily movement would be an example of sensation talk.

We have assigned to sensation partial responsibility for some of the false beliefs which we acquire about the physical world. Our cases of the disjunction of kinesthesia-proprioception and bodily movement brings in the possibility

³²L. Wittgentstein, The Blue and Brown Books (New York: Harper and Row, 1965), p. 32.

³³Wittgenstein, ibid., p. 47.

of our experiences of kinesthetic-proprioceptive sensation giving rise to erroneous assumptions about the state of our body. Locke's theory of introspection leaves no room for this state of affairs. While inattention or confusion about word usage may introduce error into our information concerning the operations of our mind, introspection per se will be as accurate and no more deceptive concerning the operations which are its objects than sensation is about the primary qualities of physical objects (see section 6 of the first chapter for support of this claim). Except for misnaming, there is no room for misrepresentation on the part of Lockean introspection. Genuine doubt concerning the self-ascription of mental predicates is found, in the second chapter, to be important for the institution of an introspection which could issue forth in introspective descriptions. The exclusion of error (with the exception of conceptual confusion) with respect to introspection's deliverances creates a climate which is ill-suited to the generation of such doubt. Although infallibility has an important role in our understanding of certain features attributed to the mental (see Chapter II, p. 130), this role must be held in abeyance when it comes to the production of introspective descriptions. Unlike Lockean introspection, experimental introspection has the possibility of error built into it.

Part of the rationale behind the imposition of experimental restraints upon introspection involves the reduction of errors which distort experimental findings.

Errors to which introspection is subject³⁴-- those arising from stimulus-error, repression, distortion, rationalization, displacement, suggestion, ethnocentrism, etc. -- are warded off more or less successfully depending upon the sample population studied, the kind and degree of environmental control achieved in the experiment and the choice of statistical procedures. As noted earlier (Chapter III, pp. 206-208), the one source of error characterizing sense observation which does not exist for introspection is that which involves the sense organs, namely, sensation. For instance, my sincere claim to see two fingers when only one is held up to me may be explained by my focussing upon a very near object which gives rise to the illusion known as "seeing double." The condition of the observer, his sensations, explains why he sincerely but mistakenly claims to observe what he does. It is difficult to introduce hallucinations and illusions into the introspective realm. Since introspection involves only states of the introspector, a distinction between what characterizes the introspector and what characterizes, not the introspector, but some object independent of the introspector is not given in introspection. Moreover, failure of experimental introspection to yield introspection without its introspected object gives us reason to be

³⁴Pointed out by David Bakan, "A Reconstruction of the Problem of Introspection," Psychological Bulletin 51 (1954):110.

concerned about the feasibility of finding in introspection an equivalent to sensation in sense observation. We can, however, make a case for introspection proving delusive about the nature of its object which is reminiscent of (though it doesn't entirely resemble) sensation in its role as a source of error in sense observation.

Introspection, like sense observation, is presumably a method for discovering facts about the world. We start out with a question, e.g., "What is x?" where "x" substitutes for some nominal phrase. We assume that the answer is to be found through some form of empirical inquiry -- that the answer lies in experience. If the nominal phrase denotes what we consider a feature of the physical world, we depend on sense observation. If the nominal phrase referred to something mental, we suppose that experience will somehow tell us what thinking is (PI, 327) or imagining (PI, 370) or remembering (PI, 231), and so we might turn to introspection. This ready assumption of ours could well be mistaken.

If the question "what is x?" reflects true ignorance of x, then our ignorance extends to where we are to search for an answer, how we are to recognize an x in case we come across one, and what methods are appropriate for finding the answer (PI, 231). Our ignorance must be lightened about these last points before we can set out on any investigation and that can be accomplished only by analyzing the concept

of x. The preliminary answer to "what is x?" is provided by an inquiry into how the word, "x," is used (PI, 373). "Grammar tells us what kind of object anything is" (PI, 373).

In case we balk at accepting our puzzlement about the nature of x as soluble through conceptual inquiry, we must remind ourselves that the query, "what is x?" presumably leaves the nature of the object of inquiry unresolved. Channeling the puzzlement into investigation is founded on the hope that the nature of x will be revealed eventually and on a particular model of how this revelation will develop. Certain methods are considered suitable for the conduct of investigations -- sense observation, for one; introspection, for another. These assumptions dictate a particular view of the object of inquiry, viz., it has become something whose nature may be revealed by these methods.³⁵ It turns out that the employment of these methods conflicts with our initial characterization of the object of inquiry, i.e., as something whose nature remains to be revealed. Because the adoption of any particular method of inquiry leads us to look for what is amenable to this sort of inquiry, then, if what we are investigating is not so amenable, the results of our inquiry will be delusive. Analysis of the concept of what we are looking for will prevent us from making this mistake.

Wittgenstein's analysis of the concepts of such mental activities as understanding and comparing suggests that the

³⁵This analysis is derived from PI, 308.

introspection of mental activities is a misguided enterprise. Taking understanding as an example, we see that an honest attempt to isolate the special mental characteristic of understanding is unsuccessful. We find that among all those things which we say go on in us, there is not one which is common to all those instances where we claim to understand (PI, 151-152). Attempts to engage in the mental activity apart from its normal accompanying circumstances -- e.g. saying a sentence with understanding, then not saying the sentence but just understanding (PI, 332) -- also fail. Even should a characteristic mental feature be discovered, we would find ourselves unwilling to adopt it as constitutive of understanding. After all, we look askance at anyone claiming to understand when circumstances indicate otherwise. The possession of a characteristic feature unaccompanied by any facility whatsoever in the subject matter to be understood is not counted as an instance of understanding (unless the lack of facility be excused on the grounds of some disability like forgetfulness). Whatever mental processes are involved by understanding, they are not the grounds upon which we are said to understand. It is what we do with these processes (if, indeed, we have them) -- how we apply them -- that reveals our understanding.³⁶

³⁶PI, 363,583. Also see A.M. Quinton, 'Excerpt from "Contemporary British Philosophy"' in Pitcher, op. cit., pp. 1-21.

To an important extent, "understanding" (and the concepts of our other mental activities like intending, remembering, believing, comparing, etc.) are dispositional concepts, signifying one's ability and proneness to do certain things. Introspection has been restricted to operating on a current mental state of the subject by the example afforded by sense observation. The concept of a mental activity goes beyond the here and now. We realize that our first mistake in introspecting mental activities is to assume that they are introspectible. Our second mistake, arising from the first, is to suppose that introspection can reveal the essence of a mental activity. The recognition that we cannot look to the here and now for criteria for the application of dispositional concepts doesn't mean that we should ignore the here and now as a source for understanding dispositions. Consider the property of sweetness. A certain amount of research into this property has been directed towards uncovering what aspects of the molecular structure of sweet substances determines their possession of this property. Similarly, by assimilating the concept of a mental activity to that of a disposition doesn't mean that introspection will tell us nothing about our mental activities. It can tell us what mental processes accompany our mental activities so we may determine if any are characteristic accompaniments. Although the paradigm of sense observation indicates that introspection best accomodates datable processes, whose onset,

duration, and cessation may be pinpointed, it also indicates that introspection can take relations and structures for objects, too. Consider a series of dots: A. B, C. Now the relation of "betweenness" characterizing dot, B, with respect to dots, A and C is as directly and non-inferentially observable as the related dots. It remains true that the only entities we are dealing with are dots. But this warns us that

we ought not to expect the relating relation, which makes this a complex of such and such a structure, to be presented to us in the same way as the substantival constituents.³⁷

It is a mistake to view the situation as consisting solely of dots. They are arranged dots, dots related in a certain way.³⁸ And sense observation can reveal this to us. There is, therefore, no reason to suppose that introspection can't also reveal the relations obtaining between mental processes. And it could be the case that the structure of those mental processes accompanying our mental activities has a hand in determining those activities. Introspection may yield that information.

Our efforts to construct a pitfall for introspection analogous to that represented by sensation amounts to the following: we supposed that in undertaking some mental activity, there may be mental processes accompanying the

³⁷Broad, op. cit., p. 308.

³⁸We are indebted to Broad, ibid., pp. 308-311 for this analysis.

activity -- they may even be the effects on us of our acting. By way of a conceptual analysis linking mental activities to dispositions, we barred the introspection of mental activities per se. Thus, by engaging to introspect some mental activity, we end by introspecting some mental accompaniment of the activity, perhaps the mental effect of that activity. Unless we are forewarned, we will mistake the accompaniment for the activity or (possibly) the effect for the cause. Conceptual confusion leads to this error in the case of the introspection of mental activities. Other kinds of confusion may well lead to such mistakes for the introspection of mental phenomena other than mental activities. The source of error does not consist of an introspection occurring without an object. We do not find a parallel to the case of sensation occurring without its physical correspondent. Rather the error arises from mistaking the object introspected for some other object: mistaking the effect we introspect for its cause. This is something like the mistake sensation can lead us into in that when we mistake our sensation for some aspect of the physical world, we are confusing that aspect of the physical world with its effect on us.

Acknowledging the possibility of error -- whatever its source -- is only the beginning for experimental introspection. Concern over error mandates the construction of some way of detecting when error has arisen. This is accomplished through

the use of statistics. Statistical treatment of the various introspective descriptions generated by an experiment identifies what the norm is -- what introspective descriptions may be considered typical in the relevant situation. Deviations from the norm -- atypical introspective description -- will be understood to encompass mistaken introspective descriptions (as well as eccentric ones).

The last thing we have to consider is whether it makes sense to apply a subjective-objective distinction to introspection. Our discussion of kinesthesia-proprioception will not allow us to escape this issue. Even though only a single entity is involved in the process of kinesthesia-proprioception, the subjective-objective distinction still holds good. For the object of kinesthesia-proprioception that we discussed -- bodily movement -- belonged to the public domain. It is an objective phenomenon. As such, the bodily movement is accessible to a number of points of view. By way of kinesthesia-proprioception, the access to bodily movement is limited to the individual whose body is in motion. With respect to kinesthesia-proprioception, we get a subjective point of view of bodily movement. Neither in Locke's theory nor in the experimental version did the introspected mental experience involve constituents which could be classified as objective and as subjective, respectively. Yet, a subjective-objective distinction may be constructed for experimental introspection on the level of descriptions

if not on the level of phenomena.

We have to admit the force of Nagel's remark that it is a mistake to assume that we could approach the objective reality of mental phenomena more nearly by abandoning the subjective point of view. However, if we recall what served as data in the introspection experiments and how the data was handled, we realize that we have, ready-made, a distinction between the individual (and idiosyncratic) and the general. The subject's introspective statements, made in the first-person, embraces the single, individual point of view. In this sense, we say it occupies a subjective standpoint. When we collect a number of these individual introspective statements, we come up with the point of view of a plurality, made up by adding together all the single points of view.

It is something of a truism that a mob is more than the sum of the unruly individuals involved. For Nagel, the pluralistic point of view is more than just the summation of single points of view. The pluralistic point of view is connected to phenomena -- it arises from phenomena which are susceptible to viewing by a number of observers. The pluralistic, objective point of view combines single, subjective points of view because it is assumed that what is presented to each subjective viewpoint is the same. Nagel is quick to point out that no one supposes the same constancy to hold for mental phenomena. And we want it to be quite clear

that when we allow a general point of view with respect to mental phenomena, we are not assuming the numerical identity of the phenomena presented to each individual viewpoint. We are assuming, though, that whatever the idiosyncracies characterizing each individual's experiences, there are also features of his experiences which are shared by the experiences of other individuals. By collecting the individual introspective accounts, we hope to gain further information about those features.

The dangers posed by insisting upon the unshareability -- and uniqueness -- of each individual's mental life were amply demonstrated by the private language argument. We had to acknowledge shareability and, as a consequence, we must acknowledge the general character of the mental. These considerations indicate that, if imposing general features on the mental does violence to the nature of the mental, that violence is required for the purposes of communication and shared human lives. This assumption underlies the introspection experiments. The procedures they employed involved identifying the common features of introspected experiences recounted by any number of individuals. Indeed, Titchener warns of the fatal consequences for the introspector who "cherish(es) the belief that (his) mind is different, in its ways of working, from all other minds, and that (he) must be individually treated."³⁹

³⁹Titchener, 1901, op. cit., p. xviii. (parentheses added).

The introspection experiments were set up with the assurance that:

practically, we can observe a particular consciousness as often as we wish, since mental processes group themselves in the same way, show the same pattern of arrangement, whenever the organism is placed under the same circumstances.⁴⁰

The theoretical underpinnings for the confidence in the repeatability of mental experiences is provided by the recognition of the criterion-type relation between external circumstances and mental concepts forced on us by the private language argument.

The individual introspective descriptions are our givens. Of course, as indicated earlier (they are descriptions, reports, after all), this does not mean that they are immune to error. We have already enumerated some of the possible sources of misleading introspections. The experimenter's concern with the accuracy of individual introspective statements manifests itself in his adoption of one experimental design above some other. He will choose the one which will minimize the influence of such errors. A large sample of introspective statements becomes a desideratum. That is why repetition characterizes introspection experiments. Given a good experimental design, the confidence in the design extends to the

⁴⁰E.B. Titchener, A Textbook of Psychology (New York: The Macmillan Co., 1924), p. 19.

individual introspective statements: their truth is no longer in question. The individual statements become grist for the mill, data for appropriately chosen statistical procedures. The major concern of the experimenter is with the validity of the generalizations that his introspection experiment generates. In a sense the main bearers of truth (and falsity) are the generalizations which arise from these experiments. Psychological generalizations, even when they emerge from statistical procedures, can become as well-established as any scientific generalization.⁴¹ Individual introspective descriptions are judged in terms of their conformity to or deviation from the norm. These generalizations put introspected phenomena into the public domain: their accreditation signifies that their description of the mental phenomena in question is impartial between individual points of view. In a manner of speaking, then, through the validation of generalizations concerning the phenomena introspected, these phenomena become objective. The individual-general distinction yielded by the introspection experiments allow us to attribute to introspection a subjective-objective distinction of sorts.

⁴¹For the reasoning behind this claim and discussion of the standards to be met for a statistical generalization to become well-established, see Ernest Nagel, The Structure of Science (New York: Harcourt, Brace & World, 1961), Chapters 13 and 14.

4. Experimental Introspection: A Summary

The experimental uses of introspection tell us certain things about introspection. Accommodating introspection to the kinesthetic-proprioceptive model of sense observation tells us a little more. Between these two sources of information, a picture of experimental introspection (a somewhat hazy one, to be sure) emerges.

We may wonder, at this point, whether this picture is, in one formulation of the traditional notion of introspection, that of a "supposed species of perception," as a higher order activity involving a deliberate and attentive scrutiny.⁴² This traditional notion survives in experimental introspection to a certain extent only. Attentiveness is certainly a feature of experimental introspection, witness the refocussing which is required for the mental process (in place of the object of the mental process) to become prominent. One may assume that experimental introspection is, at least in part, a deliberate or voluntary undertaking. The instructions in the introspective experiments are furnished presumably because cooperation on the part of the participants is required. The instructions encourage the participants to choose the appropriate means of attaining the desired descriptions. Experimental introspection may also be deliberate in the sense of "careful" or "studied." The distancing involved by

⁴²Ryle, op. cit., p. 163.

such deliberateness requires the subordination of our interest in practical, everyday concerns. This requirement is fulfilled in experimental introspection by the prominence of our interest in the mental process which has these everyday concerns for its object. Whether, in fact, either the distancing or the care is exercised by the introspecting subjects cannot be surely determined from the experimental conditions. While the introspection experiments and the kinesthetic-proprioceptive model of observation do not gainsay neither do they warrant assuming that introspection is comparable to scrutinizing if the latter is an example of a higher order activity.

By a "higher order activity" is meant an activity concerned with some other activity which latter need not exist in order for the former higher order activity to occur.⁴³ Experimental introspection may be considered an activity or process insofar as part of what is involved by such introspection is one's consciousness of some mental process qua mental process. It will be recalled that the sense of "consciousness" to which we are committed is that of consciousness as process where being conscious of different objects amounts to various ways of being conscious. When a mental process is the primary object of one's consciousness, then that is a particular way of being conscious. In other words, part of what one is doing upon

⁴³ Ryle, ibid., p. 191.

taking the mental process as primary is engaging in the mental process so that it is the process rather than some associated concern which is paramount. It is furthermore the case that the description of any instance of experimental introspection involves some reference to the mental process or activity which is its object. The impetus behind incorporating the mental process into the description of experimental introspection is that the mental process forms part of the introspection procedure. Although the reverse is not the case, experimental introspection is inseparable from its objects. In sum, experimental introspection may be considered a higher order activity unless it is essential that higher order activities can exist apart from those activities to which they refer. Then, experimental introspection is no such thing. Whether experimental introspection, as a scrutiny, may be considered a "species of perception" deserves, as far as we have determined in this discussion, only a qualified affirmative.

With these qualifications in mind, it will be timely to determine how well Locke's notion of introspection has weathered our efforts to salvage a sense observation model of introspection: how much of our original introspection scheme has survived in the notion of experimental introspection that we are settling for?

The experiments cited earlier presumably lead to introspection on the part of the participants even though

explicit instructions about or specific training in introspection is missing. The absence of such guidelines means that the experiments themselves provide the grounds for our conjectures concerning the nature of introspection.

The experimental use of introspection lays to rest any doubts we might have about identifying introspection with retrospection. Not only does memory not have a fixed role in the production of the introspective descriptions, its role is no more crucial for the latter than for other observation statements. Furthermore, the experiments require the participants to actually undergo some mental process which they are asked to report on. This requirement is not necessary for memory claims.

In the experiments, the *prima facie* evidence for the occurrence of introspection is the resultant descriptions. Unlike the ordinary experience of mental processes, the descriptions elicited from the participants concern the mental processes themselves. It is evident that the mental process has become the object of importance. This is in contrast to our everyday experience where the mental process is subordinate to our practical, goal-oriented concerns. We infer that the difference in descriptions is based on a difference in the way that the mental process is experienced. Presumably the participants become aware of the mental process *qua* mental process -- the mental process itself becomes the primary object of consciousness. Consideration of

these factors leads us to characterize the mental process as it is subjected to introspection in terms of a shift in attention, a refocussing. The remark that "the understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself; and it requires art and pains to set it at a distance and make it its own object" is a fair description of experimental introspection. This remark about the understanding was made by Locke (III, 1, 8) and referred to reflection or introspection --- that is to say, to our consciousness of our mind's operations. Experimental introspection has retained the element of attention, of a shift in focus, which Locke allows to accompany introspection.

Introspection is not regarded as equivalent to attention for the reason that attention is considered a way of doing something rather than a separate, independent process. Examples of the effects of a shift in attention on various activities gives us two possible schemas for the introspected mental process. In one schema, the shift in focus leaves the mental process essentially unchanged while, in the second, the introspected mental process is considered a 'modulation' of the (non-introspected) mental process. For the first schema, the contrast between the introspected and the non-introspected mental process may be illustrated by that between seeing a figure as foreground and seeing it as background. The contrast afforded by the second schema may

be given by comparing reading (for sense) with proof-reading (reading for error) or by comparing killing with suicide. Which schema of experimental introspection is preferable is decided upon only when these two views of introspection and the Lockean version of introspection are subjected to the requirements generated by a kinesthetic-proprioceptive model of sense observation.

The 'modulation' version of experimental introspection turns out to be the most satisfactory in fulfilling the requirements set up by kinesthesia-proprioception. It need hardly be said that even this version, satisfaction is not complete. On this view, the introspected mental process is a complex which contains the mental process as its core -- somewhat the way killing is at the heart of suicide. As a result, the mental activity is seen in a new light, so to speak. Features may be revealed which, while always present, may not have been obvious before. The visual exemplar for the first schema involved shifts in foreground and background. A more appropriate visual example for the 'modulation' schema may be taken from Cyclopean perception.⁴⁴

In Cyclopean perception, the stimulus is a computer-generated square area filled, as far as the unaided eye can see, with randomly distributed green and red dots (the effect is rather like that of a garishly colored tweed

⁴⁴See Bela Julesz, Foundations of Cyclopean Perception (Chicago: University of Chicago, 1971).

carpet). By continuously looking at the square through red-green glasses with the eyes relaxed, we eventually see a shape emerge to hover above the field. This shape has always been there in the square: the dots are not, in fact, randomly distributed. It takes special circumstances, however, to tease out the pattern from the camouflage created by its surroundings. Remove the glasses, the shape disappears and there to be seen once again is the field of 'randomly' distributed red and green dots. This example, like all the others, is offered in the hope that it will afford some insight into how an introspected mental process can be different from the mental process without concomitantly affecting a substantial change in that mental process.

For both experimental introspection and Lockean introspection, consciousness can testify to the presence of introspection only by way of introspection's end-product. In Locke's theory, introspection is necessary for, yet leaves no traces of itself on, the end-product (i.e., the consciousness of the mind's operations). However, in experimental introspection, introspection leaves its mark on the end product: when introspected, the mental process is experienced as a component of a more complex experience. The mental process does not owe its existence to introspection. Indeed, the point of conducting experiments utilizing introspection would be lost were introspection to be an invariant accompaniment of any of our mental processes.

Separability is achieved for the 'modulation' version of experimental introspection inasmuch as the mental process is allowed to exist independently of introspection. It has already been pointed out that this is not possible in Locke's theory of introspection. Since the introspection of a mental process is, according to the 'modulation' version, built up out of that process, the existence of introspection apart from its object (the process) is ruled out.

An adequate analog to sensation is not to be found in experimental introspection. The best we can do is to construct a source of error in introspection that simulates sensation as a source of error. This may be done for the introspection of mental activities (or for any mental phenomena) where the phenomena which is encompassed by the complex constituting introspection, is not what we have set out to introspect but is, instead, its accompaniment or effect. Not only has the introspectibility of mental activities been brought into question, but the restrictions that Locke placed on introspection's objects have been dropped for experimental introspection. The objects of the latter include all features of our conscious life, not just our mind's operations.

In the experiments, the mental processes under investigation are experienced by the participants under controlled conditions. In this way, the experimenters attempt to standardize the experiences of the participants. A number

of descriptions of the experiences become available thereby allowing the creation of a subjective-objective distinction. The particular introspective descriptions provide the individual, idiosyncratic point of view and, in this sense, provide a subjective viewpoint. The generalizations, arising from the statistical treatment of these individual descriptions, provide the objective point of view insofar as the generalizations are linked to phenomena. The generalizations are understood to be describing those features of the mental process that are common to the participants' experiences.

The experiments are surprisingly non-informative about the process giving rise to the introspected mental process. Evidently the behest to describe the mental process itself is enough to get the participants in the experiment to introspect. The initial conditions for experimental introspection are the preparations to experience some mental process combined with the intention (formed as a result of the experimenter's instructions) to find out something about the process. There is apparently no intermediary stage consciously assumed by the participants which parlays these initial conditions into the introspected mental process.

On the conscious (and, by our standards, the mental) level, all there seems to be to the story of experimental introspection is the initial conditions leading to the

introspected mental state. But to stop here may be as hasty a move as deciding that all there is to getting a computer to provide information about the operations involved in carrying out some program is to furnish another program which instructs the computer to examine its operations. Besides programming, there is the matter of hardware to be considered. A computer with the capacity to execute the instructions for the latter program must be constructed. The right sort of causal mechanism is necessary before we can acquire information about the computer's operations from the computer. More specifically, suppose a computer which can list all the employees working for a certain firm. If we are interested in the number of operations involved in the construction of this list, we will have to program the computer to count these operations. For this to be possible, the computer will have to be constructed so that the electric circuits which are activated for the compilation of the list will, each in their turn, trigger other electric circuits to do the counting. This computer example gives rise to speculation concerning the possible existence of a non-mental causal mechanism which will constitute the intermediary stage translating the initial conditions of introspection into the introspected mental process. Perhaps the causal mechanism behind introspection is, as in the case of computers, a matter of one process triggering another process, say, some neurochemical process associated

with the change in the mental process attributed to introspection.

The speculations prove more alluring when we realize that with them we carry on the tradition of a causal theory of introspection introduced in Locke's theory of introspection. The fact that the introspective causal mechanism is non-mental need not give us pause. We can also find precedents for this move in Locke's theory. The paucity of information about the steps leading from the originating cause (the mind and its operations) to the final effect (the consciousness of the mind's operations) may be attributed to our not being conscious of such steps. The lack of consciousness may be taken to indicate either the non-existence of an intermediate stage (as Locke does for thinking) or the non-mental nature of the intermediate stage. Taking sensation as our guide, the latter tack is the more attractive one.

Sensation, regarded as the source of our ideas of sensation, is described by Locke as a neural reaction intervening between the initial encounter with a material body and the awareness of that body. Considered solely in this capacity, sensation (the source) would not be regarded as a mental operation because it is a process involving physical entities. What we know of Lockean introspection (the source of our consciousness of the operations of our mind) is a complex matter involving our experience of our

mind's operations and inferences and suppositions concerning the cause of these experiences based on the example afforded by sensation.⁴⁵ The intermediary steps between the originating cause and the final product need not be mental in introspection any more than they are for sensation. This may be the case despite the fact that introspection deals with things mental. Sensation does not operate solely within the physical realm. Its end result, the consciousness of some physical body, is a mental phenomenon.

The notion of kinesthesia-proprioception is a technical one. It has been fleshed out by advances in neurophysiology: investigation of the causal relations involved are crucial to establishing it as a mode of sense observation on par with our other five senses. The concept of experimental introspection is also technical. It has been derived from psychological experimentation -- not necessarily from psychological theory. The application of a causal picture to experimental introspection partakes more of the nature of a promise than a fait accompli. Perhaps, at some future date, as the details of the causal relations obtaining in introspection are worked out, it too may become established as a mode of observation paralleling sense

⁴⁵ Our understanding of sensation (the source) involves assumptions concerning the existence of physical objects (which are independent of our experiences of them, and their relationship to these experiences via primary and secondary qualities.

observation. So far, it must be admitted that our efforts to adopt a sense observation model for introspection provide an awkward fit at best. Nevertheless, Locke was right and his critics wrong: at least, it is not out of the question.

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