

Eliminative Materialism and the Distinction between Common Sense and
Science

by

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Abstract

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It is one of the premises of eliminative materialism that commonsense psychology constitutes a theory. There is agreement that mental states can be construed as posited entities for the explanation and prediction of behavior. Disputes arise when it comes to the range of the commonsense theory of mental states. In chapter one, I review major arguments concerning the span and nature of folk psychology. In chapter two, relying on arguments by Quine and Sellars, I argue that the precise scope of commonsense psychology cannot be determined because there are no resources to distinguish claims that are commonsense from all others. I use this conclusion to evaluate Churchland's proposal that folk psychology should be eliminated in favor of a scientific theory. I argue that, although such an elimination is possible, it is unnecessary because commonsense psychology is in part informed by scientific theories.

The properties that are usually attributed to mental states, on my view, are not common sense and would re-emerge even if we replaced our current theory with a scientific one. In chapter three, I examine how this affects eliminativist arguments, such as Churchland's proposals for how to solve the emergence of

the phenomenal character of sensations. I argue that it might be the case that some phenomenal properties are the result of endorsing a particular theory, but phenomenal character as such is a permanent feature of any theory about internal states. Addressing the problem of the incorrigibility of mental states, in chapter four, I challenge Rorty's idea that such a property is the mark of the mental and can be attributed to our mental states based on our everyday usage of mental terms. The position asserted in the dissertation is compatible with the view that any theory can be revised, but doubts are expressed concerning the likelihood for a complete replacement of the current folk-psychological theory. Taking inspiration from Sellars, in chapter five, I argue that the establishment of a conceptual framework entails a wholistic jump from no concepts to a rudimentary framework. With this leap some properties are solidified and stand in the way of elimination.

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Chapter I

The Scope and Nature of Folk Psychology

Section I--Introduction

Part I

The mind/body problem has three, contemporary proposed solutions: reduction, functionalism and eliminativism. The three approaches splinter off into factions but all of them are somehow compatible with physicalism or materialistic monism. As it is true for most theories, these various views of the mind/body problem adopt one of the two general strategies towards explaining phenomena: one such general approach is to take into account the intuitions found in common sense, and the second is to go against those intuitions. The first type of theory attempts to ground a more developed or scientific view, about particular phenomena, on our common sense. Thus, we get theories that preserve the entities of our commonsense theories but they change, to some extent, what we used to believe about the nature of those entities. For example, reductivist views have, in the past, attempted to identify the commonsense entities, either in the domain of physics or psychology, with entities in the scientific variants of those same theories. In particular, the reductive views of the mental have aimed to identify types of mental states, like pains or beliefs, with types of physical states, such as brain states. One can see a successful identification in two ways: as the vindication of commonsense mental categories or as the elimination of those via definition. For our purposes reductionism will be viewed as accomplishing the former, such that we can contrast that approach with eliminativism proper.

Functionalism about the mental--although not reductive--attempts the first general strategy also, it reaches for an account of the mental that captures the intuitions about it but also provides a view that is compatible with materialism. These theories uphold the entities of commonsense psychology but attempt to provide better theories for those same entities. Ultimately, they assume that these intuitive, commonsense views are, at least partly, right about our mental states.

Eliminative Materialism (EM) is not such an approach. The Eliminativist theory of the mind/body problem falls under the second general category of theories. This second type of theory does not attempt to capture the intuitions about phenomena under investigation; rather they propose an alternative view. Such views in general, and eliminativism in particular, begin by claiming that our intuitions are faulty. EM wishes not to have any association with commonsense psychology because the proponents of eliminativism think that our view about mental states is false. This is a prediction on their part, but one that they feel is substantiated. Thus, for this theory, there are no attempts to use what we think we know about human psychology, they will not tip their hat to the mental entities such as pains, beliefs or desires. EM urges that the scientific theories of the mind are the only real option for the explanation of phenomena associated with human psychology.

The first type of theory is usually easier to accept, there is a human tendency to prefer views that somewhat defer to common sense. But, it is not clear why that should be so? Is it sentiment or reason? Are we partial towards

common sense reflexively, or is it the case that theories that aim for compatibility with our intuitions are just better? The answer must rest on the clarification about what one means when one speaks of such things as common sense. In order for common sense to be used as the ground on which one rests scientific, and other theories, one must establish that commonsense beliefs, and then theories, are worthy of that role. In other words, one must establish the truth of, at least some, elements of common sense. That turns out to be quite the task. The eliminativist make a clever move, they equalize the playing field by asserting that commonsense psychology is nothing but a theory, consequently the constitutive parts of that theory are just beliefs. So, intuitive or commonsense views on the subject of psychology are wound tightly, or loosely whichever one prefers, into a web of beliefs.

If the story were to end there the news would be bad, but not devastating. But, then somebody would think to say that perhaps there is something else that is special about commonsense beliefs, perhaps we arrive at those in a way that is distinct from the way in which we arrive at other types of beliefs. Perhaps there is an epistemological difference, maybe a commonsense belief is arrived at by using only one's common sense and that is what will justify our affection for our intuitions. All other beliefs--and the propositions featured as their objects--are supported by a theory. We believe that atoms make up the large object that we see, because we have a theory that tells us so, or we believe that plants emit oxygen during the day and carbon dioxide at night, because we

got to know some science in eighth grade. Succinctly, the beliefs that are acquired are a result of endorsing a theory.

But, commonsense beliefs must be different because it seems to us that they spring out of nowhere, like weed. It seems to many that nobody needs to tell a human about a human's mind. In fact, a Homo sapiens when approached on this subject gets rather irritated and would say something like: "Mind your own business! I have thoughts, sensations, and emotions; I don't need a theory to tell me about them!" This attitude towards the mental is, I think, supported by a metaintuition about commonsense beliefs, which is that intuitions are beliefs that could occur in absence of a theory, somehow independently. It is this impression of independence from theory, for some beliefs, that accounts for the way we think of intuitions as different from other beliefs. Commonsense propositions seem to rest in a realm untouchable by other theories, since they strike us as pretheoretical. It is usually seen as a consequence of that, that some truths are outside of the realm of theory, they cannot change and so theory has no choice but to be restricted by these facts. But, one must establish a preferred status for these claims in order to make it a belief that is foundational. A belief that is self-justified. That seems easy enough, all we need to do is establish a necessary proposition and Descartes has done that for us.¹ Then, we need a way to move from one necessary proposition to another, where necessity transfers. This can be done easily, we can name this activity cogitation, and the rules of this activity can be set by logic which in turn specifies methods which can support necessary

¹ Descartes, Rene A Discourse on Method, Meditations and Principles, Everyman, 1992, particularly Meditation II.

inferences, from one belief to another. So, we go from one necessary belief to all the others that follow from this first one by deductive inference.

Once these necessary connections are established, then these types of beliefs are not such that they can be empirically evaluated, since their truth is necessary. Consequently, we can concede that our intuitions are beliefs, but if they are there independent of theory stuck together with these necessary connections then they cannot be evaluated as any other empirical theory, or replaced by another such theory. This is one way to solidify the truth of commonsense beliefs by using a method that assigns truths independently of empirical evidence. Moreover, it would account for another meta-intuition about commonsense beliefs, which makes them even more similar to weed than previously mentioned: they are quite resilient; intuitions seem hard to root out. One can try to persuade an intuition to go away by telling it that it is false, based on a scientific theory, but that might not be enough. Intuitions are recalcitrant, sometimes, and if we establish their necessity, their resilience should not be a surprise.

Another way to speak of necessity when it comes to beliefs is to talk about analyticity, where the meaning of some terms is such that it is not set empirically but is based on the definitions of the terms involved in a particular claim. Like the old favorite, "Bachelors are unmarried men," the truth of which is not established by polling a sufficiently large number of unmarried men. Bachelors just are unmarried men, because this is how we define the term. Again, such propositions would be necessary and not revisable, in the way a

belief based on induction would be such as, "All goldfish die within three days of being purchased." That proposition is contingent, in the sense that it is based on an inductive generalization and can be falsified by another, more substantiated, generalization.

It seems as if we could establish these two ways of arriving at beliefs as methods that preserve the truth of some beliefs independent of theory and all we need to do is restrict the pool of intuitions to the beliefs that are produced by those methods, and then common sense has a special status. The status protected by either of these two ways of conferring necessary truth. So, the next step in the quest to explain why common sense, in mind, is important is to collect all we tend to think about the mind and reevaluate their truth, see which ones are necessary and then keep those, victoriously, and claim that necessary beliefs are such that they cannot be doubted and so any scientific theory that aims to explain the mind must use them as groundwork. So, eliminativism about the mind is out of the question.

Well, not really. Both of the ways we proposed for preserving necessity were disputed a while ago. First, there is a problem with establishing foundational beliefs, apparently unless one believes in God, there seems not to be a good way of securing the integrity of clear and distinct ideas. Descartes never found a persuasive argument that would establish a method of arriving at foundational beliefs. Consequently, the necessity of the proposition proposed as such in the Second Meditation, has been put into question. If there are no

foundational beliefs then there is no necessity to transfer, from one belief to another.

Second, as it turns out, the method of cogitation might not be as truth-preserving as once assumed. When it comes to things empirical, inferences do not transfer necessity from one belief to another. I can be sure that the fire in front of me is warm and I can even be sure that the fire by which I wrote yesterday was also warm, but any generalization based on those two instances would not contract necessity. We have Hume² to thank for that argument and we thank Quine for deeming it the “human predicament.”³ Again, there are very few, close to no, resources left to establish the primacy of common sense.

But, Quine’s Hume reminds of a new way of looking at foundations. If we take perceptual beliefs to lay at the groundwork, even though the necessity from each perceptual belief to a generalization based on those beliefs does not transfer, perhaps we could do a lot for commonsense psychology by emphasizing the necessity of perceptual beliefs. Perceptual beliefs seem to have features attributed to commonsense beliefs: they seem pretheoretical, we think we acquire them directly, without knowing a theory and because of that perceptual beliefs are used as the data for the development of theory, moreover the folk are convinced that their perceptual beliefs are largely unchanging, one can get new ones but the old ones never change.

² Hume, David An Enquiry Concerning Human Understanding, Indianapolis, Cambridge: Hackett Publishing Company, Second Edition, 1993, particularly section 4.

³ Quine, W.V.O. "Epistemology Naturalized." Ontological Relativity and Other Essays. New York: Columbia University Press, 1969, p72.

Perhaps we could say that mental states are such that they are more like reports of internal goings on, some sort of a perceptual belief, and less like posits. Thus, if we have necessity for perceptual beliefs we can save the mental by denying that they are posits. The problems with this type of foundations come from arguments that show that even the most basic perceptual beliefs are theory laden. What we see is infected by a theoretical view that is the background for any particular perceptual belief. Thus, seeing something as having a particular property is a result of holding a theory about the nature of the object that we are perceiving as being this or that way. Consequently, mental states, acquire properties only as a result of being part of the commonsense theory. Thus, if the theory changes so do the properties of the entity that we sense or perceive. Ultimately, even perceptual beliefs are not such that they are pretheoretical, and so they would not qualify as common sense.

The only thing that is left to appeal to is analyticity, which is very unwise and likely to get one nowhere. Famous Quine has written famously against the notion of analyticity and its unusually close connection with necessity. Apparently, says Quine, there are no noncircular definitions of necessity, or analyticity, for that matter. Analyticity is like the dog, while necessity is like its tail and the former cannot be defined without biting its own tail. The conclusion that Quine draws from this, and most people see as a sequitor, is that if there are no resources to define necessity in a proper way, then there is no necessity and no beliefs that are necessarily true. So, all beliefs are synthetic, as opposed to analytic, which means that they are all, ultimately, empirically evaluable and

revisable. This revisability cuts deep, because it applies to all beliefs, even ones that have been thought of as necessary, like the axioms of logic. After Quine, even those axioms are revisable in principle. This means that the method of cogitation is lost completely, there are no self-justified, necessary foundational beliefs, and there are no rules that can guard the safe transfer of necessity from one place to another.

This has put commonsense beliefs in an awkward situation. On the one hand people expect much of them, we mentioned above that somehow there is a bias towards theories that take into account our common sense. But, on the other hand, there is nothing special about these beliefs, nothing that would merit their elevated status. Because of the failures of necessity, common sense has no claim to fame. So, if we return to the discussion of the two general types of theories, theories that do not take into account our intuitions are no worse than the other type, solely based on the role of common sense in those two kinds of theories. It turns out that what makes us favor reductive theories is sentiment alone; we have a bias towards things we thought of first.

Since, eliminativism is still a contender it is worth discussing it. In this dissertation, I will discuss Eliminative Materialism (EM), and I will argue against it, in an attempt to give reasons for some of our sentimental attachment to common sense. The first chapters will be devoted to the presentation of EM, and some possible strategies for the defense of commonsense psychology. But, I will usually refer the reader to some further chapter when it comes to more elaborate discussions on the particular faults of eliminativism, although, I will lay the

groundwork for my position in the first chapter. In chapter two, I will further expound on the subject of commonsense psychology, I will reevaluate the arguments that the eliminativists use to argue for the inclusion of folk psychology into the realm of theories; specifically I will assess the consequences of that argument for the elimination of folk psychology. I will say that if one takes the arguments that equalized commonsense with scientific theories seriously, then the distinction between those two cannot be drawn. If there is no distinction, then commonsense psychology and any other kind of theory about the mind are the same type of theory. In that case the issue about which one is right is largely empirical and uninteresting for philosophy. Moreover, I will claim that there is informational flow between commonsense psychology and other theories, such that the body and ontology of that theory is not purely its own. In this case the elimination of folk psychology might not rid us of the problems that eliminativism usually attributes to the commonsense view of the mental. Folk Psychology is largely credited with providing the contrast between the mental and the physical, but if it is true that the way we see the mental is not entirely common sense then the mental and its emergent properties cannot be blamed entirely on the folk's theory of human psychology. Consequently, elimination of folk psychology would not dissolve the contrast. Part of my argument will rest on examples that support the claim that commonsense psychology is influenced by other theories that are not common sense.

Chapters three and four will present arguments aimed at specific eliminativist solutions to emergent mental properties. In chapter three, I will

focus on Churchland's argument that perceptual plasticity can solve the problem of phenomenal character. Sensations are usually thought to pose a large problem for the reductive views that attempt to resolve the mind/body problem. Sensations are said to be identified in terms of their qualitative character, a sensation of red gives rise to a red qualia, which in turn is hard to capture on the physicalist framework, partly due to its subjective character, and partly due to its nonpropositional character. Churchland blames the rise of qualia on a faulty conceptual framework and suggests we replace it for a better one.

On Churchland's view, if we replace folk theory with neuroscience, we will solve all the problems that we have with sensations and qualia. I will argue that replacing a framework might not result in the disappearance of subjective qualitative character. On the one hand, I will argue that there could be problems with the process of replacement; I think plasticity has its limits and Churchland does not provide examples that could be representative of the perceptual change involved in the replacement of folk psychology in favor of neuroscience. The examples of the training that he suggests do not seem to mirror the type of training that would be involved in the ordination of neuroscience as the primary conceptual framework for mental or brain states. On the other hand, even granting successful reconceptualization qualia could re-emerge in this more scientific framework. One could, even on a conceptual framework that enables us to individuate brain instead of mental states, have subjective qualitative states. There could be something it is like to have a brain state. Thus, plasticity

would not solve the issues over the emergence of the qualitative character of mental states, which are usually attributed to the folk-psychological framework.

In chapter four, I will focus on Rorty's argument that incorrigibility is the mark of the mental. Rorty proposes that incorrigibility is an essential property of the mental, such that anything that is mental is incorrigible⁴ and symmetrically anything that is incorrigible is mental. I will challenge the necessary connection between the two properties. The challenge will be based on arguments that were supported in chapter two. I will also dispute the claim that all things incorrigible are mental and vice versa by modifying the story of the Antipodeans, provided by Rorty, as an example that one could imagine a civilization just like ours where the language used by the people in that world is not one that features mental entities. The Antipodeans have all that we have but without the mind. I will propose that Antipodeans turn out to be incorrigible, on Rorty's scenario, about their brain states, without those states being mental which would be an inkling that the two are not so strongly connected. Also, I will claim that Earthlings are increasingly able to accept that they make mistakes about their own mental states, we know that we can be wrong about the processes that lead us to have certain thoughts, and even pains. Humans are also likely to be persuaded that sometimes their pains are not as real as they seem. Consequently, both Rorty's and Churchland's solutions aimed at resolving problems associated with the mental are not, in my view, very effective.

⁴ Rorty defines incorrigibility in terms of an established linguistic practice by which we have no resources to question first person reports of mental states.

In chapter five, I will propose a reset view of a commonsense framework and pick a candidate framework. The framework that is initially established for each person developmentally will be called the Original framework. I will argue that a framework that makes the jump from no concepts to some concepts has some features of common sense. This framework develops spontaneously and because of that is impervious to influence. I will argue that the original framework can be replaced, but not as the first framework that is established. My argument will not be that the categories of commonsense psychology can be defended by arguing for the original framework; rather I will claim that there are aspects of the original framework that limit complete reconceptualization. Some of the restriction that this framework imposes is the individuation of objects as such, and the individuation of mental states in terms of their phenomenal properties. This last part, I think, restricts the pool of frameworks that could be indorsed when it comes to inner states and goes against Churchland's view that plasticity is not restricted. I will argue that only frameworks that propose internal states with phenomenal properties can be indorsed. In addition, I will discuss a possible criterion that would help parse states that can be introspected from all others.

Part II

In the remainder of the first chapter my task will be to present the eliminativist theory and mention some ways in which people have thought that it is wrong. However, the following sections will not be an exhaustive guide to the

faults of EM. I will present eliminativism to have two premises and a conclusion. My aim will not be to present all versions of eliminativism, nor should my presentation be taken to indicate that I hold the view that all eliminativists maintain the same position. There is a general distinction between old and new eliminativism. The older eliminativists include Rorty, Feyerabend, and Quine to an extent. The newer eliminativists are represented by Churchland and Stich. Mostly, my presentation will focus on the newer eliminativists, but there will be parts where I will focus on Rorty. My focus will be on the new versions of the theory because it more keenly brings out the issues involved with the distinction between commonsense and scientific theories. This distinction will be the focus of the dissertation.

The rest of the first chapter will be divided into four sections. The newer eliminativism is thought to have some clearly distinguished premises; so I will go through those and each premise will get its own section. The conclusion of eliminative materialism is that the commonsense view of our mental states is eliminable--and should be eliminated--for a scientific theory of the mind. EM, the theory, will be challenged at various points through out the dissertation, and I will at times refer the reader to other chapters for particular criticisms. The fourth section will recount some possible defense strategies for commonsense psychology. I will argue against a view that attempts to claim that folk psychology is not such that it can be eliminated because of its normative properties. This position is less than realist about the ontology of commonsense psychology. But I think this to be a faulty strategy. Eliminativists assume that

commonsense psychology is positing real entities and one should defeat them on that ground. I will also sketch the view that I will further expound on and defend in chapter five.

Section II--Eliminative Materialism (Premise One)

It is customary to start from the beginning, so it is worth noting that the person that coined the term eliminative materialism or eliminativist is Cornman⁵ who, after introducing the term, swiftly moved to attack the theory. Thus, although Cornman named eliminativism, he is not included among the eliminativists. The initial proponents of eliminativism are considered to be Quine⁶, Feyerabend⁷, and Rorty⁸ but the theory has been very closely associated with people like Stich⁹ and Churchland¹⁰. Churchland in particular has remained a staunch proponent of the theory. The following section will draw mostly from the latter authors. The theory has two premises and a conclusion; in

⁵ Cornaman, J. "On the Elimination of 'Sensations' and Sensations." Review of Metaphysics XXII, 1968a.

⁶ Quine, W. V. O. "On Mental Entities." The Ways of Paradox. Random House, 1966.

⁷ Feyerabend, Paul. "Materialism and the Mind Body/Problem." The Review of Metaphysics, XVII, 1963b.

⁸ Rorty, Richard (1970) "In Defense of Eliminative Materialism" Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971.

⁹ Stich, Stephen. From Folk Psychology to Cognitive Science: the Case Against Belief. Cambridge, Mass.: Bradford books, 1983.

¹⁰ Churchland, P.M. Scientific Realism and the Plasticity of Mind. Cambridge, U.K.:Cambridge University Press, 1979.

this section I will expound on the core of the first premise. However, if one accepts the conclusion then one is a true eliminativist.

Eliminative Materialism's first premise asserts that Folk Psychology is a theory and it should be emphasized that accepting the first premise does not make one an eliminativist. One can hold the position that Folk Psychology (FP) is a theory and still think that it is true or, in some other way, special. That which could make one an eliminativist is the acceptance of the second premise which asserts that FP is false.

FP is the commonsense view on human psychology and it is a member of a larger club including folk physics. There are issues involved in what should be the area of coverage for FP. More often people think that it encompasses the folk's view of mental states, such as propositional attitudes and sensations. Some think that FP should aim to explain a larger number of psychological phenomena, such as memory, learning, problem solving, and even in some cases sleeping.¹¹ Usually, the criterion used to classify FP as a folk theory is that most people are familiar with its entities and that we tend to be clear on their application to people in everyday parlance. I know, you know, we all know FP and we know how to use it on each other, but this successful exchange of FP's predicates does not rest on specialized knowledge in the domain of neuroscience or cognitive science. In other words, to use folk psychology, a person need not know anything scientific about them; one might be utterly ignorant about the

¹¹ Churchland, Paul "Eliminative Materialism and Propositional Attitudes" A Neurocomputational Perspective: The Nature of Mind and the Structure of Science. MIT Press, 1989 (henceforth NP), p. 7.

goings on “in the head” in order to successfully utilize this commonsense theory. But, experts and layman alike seem to share the same FP and being an expert will not exclude you from the FP-using crowd. One can attempt to dispute this issue but for now this will be granted to the eliminativist and I promise to discuss it more thoroughly in the next section.

Part of the eliminativist argument is that FP posits entities to explain behavior and these entities are things like sensations, thoughts, or propositional attitudes such as beliefs, desires etc. The introduction of mental states as posits is usually attributed to Sellars and his Myth of Jones¹² but I will reserve this discussion for chapter two, which is entirely devoted to the topic of mental states and their alleged status as posits. Briefly, the consequence of FP being a theory is that it can be evaluated, empirically, and a chance exists that it could turn out to be false. Eliminativists think that there is mounting empirical evidence against FP. This should force us to conclude that one of the reasons FP is false is because it posits false entities. The entities of FP are mental states. This consequence tends not to make a good impression, but I will aim to make it more plausible only to reject it in the end.

The argument that FP is a theory can be separated into two parts. The first part of the argument is that mental states are posited entities that feature in the explanation of behavior. The second part of the argument focuses on showing the FP has law-like generalizations for the explanation and prediction of behavior. This view begins with David Lewis and will be presented immediately

¹² Sellars Wilfrid. “Empiricism and the Philosophy of Mind,” Science, Perception and Reality. Atascadero, California: Ridgeview Publishing, 1991, pp. 90-116.

following this sentence. Folk Psychology¹³ is used to refer to the body of platitudes that fuels our everyday talk of beliefs, desire, thought, and other such mental terms. This body of platitudes in turn constitutes a theory that is used for the prediction and explanation of overt behavior. “These are generalizations that are “common knowledge” among ordinary folk. Almost everyone assents to them, and almost everyone knows that almost everyone else assents to them” (Stich, DM, 127).

FP has explanatory and predictive powers. Using beliefs we explain the behavior of others, “She reached for the glass of water because she believed that drinking it would cool her off,” or a more psychologically elaborate example, “She hesitated to open the door for fear she would catch him with her.” We also use mental states to predict the behavior of others. Often, people use propositional attitudes to foretell what others will do, for example, “If he believes that she will sit next to him at the dinner party, he will not come.” Also, FP is used for much more basic tasks like predicting what people will do when faced with charging bulls.

Folk psychology is also used for the same purposes--to explain and predict behavior--introspectively. We use FP on ourselves. It seems obligatory to say--as a lot of people that are proponents of FP do--that we are very good at both the prediction and explanation of other people’s behavior. This is almost

¹³ It should be noted that there are other names for commonsense psychology, namely theory-theory. The latter name has been used but then mostly dropped in favor of FP and I will keep with that tradition, mostly because ‘Folk Psychology’ seems more evocative of the meaning and also because theory-theory is just too heady and altogether senseless.

indisputably true when it comes to very simple predictions, like the behavior of others in the presence of above mentioned charging bulls, or the behavior of people when they notice a red light while trying to cross the street. However, if one broadens the scope of the predictions, Folk Psychology seems to be more fallible. Especially if one, like Churchland, broadens the scope of FP to include phenomena that are usually considered the province of scientific psychology, as cited before those would include memory, learning, or sleeping and dreaming. I will not attempt to trace out the scope of FP because, as it will become clear later, I cannot find a sturdy distinction between FP and a scientific theory of the mental.

According to David Lewis¹⁴ FP consist of a body of commonsense platitudes and these platitudes implicitly define mental states. The way to establish the breath of FP should be accomplished by assembling the platitudes:

Collect all the platitudes you can think of regarding the causal relations of mental states, sensory stimuli, and motor responses...Add also all the platitudes to the effect that one mental state falls under another—'toothache is a kind of pain', and the like...Include only platitudes which are common knowledge among us—everyone knows them, everyone knows that everyone else knows them, and so on.

For the meanings of our words are common knowledge and

¹⁴ Lewis, D. "Psychophysical and Theoretical Identifications." *Australasian Journal of Philosophy*, 50 (3), 1972: 207-15.

the names of mental states derive their meaning from these platitudes (Lewis, sec.3).

It is, perhaps, an obvious point that platitudes about mental states are not cross-cultural, so the body of FP could vary from culture to culture. Dennett makes a point akin to this one in "The Intentional Stance," claiming that folk psychology varies, not just across cultures, but even within countries, states, or neighborhoods. He uses this variation to show that such an unstable group of beliefs could not be specifying laws, or law-like relations.¹⁵ The impact of this observation could be abated by pointing out that one could somehow extract the core of FP by finding and collecting the platitudes that are common to all these provincial folk-psychological theories. This core could be designated as the universal, cosmopolitan, FP and taken to be the body of platitudes to specify causal relations. Ultimately, it is not clear that just because one cannot put a finger on a unique FP that the varying FP's do not specify causal relations on the Lewis' model, which will be discussed just below. Each of the parochial FP's can be said to implicitly specify laws (as per the model), even though those laws might not be instantiated. In other words, for a theory to be said to specify a causal relation, that relation need not actually hold between the things specified.

On Lewis' view mental states are theoretical terms, implicitly defined by their function specified by the other terms already defined. Consider the following story: imagine that you are attempting to make a phone call from a public phone and since most of them are full you must use one that is surrounded by another

¹⁵ Dennett, Daniel. The Intentional Stance. Cambridge, Mass.: Bradford Books, 1987, p. 54.

two phones that are also being used. While you are dialing the number you overhear the following: “X had a dinner party at her house. W, Y and Z were invited. After the dinner X, W, Y and Z set on the couch and talked for two hours. During that time it was only W and Y that got up at some point during the conversation. W went to the kitchen to refill her wine glass and was in full view of X during that time. Y got up to the restroom, which is right across the hall from the bedroom and the doors are not visible from where X was sitting in the living room. After all the guests have left, X discovered that her mother’s ring was missing from her drawer. Being that only Y got up and was unobserved for a time during the evening, it must be Y that stole the ring.”

The terms X, Y, W and Z are theoretical terms or T-terms. The meaning of the theoretical terms is not known prior to the recounting of the story, but the meaning of those terms becomes set by the context. The context is determined by, what Lewis calls, other terms or O-terms and they are terms whose meaning was known to us before the story was heard. Let us say that a week after we have overheard this tale we come to find out who the four characters were, they were: Mary, Bob, Joe, and Ann and we also find out that this story could not have been true of anybody else but of those four. At this point the story is uniquely realized, meaning that this story is only true of Mary, Bob, Joe, and Ann. The meaning of the four theoretical terms was set by the story, even though we did not know what those terms’ meanings were initially. Their identity was set by their functional role in the story. “This is what I have called functional definition. The T-terms have been defined as the occupants of the causal roles specified by the

theory T; as the entities, whatever those may be, that bear certain causal relations to one another and to the referents of the O-terms” (Lewis, 254). Here is how this is applied to FP: “Think of commonsense psychology as a term-introducing scientific theory, though invented long before there was any such institution as the professional science” (Lewis, 256). In this theory the T-terms are mental states defined by all the other terms employed in describing our everyday life. The mental states in our commonsense theory are like X, Y, W and Z in our previous story. Consequently, the theoretical identifications of the T-terms in our folk theory will be like the identification of Mary with X and Bob with Y.

The laws are implicit in the collected platitudes in the following way:

$$\frac{C1[t], C2[t2],..}{E}$$

E stands for the behavior that one is trying to explain C1[t], C2[t],.. are premises that are describing mental states of the person at that time. T1..tn are various mental states that stand in those premises in such a way that if the premises turn out to be false the mental t1,..tn would name nothing. L1[T], L2[T] ...are the causal laws in the theory which underline the mental terms. Thus we end up with the following formula which represents the term-introducing postulate:

$$\frac{\exists 1x (L1[x]\&L2[x]\&..\&C1[x]\&C2[x]\&..)}{E}$$

x is a free variable and here it replaces t. The existential quantifier makes it a Ramsey Sentence for commonsense psychology. “ The new explanans is a definitional consequence of the original one...We have, so to speak, an existential generalization of an ordinary covering-law explanation” (Lewis, 258). In this way Lewis proves that the laws of our Folk Psychology is contained in our everyday talk of mental states, or, to use his words, in the collection of everyday platitudes about mental states.

Churchland, also, thinks that Folk Psychology contains laws. In fact he attributes our ability to explain, understand, and predict each other to the fact that we have a shared tacit knowledge of those folk-psychological laws. For Churchland, the meaning of mental states is set in the same way as the meanings of other theoretical terms; it is specified by the body of laws in which they figure.

FP, according to Churchland, specifies statements that, in turn, specify law-like relations between mental states, external stimuli, and behavior.

For example,

(1) $(x)(p)[(x \text{ hopes that } p) \ \& \ (x \text{ discovers that } p)$

$\supset (x \text{ is pleased that } p)];$

is like the statement:

(2) $(x)(f)(m)[((x \text{ has a mass of } m) \ \& \ (x \text{ suffers a net force of } f)) \supset (x \text{ accelerates at}$

$f/m)]$

The relationship between “x hopes that p” and “x discovers that p” that yields a specific conclusion is the same as the one contained in the expression “x has

mass of m " & "X suffers a net force of f " which results in the conclusion "x accelerates at f/m ."

To recapitulate, Folk Psychology is a theory because it specifies laws. Moreover, FP is used to explain and predict our own behavior, as well as, the behavior of others by positing mental states as entities.

Section III--Eliminative Materialism (Premise Two)

The second premise of EM is that FP is false. The falsehood of FP is brought out mostly by the appearance and development of neuroscience and cognitive science. FP is considered to be false for three reasons: the first reason is largely dependent on what one considers to be the scope of the theory, the second is based on the connection between language and mental states, and the third reason can mostly be blamed on the Cartesian influences on FP.

Let us start with the discussions about scope related issues. Churchland claims that any confidence in FP and its categories stems from, "innocence and tunnel vision" and lists evidence for the falsehood of FP. The failures are both internal and external, internally FP fails to account for some phenomena within its domain and the external failures of FP are that it fails to be coherent with the scientific view of psychology. The ontology of FP is disparate from that of, let us say, neuroscience.

FP fails to provide explanations for mental illness, creative imagination, individual differences in intelligence, also:

Consider our utter ignorance of the nature and psychological function of sleep, that curious states in which a third of one's life is spent. Reflect on the common ability to catch an outfield fly ball on the run, or hit a moving car with a snowball. Consider the internal construction of the two-dimensional array of perceptual illusions, visual and otherwise. Or consider the miracle of memory, with its lightning capacity for relevant retrieval. On these and many other mental phenomena, FP sheds negligible light (Churchland, NP, p.7).

As it was mentioned previously, FP can be wrong about all those things only if it promised an explanation about them, only if the above phenomena are considered within its scope. And, it seems that the scope of this commonsense theory is stretched to its limits by Churchland. Phenomena like memory, imagination, illusions and others are negligibly illuminated even by scientific psychology, and thus the criticism against FP seems largely unfair. Most of the phenomena Churchland mentions are current and mysterious even for neuroscience. Still, I do not consider this to be the serious part of my criticism of Churchland's view, but I will mention that if one takes Lewis' criterion for what counts as FP--and that is the tacit commonly held theory--most of the

phenomena mentioned above are largely unaccounted for by FP and therefore would remain outside its scope.

No matter how one collects the platitudes of common sense (unless one goes to a science camp or an APA meeting where Churchland is speaking) it is extremely unlikely that one would end up with propositions about illusions, or internal construction of three-dimensional objects from two-dimensional stimuli. Thus, the issue of what constitutes a commonsense theory is thwarted, since Lewis' criterion proscribes nothing on what should be the content of such a theory; FP is restricted only by the requirement that its tenets be platitudes. On that view FP does not cover a large portion of psychological and brain phenomena.

Perhaps, it would be possible to have a commonsense explanation, which would entail a commonsense theory with commonsense laws for the explanation of the phenomena Churchland mentions. Even though we do not initially find all those interesting psychological issues covered by FP, we could extend folk psychology to cover them. This could produce a commonsense explanation of things like memory, sleeping or problems related to perception. And such an explanation could compete with a scientific explanation of all those phenomena. We would have commonsense explanations versus scientific explanations of the internal construction of three-dimensional objects from two-dimensional stimuli. I do not believe that this proposal would work, because there are no commonsense theories. This assertion is supported in chapter two. Briefly, based on the eliminativism's first premise, FP is a theory. Since it is an

empirically evaluable theory, it is a scientific theory. Or at least there are no resources left to distinguish it from other theories that are not commonsense. Consequently, if one juxtaposes the explanations proposed by FP and those of neuroscience one is comparing rival scientific theories. This is all because, as I stated earlier, there are no resources left to claim that commonsense is special in anyway. Even assuming that there was something about FP that was initially commonsense, extending its limits to cover additional psychological or brain phenomena could change the character of the theory. One might start off holding a commonsense theory but develop it into a scientific view.

To return to the issue of scope, one could think of a different criterion for deciding what falls under FP. One such criterion could be something like collect the best of the best platitudes of commonsense psychology and use that as the body of the theory. Hence, we would not collect only those propositions that we all believe true of ourselves and other people's mental states, but we could sift through the platitudes, somehow, and select the best and fittest. Even overlooking that such an endeavor would be difficult, seeing as it would be hard to say what could count as good folk psychology versus bad FP, the things mentioned by Churchland would most likely still remain out of the scope of FP. To get a psychology that addresses the phenomena mentioned by Churchland one would have to talk to a really smart person, like a scientist and then what one would collect would be something close to a scientific theory. The problem is that there is no real way of telling the difference between a scientific and a commonsense theory, and by "real" I mean a criterion that would make the

distinction based on the theories (or platitudes) themselves and not based on the people that are devising those theories. Most of the ways that were proposed are extrinsic; the criteria are tied to people that use the theories, or platitude.

Commonsense psychology is commonsense because most people use and know the theory, and neuroscience is a scientific theory about the same domain because it is only known or used in scientific circles. But a good criterion would have to make a difference based on the theories alone. Why is thinking that a pain is an incorrigible mental property common sense and thinking of sensations as brain activity a scientific proposition? Including people, and what they do, into judgments about whether a theory or a belief is common sense seems, somehow arbitrary. After all, in accordance with the proposed criteria, if we all give up the current FP and start using neuroscience, it would become common sense. This issue will be discussed further in chapter two.

A further problem with FP, according to Churchland, is that it never changes and one should take this to be more evidence that it is a false. A look at the history of FP reveals it to be a, "...(S)tory...of retreat, infertility, and decadence" (Churchland, NP, p.7). The domain of FP has shrunk considerably, since intentional explanation used to be applied to natural phenomena. Historically, seas, winds and other things in nature used to be ascribed propositional attitudes and emotions in order to explain their behavior. Nowadays, we only use such intentional explanations for the higher animals. But Churchland thinks that within this restricted domain FP has not enjoyed much success and has not changed in two or three thousand years.

The FP, Churchland says, of the Greeks and our FP are the same theory, a claim that I find factually incorrect and I plan to take to task in chapter two. Churchland then concludes that because of this lack of change in content and lack of success, FP is a stagnant or degenerating research program and has been for millennia. A claim a lot of people find shocking, while I find just plain false. It seems that a change in domain is quite significant.¹⁶ It is unclear why Churchland does not consider a shift in domain to qualify as bona fide change in a theory.

FP has retreated from explaining natural phenomena which seems to show that it is not unchanging or stagnant, because such a shift must have been caused by external influence. It must have been that faced with better explanation of natural phenomena, one not relying on intentional states, FP retreated from covering some physical events. Hence, the development in the physical sciences incited this retreat. So it seems that FP is not immune to influence.

The shrinking of the domain of commonsense psychology challenges the claim that Churchland makes, which is that FP is not a framework that is affected by issues of continuity and coherence with other sciences. If the change in FP was at least partly influenced by the development of science, then that must mean that coherence and continuity are internal as well as external guidelines for FP. Consequently, FP has changed and, given that, it is in continuity with

¹⁶ My view is that commonsense psychology has altered in many more ways. Currently, I will limit my remarks to changes in scope in order to take Churchland to task on that particular issue.

science.¹⁷ It seems superficially that this is not a large issue but in the second section of the chapter I will argue for the importance of this conclusion and will claim that it has detrimental consequences for the eliminativists.

The second stream of challenges to FP focus on the connection between propositional attitudes and language. A purported feature of commonsense psychology is that inner episodes--mental states--are modeled on inner speech. This view hails again from Sellars and the Myth of Jones. The Myth is a story that is a fictitious history of the development of Folk Psychology, but it is meant to capture crucial features of this development. In this story, Jones is a local genius that introduces mental states, as posits, into our everyday talk and teaches his friends and neighbors how to use these posits to introspect and explain the behavior of others. Jones is a mythical ancestor that helped establish the practice of commonsense psychology and can be blamed for the introduction of mental states into our everyday lives. It seems, then, that Sellars, via Jones, is to blame for the tenets of a folk-psychological theory, which should strike one as peculiar since it seems as if once one becomes a philosopher one loses all right to be credited with commonsense theories. I will hold off on this point to present the rest of the arguments for the falsehood of FP. But, in the next section, I will further expose Sellars view as well as present arguments for the view that Sellars is partly to blame for the demise of the old-fashioned view of common sense.

¹⁷ One can find a view that is similar to this one in Sellars, see "Philosophy and The Scientific Image on Man," Science, Perception and Reality. Atascadero, California: Ridgeview Publishing, 1991, pp. 1-40.

The following problem arises if mental states are modeled on speech, “If individual thoughts have meaning, and sequences of thoughts may be logically related in various ways. Indeed, when things go well, a sequence of thoughts can have the structure of a sound deductive or inductive argument, and these covert, logically sound arguments play a central role in Jones’ explanation of intelligent behavior.”¹⁸ The problem becomes even more obvious when it is noticed that intelligent behavior is not strictly connected with linguistic prowess. Infants and some species of animals behave intelligently even when not in command of a language. Consequently, if one of the premises of commonsense psychology is that mental states are linguistic in nature then it seem like it is empirically false. We attribute those states to creatures that do not speak any languages and are certainly not able to make logical inferences best on proposition-like premises. Fodor is a supporter of the idea that there exists a “language of thought” and that it is innate, for human infants.¹⁹

Further evidence against the claim that mental states have language-like structure comes from Neuroscience; both the Churchlands (husband and wife) cite this as a nock-down empirical evidence against FP. They say that if the story of Jones is right then one should find sentences in the brain. Patricia Churchland claims that “There is some sentence-crunching, almost certainly, but

¹⁸ Stich, Stephen. Deconstructing the Mind. Oxford UK: Oxford University Press, 1996, p.18 (hereafter DM).

¹⁹ Fodor, Jerry. The Language of Thought. Cambridge, Mass.: Harvard University Press, 1975, chaps. 1,3,4).

it is not constitutive of cognitive activity.”²⁰ Paul Churchland further emphasizes that,

Research into the neural structures that fund the organization and processing of perceptual information reveals that they are capable of administering a great variety of complex tasks, some of them showing a complexity far in excess of that shown by natural language. Natural languages, it turns out, exploit only a very elementary portion of the available machinery, the bulk of which serves far more complex activities beyond the ken of the propositional conceptions of FP (Churchland, NP, p.19).

This criticism applies broadly to the view that marshals the assumptions that mental states are representational and are syntactically structured, so it is not just about finding sentences in the head but it also applies to anything that would be language-like, in this sense.

The third and last type of attack mounted on FP has much to do with the Cartesian flavor of FP. Rorty especially attributes maintains the view that our everyday talk of mental states upholds rules that are infused with the Cartesian view about the mind and its connection with consciousness. On the commonsense view mental states are defined by being conscious, or so the enemies claim. For something to be a mental state it has to be conscious and it should be accessible to introspection. It is not a feature of commonsense to view

²⁰ Churchland, Patricia S. Neurophilosophy. Cambridge, Mass: MIT press, 1986, p.396.

mental states as entities that are beyond the reach of the people that have them. On this view, it should turn out that people who hold the FP view make the strict connection between something being a mental states and that same thing being conscious. “Who ever heard of an unconscious thought?” is likely to be the folk’s attitude. I think this is false. I think that the commonsense view about mental because, as was stated earlier, I feel that those views change a lot. Freud, for example, is a person that could be credited with the introduction of unconscious drives and motives into the everyday vocabulary referring to mental states. We talk of doing things because of this or that unconscious reason, mostly because Freud’s view became so popular.²¹

But, science and philosophy seem to be slowly dissolving this bond as well. Empirical evidence seems to show that mental states are no longer strictly connected to consciousness. From psychology we get evidence that unconscious processes affect our behavior in ways that were previously unknown. The evidence of unconscious mental states are circumstantial, we infer the existence of these states indirectly from their effects on behavior. But, the change in behavior is similar to the change that would usually follow the advent of a mental state; this forces the conclusion that, even though the process is unconscious, it is nonetheless mental.

In what follows, I will present some examples of such research. First, there are the masked priming experiments; second, there is evidence based on

²¹ Here my claim is not that Freud was the first person to introduce unconscious mental states. The claim is only that he can be credited with the popularization of the type of explanation where behavior is said to be affected by unconscious mental states.

patients with brain lesions that react to stimuli that are subliminal because of physical damage to their brain; third, there are experiments showing that people propose erroneous verbal explanations of their own behavior. I will begin with masked priming paradigm where the stimulus that the subjects are asked to respond to in some way (the target) is preceded by briefly presented stimulus (the prime) that is masked usually by a string of signs or letters.²² Masked priming is said to be an objective measure of awareness.²³ The measure is deemed objective because subjects are not able to discriminate between two stimulus states, one state in which the prime is present from the other state in which the prime is absent. Control groups in the masked priming experiments have the tasks of solely doing this kind of discrimination. For the prime to be considered subliminal, the control group's performance of this task should be at chance level.²⁴

So, an unconsciously presented prime is a stimulus that precedes the target and is presented briefly enough for us not to be able to distinguish between states where the prime is present or absent.²⁵ Even though the prime is

²² For a masked priming demonstration see the DMASTR demonstration package developed by J.C. Forster at <http://www.u.arizona.edu/~kforster/dmastr/dmastr.htm> .

²³ The priming method is more generally used in implicit memory tasks. A prime is broadly defined as a stimulus that precedes the target but affects the reaction time to the target. The reasons for the affect are varied (For more see Green, 1992).

²⁴ Merikle, P. & Daneman, M. (2000). "Conscious vs. Unconscious Perception." In (M. Gazzaniga, ed) The New Cognitive Neurosciences: 2nd Edition, MIT Press.

²⁵ The duration of the prime differs from experiment to experiment, but the control group should guarantee that the prime is presented below a certain objective threshold of awareness.

presented subliminally, it exerts an influence on the subject's performance once the target stimulus is presented. The prime affects our reaction time to the target even though it is presented below the threshold of awareness. This is considered to be evidence for the existence of unconscious perception. The prime is unconsciously perceived and we know this because it affects our subsequent behavior.

Marcel²⁶ first demonstrated semantic priming using the masked priming method. In these studies, it was found that a prime that was semantically related to the target influenced the reaction time for the target. When subjects were presented with a prime that was the word nurse they responded quicker to the presentation of the word doctor than say house. Marcel's conclusion was that the meaning of the words can be perceived even though subjects are not aware of perceiving the words. Other studies have demonstrated the influence of the lexical, phonological masked prime and semantical properties of the masked prime on subsequent processing.²⁷ Studies also demonstrated unconsciously

²⁶ Marcel, Anthony J. (1983). "Conscious and Unconscious Perception: Experiments on Visual Masking and Word Recognition," Cognitive Psychology 15: 197-237.

²⁷ Balota, D.A. (1983). "Automatic Semantic Activation and Episodic Memory." Journal of Verbal Learning and Verbal Behavior 22:88-104. Dagenbach, D., T.H. Carr, and A. Wilhelmson, (1989). Task-induced "Strategies and Near-threshold Priming: Conscious Influence on Unconscious Perception." Journal of Memory and Language 28:412-443. Fowler, C.A. et al. (1981). "Lexical Access With and Without Awareness." Journal of Experimental Psychology 110:341:362. Groeger, J.A. (1984). "Evidence of Unconscious Semantic Processing from a Forced-error Situation." British Journal of Psychology 75:305-314.

perceived pictures²⁸ and auditory stimulus²⁹ can influence the reaction time to the target word.

Masked priming is evidence against the truth of FP only if one considers FP to be the type of theory that endorses the Cartesian view on mental states, where the mental is strictly tied to consciousness, or awareness. This view is more strictly tied to Rorty's eliminativism. Rorty claims that our everyday way of speaking and referring to mental states upholds a contrast between the mental and the physical. The mental has features like consciousness and incorrigibility, which are exclusive to it and not present in the physical realm. The contrast between the mental and the physical makes them incompatible, since the meaning of 'mental' entails non-physical. If among one of FP's claims one finds one that says that in order for something to be mental it has to be conscious then this type of research is evidence against the folk-psychological view since it seems to support the view that there are things that could be classified as mental but are not consciously accessible.

Further evidence for the subliminal processing of perceptual information comes to us from research on blind sight patients. These patients have brain damage in the area of the cortex that processes visual information but the damage is localized to that part of the brain and the pathway from the eye to the vision cortex is intact. These patients have "cortical blindness" since there is no

²⁸ McCauley, C.C. et al (1980). "Early Extraction of Meaning from Pictures and its Relation to Conscious Identification." Journal of Experimental Psychology: Human Perceptual Performance 23:168-180.

²⁹ Groeger, J.A. (1988). "Qualitatively Different Effects of Undetected and Unidentified Auditory Primes." Quarterly Journal of Experimental Psychology 40A:323-339.

reported conscious “seeing” but the patients are still able to report features like the location of the object.

The following is an example of blindsight:

D.B.’s right calcarine fissure was removed surgically... therefore has a hemianopia based on standard perimetry but has surprising visual capacities. When questioned about his vision in the left field, D.B. usually reports seeing nothing. Occasionally he indicates that he had a “feeling” that a stimulus was “approaching” or was “smooth” or “jagged.” But... he always stresses that he saw nothing in the sense of “seeing,” that typically he was guessing, and that he was at a loss for words to describe any conscious perception. First, when D.B. was asked to point to locations in the impaired field in which spots were turned on briefly, he was surprisingly accurate. His accuracy contrasts with his subjective impression that he saw nothing at all.³⁰

These kinds of cases are taken to support, further, the argument that stimuli that are, in this case per force, subliminal affect behavior and that consciousness is not what strictly defines mental states. This is, then, further evidence that FP could be a false theory.

More broadly the alleged problem with FP is that it is taken to propose a view of the nature of psychological processes and that introspection provides

³⁰ Kolb, B. and Whishaw, I.Q. The Fundamentals of Human Neuropsychology New York: W.H. Freeman and Company, p. 254.

access to those processes. But there is mounting evidence against the clause that introspection represents the goings on in the head in a veridical way. In other words, we do not have the privileged access to our mental states that we thought we had, since we are often wrong about cognitive processes. In an acclaimed article Nisbett and Wilson³¹ present more evidence against the view that people have direct conscious access to their higher-order mental processes like evaluation, judgement, problem solving, and the initiation of behavior. The research supports the idea that environmental stimuli shape our behavior in ways that are obscured from consciousness. Moreover, the verbal reports that accompanied the behavior were often confabulated causal stories based on a priori, implicit causal theories, or judgements about how likely a particular stimulus in the environment was to affect their behavior. The verbal reports given by the participants did not seem to recount the processes that were actually involved in the production of their behavior. The participants, in these studies, tended not to be aware of the stimulus that influenced a response; they were unaware of the existence of the response, and unaware that the stimulus was affecting their behavioral response (Nisbett and Wilson, p. 231).

For example, Nisbett and Wilson conducted a study where they asked psychology students to memorize a list of word pairs and some of those word pairs were intended to generate associations that would be elicited later on in the experiment. The students were asked to memorize a word pair like “ocean-moon” and would later on be asked which detergent they preferred and they

³¹ Nisbett, R. & Wilson, T. "Telling More than We Know: Verbal Reports on Mental Processes." Psychological Review, 84, 1977: 231-59.

were more likely to choose “Tide” than students that were not exposed to the word pair. The students were also asked to give verbal reports about why they had the preference for Tide. Most gave explanations that had nothing to with the word pair and most of them never mentioned being influenced by the memorization task. The subjects proposed as explanations things like, “Tide is the best known detergent” or “My mother uses Tide” (Nisbett and Wilson, p. 243).

Another such experiment asked subjects to evaluate the quality of clothing, in particular nightgowns and nylon stockings. Subjects were asked which article of clothing was the best quality. In the case of the nylon stockings, subjects had a choice of four identical pairs and were asked which ones they preferred. The results of the study seem to suggest that the only thing that really affected the choice between the identical nylon stockings was their position, the ones to the right were chosen more than the ones on the left. “For the stockings, the effect was quite large, with the right-most stocking being preferred over the left-most by a factor of almost four to one” (Nisbett and Wilson, p. 243). The verbal reports did not reflect this preference; the subjects never cited the position of the object as significant factor in the evaluation of the quality of the object.

To conclude, eliminativist argue that FP is an empirically testable theory and therefore if evidence is accrued it could be proven false. Moreover, FP is a false theory because it fails to address some important phenomena that seem to be within its realm, like the nature of perceptual processes. In connection to Rorty’s eliminativism, FP is false because it seems to hold on to a Cartesian view where mentality is tied to consciousness and the reliance on introspection as the

method of access to the mental. However, research in the field of cognitive psychology, some examples where presented above, points to the conclusion that a large portion of higher-order cognitive processes are obscured from conscious access. We do not seem to be able to access the actual mental processes involved in the production of behavior and because of it we are often wrong in our verbal reports that follow as explanations of why we behaved in this or that way. Consequently, FP is a false theory.

Now that we have listed the premises of EM, which are that FP is a theory and that it is false, we can move on to the conclusion. The conclusion of EM is that since FP is a theory and it is false, this should be taken to be evidence that the posits of this theory do not really exist. The posits of FP, as was mentioned, are mental states like beliefs, thoughts, sensations, and emotions. The fate predicted for them is grim since the eliminativist thinks that they are nonexistent. From this, the move is to argue for the elimination of FP and the replacement of it with a scientific psychology or neuroscience.

The conclusion of EM is drastic enough and seems to produce large amounts of discomfort because it seems to deny what is obvious namely, the obvious existence of mental states. The eliminativists seemed to have used a bit of trickery because they started off proposing a solution to the mind/body problem which usually involves some attempt to explain what are considered to be the phenomena under consideration for explanation. So the reader usually braces for a story of why or how a mental state can be something else like physical substance, while still remaining itself. In fact, the job of the scientist is

seen as a job of providing physical, and in some sense reductive, explanations of the categories of common sense. So it seems justified to be upset when one is faced with a theory that seems to dismiss what we wanted explained. Obviously, there is no problem if there are no mental states!

But EM does not seem to stop there but further calls for the replacement of FP by something better, because some eliminativists think that a prospect of finding a physical explanation of something non-existent are dismal. Churchland will tell you that it is not the case that some features attributed to FP are false; rather it is a radically false theory that just cannot be reduced on the old-fashioned view of reduction via identity.³²

If a reductive type of solution is impossible, even the goals of cognitive science are under question,³³ because cognitive science still subscribes to the categories of commonsense psychology. This is why Churchland only listens to neuroscience and the empirical evidence against FP that he cites, and was presented earlier in the chapter, is only from that domain. A radically false theory has to be replaced entirely with no trace left because it is in the way of the development of a scientific psychology.³⁴ This is because if one is looking for

³² Nagel, Ernst. The Structure of Science. New York: Harcourt, Brace, and World, 1961.

³³ This is a view attributable to the Churchland's.

³⁴ Churchland's reason for the complete elimination of FP will be further explicated in chapter three. There I will present Churchland's view where he distinguishes between false and radically false theories. FP is the latter kind, and keeping even the general categories of FP alive would impede scientific progress. For Churchland, the nonexistence of mental states is an inference based on the status of FP as an empirically evaluable theory. This should make sense because it is in keeping with the idea that mental states have no special

something that does not exist one will not find it and one can only erect another false theory based on the shaky ground that are the categories of commonsense. So, FP is not only false but it has to be eliminated in order for science to do its job on whatever would stand in place of mental states.

Section IV--Defense strategies

In this section I will aim to present some possible defense strategies for FP. There are quite a few arguments defending FP, but my task will not be to present them all. I will present only three argument types. Those three types subsume a large number of views that assume more or less similar strategies.

First, there are arguments that question the status of FP as a theory. Most notably, Searle³⁵ has claimed that FP does not specify any laws; rather FP is just know-how. I will not attempt to treat this argument, because I do not agree with Searle's view that for FP to have laws, those laws would have to be something that is explicitly communicable and teachable like the laws of physics. I also disagree with his view that in order for a person to be said to be following, or implementing, a law of commonsense psychology, that person would have to be doing it consciously. Claiming that FP is just a matter of know-how merely

standing. The evidence for the existence of a posit come from positive evidence for the theory of which it is a part.

³⁵ Searle John R., The Rediscovery of the Mind, Cambridge, Massachusetts: MIT Press, especially. p. 58-63; ch. 8.

passes over the issue. Ultimately, one would have to unpack the meaning of that term, and this unpacking would probably entail the specification of law-like rules that underlie our accomplishments with FP.

Searle also claims that mental states are not posited entities. “We simply experience conscious beliefs and desire” (Searle, p. 59). Attacking eliminative materialism in this way is tempting, but it shows a basic misunderstanding of the position. Of course we experience all those states, but this experience could be a result of a conceptual framework, which is rooted in a theory. Therefore, claiming that experience mental states are experience does not preclude beliefs, desires, and sensations from being posits. A posit is something that can be experience. I will devote Chapter II entirely to the explanation of how it is that mental states can be posits.

The third type of argument, in defense of FP, is the one invoking special properties of FP as a whole. Proponents of this type of argument usually admit that FP is a theory but try to say something about why FP is special. For example, they claim, FP has certain properties, which could be construed as normative, that would prevent the elimination of FP.³⁶ Popper argues that materialism in general cannot explain the descriptive aspects of language like truth and falsehood, and including judgments about validity a invalidity of arguments. I will consider this argument promptly and then never mention it again, partly because I do not find views of this kind to be the real adversaries of

³⁶ Popper, K and Eccles, J. The Self and Its Brain, New York: Routledge, 1977, chapter 3, pp. 51-98.

eliminativism and partly because they are not within the scope of this dissertation.

Any views presupposing properties that are not reducible assume what Churchland's eliminativism rejects, which is that properties that cannot be reduced exist outside of the realm of physicalist theories. In that sense, eliminativists and the normativists are not restricted to the same paradigm. This is why the argument from normative properties will be gently ignored. But to address the argument superficially, normative properties alone are no indication that they cannot be reduced. The normative properties that are seen as embedded in Folk Psychology could be dealt with reductively, if an adequate explanation is discovered. However, if a reductive explanation is not available this would indeed be taken as proof that no such properties exist. But Eliminative Materialism at its best is not proposing that FP be replaced in absence of a better theory. What EM proponents are hoping for are achievements in the physical sciences that would accomplish a complete theory explaining all that exists. Such a theory would not leave out anything "real" unexplained. Thus, at that ultimate stage of development in science, FP will either be reduced or replaced without any noticeable lack. It is a big dream for science and one can either go along with that dream or not, but if one does not the criticisms against eliminativism, from that point of view, will not be substantial. Because the eliminativist can just say, "We haven't gotten to that yet, but don't worry when we get there we promise it won't hurt a bit!"

The third type of argument in defense of FP addresses the issues of its replaceability. I will give a preparatory exposition on this topic below, but I will leave the more extensive discussion of my view for chapter five. To begin, I think that the issues involved in the claim that FP is empirically false theory are distinct from the arguments that are involved in the eliminativist proposal that the framework can be replaced. The first entails claims on the scope of FP while the other presupposes the replaceability of FP, which rests on the human ability to adopt other theories in the place of commonsense psychology. The questions associated with the scope of FP entail empirical predictions about the generalizations that are part of the propositional body of FP, while replaceability makes empirical predictions about human beings.

The positions that focus on the replaceability of commonsense psychology split into two camps the externalists and internalists about folk psychology.³⁷ Stich intends this distinction between the two groups to be analogous to the schism in linguistics concerning intuitions that contribute to the judgments about the grammaticality of particular sentences. "On the analogy that we are urging, linguistic intuitions are analogous to peoples' spontaneous judgments about the correctness of proposed folk psychological platitudes (Stich, DM 128). On the externalist view of folk psychology the theory is nothing more but a systematization of our intuitions about mental states. Thus, if FP is just a systematization of commonly held intuitions about mental states, any other equally successful systematization can replace the one we currently have. In

³⁷ The grouping into two camps is borrowed from Stich, S. & Ravenscroft, I. "What is Folk Psychology?" Cognition 50, 1994: 447-68, particularly p.128.

other words, a folk psychology construed externally is underdetermined by our intuitions about mental states as well as considerations of simplicity (Stich, DM 128). Lewis is an example of an externalist, because he reduces FP to the platitudes commonly used to describe mental states. These platitudes entail laws or generalizations, that have their role in the prediction and explanation of human behavior but they are not internally represented.

However, if one is an internalist about folk psychology then FP is not only a systematization of our intuitions, but it is also internally represented and has a role in the production of the intuitions we have about mental states. Internalists are usually nativists, and liken FP to an internally represented grammar. The similarity between FP and innate grammar are extensive on this view. It is not just that the FP and innate grammar are both represented internally, but the processes by which we acquire both are similar.³⁸

If FP is more than just the generalizations of commonsense psychology, the empirical problems with the content of FP might not result in its elimination. At most it could result in the readjustment of some of the generalizations. Moreover, the views indorsing the internalist construal overlap with views that claim that the generation of folk psychological intuitions rely on innate mechanisms. Proposing that FP is innate undermines the equality of it with other empirical theories. If FP is an internally represented theory that is partly supported by innate tendencies, then it is unlike other theories. Perhaps, this is a

³⁸ See both Fodor, J. The Language of Thought, New York: Thomas Crowell, 1975, and Carruthers, P. Language, Thought and Consciousness, Cambridge: Cambridge University Press, 1996.

way in which we can fortify the status of our intuitions about mental states. FP construed internally gives a special status to our intuitions and then to commonsense beliefs. This status is partly derived from the idea that if certain aspects of FP are innate, then the evaluation of the truth of such a theory is separate from arguments that propose replaceability. If a theory is innate, then it may not make sense to speak of it as either true or false (Stich, DM, 129).

If it is true that the issues of the empirical truth or falsehood of a theory are distinct from the issues replacement, then falsehood of a theory does not entail that theory's replaceability. The contrapositive would be that the truth of a theory does not entail its adoptability. Things get even worse for EM, because eliminativism proposes replacement as the first element in the solution to the mind/body problem. Eliminating FP is just the initial thing to do; the process is complete by the adoption of a new, bigger, better scientific psychology and questions still remain about the actual possibilities of such an adoption. It is here that I see the place from my position. Although I will not align myself with either internalists or externalists as defined above, I see my position as having elements of both. I believe that the view currently designated as folk psychology is not innate, and that it can be construed externally in the style of Lewis. However, I think that some aspects of the framework are entrenched, such as the individuation mental states in terms of phenomenal properties. I plan on presenting the extended version of this view in chapter five. Generally, my argument is developed in two parts. The first is established in chapter two, where I will claim that defenders of the first premise of eliminativism cannot

establish a distinction between commonsense and all other frameworks, since no distinction can be made between beliefs in terms of their modes of being true. The frameworks, equalized in this way, can impose no conceptual or perceptual limits on each other. Commonsense has no resources to limit the categories of science; FP cannot restrict the field of discovery for neuroscience to commonsense mental states.

In continuity with that, my arguments will be to show that no such restrictions exist. There will be a presentation of examples that show that commonsense psychology changes as it is influenced by science. If that argument is accepted, there are issues about the efficacy of elimination. The categories and generalizations that are currently part of FP are shifting as a result of external influence. It must be, then, that FP does not restrict scientific discovery. Also, there seem to be no obvious restrictions on the character of FP commonly endorsed in everyday life. The categories of commonsense so loosely construed, cannot be the adversary of science because those selfsame categories are not impervious to its influence. In principle there is nothing standing in the way of complete elimination of mental states. But, the elimination of those states would not be fruitful or motivated, if there is no real friction between science and common sense about mental states.

Now, we come to second part of my arguments, which should establish that complete replacement cannot happen. In chapter five, I will describe a framework that fits some of the metaintuitions about commonsense frameworks, but its status as such is not dependent on necessity or pretheoretical knowledge.

This framework will support some of the categories of commonsense theories in general, such as the individuation of objects and the individuation of mental states in terms of how they feel. However, this framework is nothing like the fully enhanced folk psychology that is usually defended or attacked. It is just the initial rudimentary framework that is established as part of human development. Such a framework establishes the rudimentary individuation of common objects, and the limited individuation of some mental states such as the sensations associated with perceptual experience.

My arguments will support the view that this framework, which I called the original framework, is entrenched as the initial framework that develops for each person. The argument should not be construed as a claim about the innateness of this theory. I assume that there are strictly human limitations that bias the development of this original framework, but that is not equivalent to the claim that the framework itself is innate. My focus is mostly on the leap that is made as the framework develops, where one begins by having no concepts and develops some concepts. The jump that is made by the original framework is hard to influence. The learning of this initial framework is not like the learning of other types of framework, because it is established spontaneously. The spontaneity is described as the limited influence of instruction on the development of this framework. The spontaneous development of the original framework is one of its commonsense features.

Because the emergence of this framework is spontaneous, my argument will be that it cannot be replaced as the initial framework. Although, most of the

framework, as it is first established, will change, the original framework establishes the habit of individuating objects as such and mental states in terms of feels. Even though the particular features initially attributed to objects and mental states can and will change, the habit of individuating objects and having feels is not revisable. The latter are limits on theories that can be endorsed; even though they are not strictly speaking restrictions on scientific theories. The restrictions on replaceability are another of the features that make the original framework common sense.

Ultimately, the argument will be that although the first premise of eliminativism establishes the conceivability of reviseability of any framework, the replacement of frameworks requires physical possibilities. Those are not well established by eliminativisms. In fact, they are presupposed rather than supported in the prediction that commonsense frameworks will be replaced by scientific theories.

Chapter II

The Distinction between Common Sense and Science

Part I

In chapter one, my aim was to present some arguments for and against Eliminative Materialism, and situate my position within that dialectic. In this chapter, I will elaborate on some of the aspects of the argument that were introduced in the previous chapter. I shall also expand on the discussion regarding the status of FP as a commonsense theory, as well as the status of commonsense theories in general. My view is that the arguments that underline Eliminative Materialism are also the arguments that undermine the status of FP as a commonsense theory. At the very least, the success of the first premise of the new eliminativism erodes the distinction between commonsense and scientific theories.

There will be two parts to this chapter. The first part of the chapter will be focused on demonstrating that the arguments which support the first premise of eliminativism -that commonsense psychology constitutes a theory- erode its status as commonsense. In the first section, I will attempt to argue that in order for a claim to be commonsense, it has to have some features that distinguish it as such. The feature that could distinguish commonsense claims from all others is that they are not revisable, either by being necessary or pre-theoretical. It is my contention that the arguments that support the view that folk psychology is a

theory, assume other arguments that make it impossible for any claims to have the two distinguishing features of commonsense. No claims, and consequently no theories, are common sense. This is a mildly unfortunate consequence for eliminative materialism, because I argue that in order for elimination to be motivated it must be shown that the categories of commonsense are rigid in such a way that they are stagnating the progress of science. However, the rigidity of folk psychology can be established only on the view that it is a commonsense theory.

In section two, I aim to present the arguments against the first feature of commonsense: necessity. In my discussion of Quine, I plan to give an exposition of his argument that establishes the lack of distinction between analytic and synthetic truths. This argument will then lead to ontological relativity, where talk of existence only makes sense against a theoretical background. Quine's argument that individuation is a result of an established theoretical framework, rather than the other way around where objects themselves establish a conceptual framework, relies on both the undermined first dogma but also on inscrutability of reference. This latter part of the argument establishes that there are various ways of individuating content, and the decision is made, usually, after a theory is already in place. Parts of Quine's argument revoke the view that there are any necessary statements. It is this argument that allows Churchland to claim that no analytic statements can restrict our understanding of mental states. All statements are synthetic and revisable, therefore all that we think is

true analytically about mental states are just well entrenched statements that are part of a theory.

In the third section, I present Sellars' argument against the sense-data theorists, or what he calls the Myth of the Given. Sellars establishes a distinction between thoughts and sensations. The sense-data theories need for sensations to be propositional in order to serve as the inferential basis for other beliefs. Sellars' argument shows that sensations alone are not able to provide that base because they are not propositional. Sellars makes clear that aboutness of thoughts is confused with aboutness of sensations. Since the two are not equivalent, Sellars goes on to argue that in order for the aboutness of thoughts to be established, a person would have to already have a battery of concepts. One would have to have a conceptual framework to have thoughts that presuppose individuation. In this way Sellars establishes that there aren't any pretheoretical beliefs. Sellars proves that we individuate mental states the way we do because we learned how to apply a conceptual framework. This argument establishes for Churchland the groundwork for claiming that observations are theory-laden. Moreover, this allows for the argument that the way things seem to us is determined by theories about their nature.

In the second part of the chapter, I will present some examples that should show that folk psychology changes. Commonsense views are in the very least influenced by scientific views. The previous chapter should have established that there is no general criterion left by which one could tell commonsense from science about the mind. The only way to draw the boundaries of folk psychology

is to use the frequency of usage of certain platitudes. I will attempt to bring up some examples where discoveries in science have become part of the everyday explanations used to report and attribute inner states. My list will not be extensive or exhaustive, but it will be, I think, sufficient to prove that the purported plasticity of both our understanding and our experiences is true in practice, as is seen through the changes in folk psychology.

Ultimately, I will attempt to show that the view that is used as an example of commonsense about the mind is marbled with influences from outside commonsense, thereby making the ontology of FP not entirely its own. It is usually said that some of the problems in philosophy of mind can be traced back to the faulty commonsense view. But my claim will be that if the FP is not hermetically sealed off from influences outside itself, then it cannot be entirely blamed for any problems that are said to stem from that view. Some of FP's problems are imported. If the properties of mental states as per FP are a mix of science and commonsense, the elimination of just one partner might not solve any of the problems attributed to common sense.

Section I--Commonsense Claims and Reviseability

It is the aim of part of this chapter to support two claims. One of those claims is that in order for a belief, or a group of beliefs, to be commonsense, they must be clearly distinguishable from beliefs that are a consequence of holding a theory. The other claim is that areas of eliminative materialism depend on a distinction between commonsense and science. I plan to substantiate the

former claim first. My argument will be that the criteria that could provide ways to distinguish commonsense beliefs help establish a distinction between commonsense and scientific theories. If there are features that mark some claims and beliefs as commonsense, a distinction between commonsense and science can be established.

Alternatively, if there are no features that help us distinguish commonsense beliefs, there is no distinction between science and common sense. In order for the distinction between theories to exist, there should be a general criterion by which one could tell commonsense beliefs, from beliefs that are not such.³⁹ It is my contention that this general criterion coexisted and depended on the project of foundational epistemology. In addition, Eliminativism about mental states depends on the demise of foundational epistemology. The first premise of eliminative materialism, which establishes commonsense psychology as an empirical theory, builds on arguments that attack foundationalism and classical empiricism. Since eliminativism is incompatible with foundationalism, it cannot establish a distinction between types of beliefs.

Although, eliminativists and others partaking in the debate about commonsense tend to have a list of claims that they brand as commonsense, they seldom provide reasons for their classifications. Folk Psychology is said to be comprised of a designated group of commonsense beliefs. Churchland has a

³⁹ I plan to group beliefs in two piles only: those that are considered commonsense and those that are theoretical. I do not plan to make a distinction between beliefs that stem from differed kinds of theories, such as philosophical and scientific. This is because that particular distinction is not relevant for my project. Mostly, because I argue that once a belief is theoretical it is not common sense.

battery of claims that he cites as constitutive of Folk Psychology.⁴⁰ For example, commonsense psychology is attributed the view that propositional attitudes must be sentence-like in structure. The argument is that Folk Psychology is ontologically committed to propositional attitudes and that commitment entails that “sentence-crunching” is the primary mode of operation of the brain, as well as its primary mode of storage of information. If that claim is then empirically disputed, it should be concluded that FP is wrong about the way the brain works.⁴¹ In turn, evidence against sentence crunching is evidence contra propositional attitudes.

The argument assumes not only that FP is committed to this view, but it also presupposes that any view committed to the existence of propositional attitudes is committed that the propositional character of the attitudes is exactly replicated in the physical matter of the brain. If there are propositional attitudes, we must find sentences in the brain. I disagree with this feature of the argument, but I argue against it in chapter three.

To build on the commitment to propositional attitudes, FP is said to be committed to the view that propositional attitudes are causally efficacious. “The explanatory power of folk psychology depends on beliefs, desires and other propositional attitudes being the “springs of action.””⁴² Bermudez cites a key tenant of FP to be that “... (W)e act on objects in virtue of how they appear to

⁴⁰ For some of those see Churchland, P.M. “Eliminative Materialism and the Propositional Attitudes,” Journal of Philosophy, 1981, 67-90.

⁴¹ Some evidence against “sentence-crunching” as the primary mode is given by Churchland, Patricia S. Neurophilosophy. Cambridge, Mass: MIT press, 1986.

⁴² Jose Luis Bermudez, “Arguing for Eliminativism” in Paul Churchland, ed. Brian L. Keeley, Cambridge University Press, 2006.

us...” (Bermudez, 54). Again, empirical evidence against these purported commonsense claims is seen as evidence against commonsense psychology.⁴³

It will be my contention that the commitments of FP can be determined at most by the frequency of usage in particular contexts. In this way, we could reach the boundaries of FP in the way Lewis suggested: collect all the platitudes that people use and assume other people to use, in situations which require interpretation of human behavior.⁴⁴ In the end, we will have a body of claims that are commonly used, and inevitably a lot of them would refer to propositional attitudes, and other mental states. Based on that particular grouping of platitudes, one could extrapolate a view that has some of the attributes that are cited above.⁴⁵

Frequency of usage, or ubiquity, is not the right way to determine the status of a claim as common sense if the aim is to draw a distinction between commonsense theories and scientific theories. One needs another type of general criterion by which we could distinguish commonsense beliefs just by looking at the claims, and I will argue that no such criterion is at the eliminativists' disposal.

⁴³ For evidence against the listed claims see Bermudez, 52-63.

⁴⁴ For more on Lewis see back in Chapter one, Section two.

⁴⁵ There is a distinction between two types of functionalism based on the type of claims that enter into the functional definition. See Ned Block “Troubles with Functionalism” in The Nature of Mind, ed. David Rosenthal, 1991, p. 214. My aim is not to pick a view that sides with either one of those. Rather my aim is to show that there is no distinction between the two, in terms of one collecting common sense claims and the other scientific. The two kinds of functionalism aim to define the terms of two different empirical theories.

In general, commonsense beliefs are often taken to designate a class of beliefs that are commonly endorsed, and commonsense terms are terms that most people know and use. Lewis's functionalist argument for implicit definition of commonsense mental terms uses the frequency and context of usage of mental terms as a way to pick out platitudes that would provide this functional definition for mental states. In order for mental terms to count as commonsense they should be mostly used in everyday life by laymen. Ubiquity, then, only establishes that there are some claims that are more frequently used than others, but it does not establish that those claims are common sense. The ubiquity rule relies not on the claims, but also on the context in which they are uttered. I think this way of parsing commonsense and scientific claims is inadequate. A criterion that attempts to make the distinction by using ubiquity relies on another criterion that would allow us to pick the right platitudes. The inclusion of the right platitudes would, in turn, depend on other distinctions that are even more difficult to make, like who is a scientist and who is not.

My aim is not to argue that this or that particular claim is commonsense; rather I assert that because FP is a theory, nothing we say about the mind is common sense. Even more broadly, if individuation is a result of holding a theory, nothing presupposing it is common sense. Eliminativists should take notice because the arguments that provide support for individuation being inferential are also the arguments that must be accepted in order to claim that FP is a theory. Then, if one is an eliminativist, one must accept that FP is not common sense. I maintain that the same is true for other such examples, where

claims about mental states are deemed commonsense because they are said to be part of FP. I specifically address some such claims in chapters three and four.

Ubiquity is relevant only if one wishes to discover which terms have taken root in colloquial usage. This by itself says nothing to us about the character of the claims that are in use. Colloquial usage is influenced from various directions. Although, it is often thought that commonsense is influenced by religion or other such sources that tend to multiply ontology, I will claim in the last section of this chapter that commonsense is currently more and more infused with science. The inclusion of the scientific jargon into folk psychology undermines the idea that ubiquity can be used as way of distinguishing between science and commonsense.

There are a few features that could help distinguish commonsense beliefs. To put it tersely, a belief is commonsense if it is unrevisable. A belief can be unrevisable either by being necessarily true in virtue of being analytic or it can be unrevisable by being noninferentially true. Analytic beliefs are such that they are true in virtue of their meaning and as such they cannot be revised. It is thought that the statement 'Bachelors are unmarried man' is analytically true because no empirical evidence can dispute this claim, since the statement is true by definition. Assuming the possibility of analytic statements, one could fix the definition, and ultimately the properties, of certain entities a priori. For example, one could cite some of the following statements as analytically true:

- 1) Mental states are states that are conscious.

- 2) Mental states have phenomenal properties.
- 3) Mental states are causally efficacious.
- 4) Mental states are such that they are incorrigible.

Statements 1-4 are such that they could be said to be a priori true about mental states and that they cite features of mental states that are true by definition about those states. They are a priori true because they do not seem to be formed based on empirical discovery; rather they form our understanding of what a mental state is. In fact, if one considers any of the four claims as necessarily true, they would limit the scope of empirical discovery. It would be impossible to discover a mental state that is not conscious, because a state that lacks that feature would be immediately disqualified. It would be like claiming that one has met a bachelor that was not married.

One can see that if commonsense psychology is comprised of such claims, it could limit scientific psychology to the explanation of those core tenants. It is in this sense that one could understand the plight of the eliminativist. If the statements 1-4 are false, but are taken to be the categories that limit the field of discovery for an empirical psychology, then folk psychology truly could be in the way of scientific discovery. However, as it will be clear from section two, no such statements are possible because there is no distinction between analytic and synthetic statements. The statements that were listed above are not analytic but are statements that can be evaluated empirically, as part of a theory. Thus, our understanding of mental states cannot be restricted by any seemingly analytic statements about the mind.

The other kind of permanently true beliefs are beliefs that are noninferentially true. Beliefs of this kind are not necessary in the same sense as analytic beliefs, but they are permanently true because their truth needs no justification from other beliefs. The truth of noninferential beliefs is self evident. It used to be the case that simple observational beliefs were considered noninferentially true. Observational reports of middle sized objects such as tables and chairs used to be considered noninferential. One needed nothing else but to look at a table in order to see it as such. These types of beliefs used to be supported by the idea that there is such a thing as 'direct' knowing, by which one could individuate an object from the other without having to endorse a theory or a conceptual framework. Thus, the empirical fact that we see objects the way we see them, and that we report mental states in the way that we report them, is a result of merely noticing what is there. Beliefs that are known via direct knowing are known prior to theory. The special status of commonsense has its source partly in this idea that there are beliefs that are known prior to any theory. It follows from the status of these beliefs as pretheoretical that they cannot be revised by theory. Thus, what one knows via direct knowing, one knows for sure.

Direct knowing is supported by foundationalism and that was attacked by Sellars, because it assumes that there is a row of such noninferential beliefs that can be the observational basis for any theory seeking to explain a particular domain. Direct knowing, then, supports the view that commonsense can provide the observational basis for any theory about a particular domain. In this way, commonsense restricts the domain of theory but it is not itself theoretical.

Direct knowing also supports the special status of the commonsense about the mind. In the case of mental states one is not speaking of observations, but one is speaking of direct introspection, or noninferential individuation of mental states. One can report the presence of a sensation or thought, and the report would count as necessarily true because they are said to be introspected directly. Again, like in the case of individuating physical objects, one can individuate mental states without knowing any theory. A babe as well as an adult can tell sensations from thoughts without any prior learning of a conceptual framework.

Assuming a world where epistemology can support different modes of truth and direct knowing, we can conclude that there are some beliefs that are true across theories and prior to any theory. We can then restrict the domain of commonsense to only those types of beliefs. On the other side we will be left with inferential beliefs that are a result of endorsing a theory, those types can be revised as the theory changes and their truth is only contingent. The distinction between commonsense and science comes down to revisability.

The features that support the distinction between commonsense beliefs and beliefs that stem from theory also distinguish commonsense psychology from empirical theories. This is why the claim that folk psychology is a theory and that mental states are posits tends to seem counterintuitive. Attributing folk psychology the status of a theory seems to turn things onto their heads, because the implication of that claim is that we only report having mental states because we endorse a theory that features those states. It seems obvious to all creatures

with minds that things go the other way around: we report mental states because we have them. Further still, because it seems to us that we know our mental states noninferentially, there is the sense that we cannot be wrong about them. For all those reasons any scientific theory should have to contend with explaining those inconspicuous entities and their features in accordance with the dictates of commonsense. It seems against intuition that folk psychology is an empirical theory that can be false as well as revised.

To return back to eliminativism, the first premise of eliminativism is supported by the arguments that are the demise of both necessary truths and direct knowing. In fact, the attacks on the analytic/synthetic distinction, as well as the argument against noninferential knowing, make it possible for Churchland to argue that folk psychology is a theory. The view that folk psychology is a theory rests on the arguments that show plasticity both in understanding and perception.⁴⁶ The arguments that collapse the distinction between analytic and synthetic statements provides for the argument that all we think about mental states can change and is revisable as the consequence of empirical discovery. While the arguments that show that there is no direct knowing and no beliefs that are noninferentially known allow for the claim that perception is plastic. There could be change in what we observe in a way that tracks changes in theory, because observations are redolent of theory.

All those arguments are the basis for the claim that our common sense about the mind is nothing but an empirically evaluable theory. Mental states are

⁴⁶ Churchland, P.M. Scientific Realism and the Plasticity of Mind. Cambridge, U.K.:Cambridge University Press, 1979, Chapters 1 and 2.

not known noninferentially, they are known only after one has learned an entire conceptual framework. If one agrees with the truth of eliminativism's first premise, one must countenance the rejection of foundationalism and empiricism that are built into that claim. Consequently, the arguments that support the first premise of eliminativism erode its status as commonsense. Folk psychology is not commonsense because no beliefs are noninferential and all of them are revisable. The antagonism between folk psychology and scientific psychology is then just a regular rivalry between empirical theories. The theory that wins is the theory that is of better quality, which is determined by simplicity, explanatory power, and coherence with other theories.

I think this should be a mild problem for eliminativism. If one equalizes the status of all beliefs, one can establish the possibility that folk psychology is false, but one also establishes that the categories of commonsense are nothing special. If folk psychology is a theory, then its categories are not such that they should limit the study of scientific psychology. Although it is true that that makes them a candidate for elimination, it also deflates the need for that elimination. If commonsense psychology is false- and because of its status as commonsense, restricts our understanding of mental states- then one must eliminate it in order to make room for a better theory. However, if folk psychology is not commonsense, then its categories do not restrict our understanding of mental states and the science of our inner states can proceed without paying much heed to the folk view about those very same states.

The purported commonsense status of folk psychology can also account for the seeming rigidity of that view. The idea has been circulated by Churchland that folk psychology does not change. In the last part of this chapter I will show that it does change. The changes in FP are sufficient to show that what we think of mental states can be influenced and because of that it is not clear why one should eliminate that view. The dispute is not after all what we call our inner states; rather it is a dispute about the nature of those states. One could argue for the elimination of FP if it can restrict either our understanding of our mental states or the way in which we perceive those states, and the argument that FP is a theory shows that it cannot. Ultimately, the argument is that it only makes sense to call for elimination if folk psychology is commonsense, and it was stated earlier that eliminativists cannot establish that status for FP because they must maintain that it is a theory. The next two sections should provide a more elaborate account of the background for the claim that folk psychology is a theory.

Section II--Necessity

The first feature that could set commonsense beliefs apart relies on the establishment of modalities of truth. One such distinction rests on the difference between necessary and contingent beliefs. I would argue that commonsense beliefs are such in terms of being necessary,⁴⁷ and because they are necessary they are not revisable. The feature of necessity captures a meta-intuition about

⁴⁷ By that I do not mean to claim that all beliefs that are necessary are common sense, just that commonsense beliefs must in the very least be necessary.

beliefs that are commonsense, which is that they are true in a stronger way. Commonsense beliefs have features that are in opposition to those of beliefs that stem from theory. Beliefs that are known as a result of endorsing a theory are usually contingent and revisable. In this case the distinction between commonsense and beliefs held as a result of theory, rely on the distinction that can sustain different modalities of truth. As underlined before, the aim of this section is to present Quine's arguments that challenge the distinction between the analytic and synthetic and thus challenge the view that there are different ways in which a claim can be true. The following is an exposition of Quine's argument that shows that there is no non-circular definition of analyticity.

In "Two Dogma's of Empiricism,"⁴⁸ Quine proposes a few ways of establishing a definition of analytic statements. A statement is 'analytic' when it is true by virtue of meaning and independently of fact (Quine, 21). Quine emphasizes that the word 'meaning' in the definition should not be confused for the extension of a term, or the entity that the term purports to designate, rather it should be taken to refer to intension. Once this distinction is drawn, Quine thinks, that the business of semantics is the synonymy of linguistic forms and the analyticity of statements.

There are two types of analytic statements: ones that are logically true and ones that can be turned into such statements via synonymy. For example,

- 1) No unmarried man is married,

⁴⁸ Quine, W.V.O. "Two Dogmas of Empiricism" From A Logical Point of View. New York: Harper and Row, 1961.

is true under any reinterpretation of the subjects and predicate terms because they are complementary terms, but:

2) No bachelor is married,

can be turned into 1). By substituting 'bachelor' for 'unmarried' we get 1) out of 2). The "conspicuous question", then, becomes how to define 'synonymy'.

Quine tests Carnap's attempt at clarifying the notion of synonymy, which invokes state-descriptions.

"A state-description is any exhaustive assignment of truth values to the atomic, or noncompound, statements of the language. All other statement of the language are, Carnap assumes, built up of their component clauses by means of the familiar logical devices, in such a way that the truth value of any complex statement is fixed for each state-description by specifiable logical laws. A statement is then explained as analytic when it comes out true under every state description" (Quine, 23).

But, according to Quine this type of definition does not do anything for the explication of synonymy between terms such as 'bachelor' and 'unmarried', which are not logically dependent. Consequently, there could be a state description that assigns truth to both statements: 'Bob is a bachelor' and 'Bob is unmarried,' thereby making 'No bachelors are married' a mere generalization. Quine, concludes that Carnap mostly reiterates the notion of logical truth, rather

then giving a definition of synonymy that makes statement 2) analytically true. We then still do not have a definition of analyticity that rests on synonymy.

Another way of explaining how statements of the type in 2) can be reduced to statements that are logically true is by claiming that it is by definition. The term 'unmarried,' defines the term 'bachelor.' And if by definition we mean an established custom, by which we link the meaning of bachelor and unmarried man and record it in a dictionary, it is clear that we have not found an independent clarification of synonymy. "The lexicographer is an empirical scientist, whose business is the recording of antecedent fact;..." (Quine, 24). From this we should conclude that the dictionary presupposes synonymy. This, in turn, means that definition in general only relies on pre-existing synonymy, hence we cannot use it to explain synonymy.

A superficially more promising variant of 'definition' are, again, provided by Carnap and his *explication*. Explications are different from regular definitions because they aim to improve upon the meaning of the definiendum. This kind of definition, then, does not merely provide a synonym but aims to clarify the meaning of the term to be defined, by extending the context, via the definiens, in which the term can be applicable. But, Quine still finds fault with this kind of definition. Although, explications do not rely on preexisting synonymy, the way mundane definitions do, they still are grounded on previously established synonymy. The meaning of both the definiendum or the definiens are supported by the more or less precise meaning of the terms that constitute the context in which the terms are applied. "Any word worth explicating has some contexts,

which, as wholes, are clear and precise enough to be useful; and the purpose of the explication is to preserve the usage of these favored contexts while sharpening the usage of other contexts” (Quine, 25).

The third and last way to think of definition as an explanation of ‘synonymy’ is to turn to a situation where a sign or a word are created strictly for the purposes of synonymy, i.e. abbreviations. “Here the definiendum becomes synonymous with the definiens simply because it has been created expressly for the purpose of being synonymous with the definiens” (Quine, 26). Quine praises this type of synonymy, but urges that these are limited cases and that for all other examples of definition, synonymy is already presupposed.

A distinct way of approaching synonymy is interchangeability. Thus, two terms are equivalent in meaning if they are interchangeable, in all contexts, in such a way that they preserve the truth-value of a statement. In the following examples Quine is assuming analyticity, where earlier we attempted to define it and keeps on searching for synonymy. Quine wants to limit what he means by synonymy to exclude “complete identity in psychological synonymy,” and to include only cognitive synonymy. Moreover, interchangeability should apply everywhere except within words, and this includes expressions like: ‘bachelor of arts’ or ‘bachelor’s buttons.’

Hence, to say that two terms are synonymous is to say that the following statement is analytic:

- 3) All and only bachelors are unmarried men.

But, to define synonymy without relying on analyticity. Thus, the question becomes whether interchangeability *salva veritate* is enough. Initially it seems that it is, consider the following statements:

4) Necessarily all and only bachelors are bachelors

and if the terms 'bachelor' and 'unmarried man' are synonymous, 4) will remain true necessarily construed to apply only to analytic statements. Resulting from substitution we get:

5) Necessarily all and only bachelors are unmarried men.

And it seems that is, like 4), true. "But to say that 5) is true is to say that 3) is analytic, and hence that 'bachelor' and 'unmarried man' are cognitively synonymous" (Quine, 29).

The problem with this solution is the adverb 'necessarily'. It only applies to sentences that are analytically true, but we have not yet been able to define analyticity independently. In order to "condone the use of this adverb" we must already be square on the use of analyticity, which was our starting point as well as our goal. "Our argument is not flatly circular, but something like it. It has the form, figuratively speaking, of a closed curve in space" (Quine, 30).

Quine thinks that interchangeability *salva veritate* only works in a language that is entirely extensional, languages that are only concerned with reference rather than cognitive synonymy where we are looking for intensional agreement. In these extensional languages, two terms would be synonymous and therefore interchangeable if they had the same reference like 'creature with a heart' and 'creature with a kidney.' The synonymy in that case rests only on

accidental matters of fact, meaning that two terms happen to refer to the same entity. Thus, the statement in 3 is true, accidentally because the two terms are coextensive. But, we were not looking for 3) to be true we wanted it to come out necessarily true. Moreover, we did not want to find out that 'bachelor and 'unmarried man' merely refer to the same object we wanted them to have sameness of meaning--cognitive synonymy. Thus, Quine concludes that if a language contains the intensional adverb necessarily, it guarantees interchangeability *salva veritate* only if we already have a good understanding of analyticity. Hence, the vicious elliptical curve in space alluded to previously.

Thus far, we have not found a good way of defining analyticity via cognitive synonymy, so Quine attempts once more to define analyticity independently. Perhaps the problem with 'analyticity' is present only in natural languages.⁴⁹ If, then, we restrict our focus to only artificial languages, which do not suffer from issues with vagueness and ambiguity, the definition of analyticity will become obvious. If we restrict our search to only artificial languages we might end up more successful. Perhaps we could use semantical rules that designate statements as analytic. However, in order for those rules to do that we would already have to know what analytic means. One could have a rule that assigns the terms 'analytic' to a group of statement but the rule itself already assumes that the term has been defined. There could even be a symbol that

⁴⁹ Quine here takes the "problem" to be how to distinguish analytic from synthetic sentences, rather than finding a noncircular definition of analyticity. The two problems are different, since one could be able to distinguish the two types of statements without ever being able to come up with a clarification of 'analyticity.' In general, the problem is more the latter than the former, since it seems that people have no real trouble sorting synthetic from analytic statements.

stands for analyticity of certain statements relative to a language. We could have something like 'analytic for L_0 ,' where L_0 stands for an artificial language. However, "...(S)aying what statements are analytic for L_0 we explain 'analytic-for- L_0 ' but not 'analytic,' not 'analytic for'" (Quine, 33).

Thus, semantical rules have not fared better than all the other previous attempts to pin down analyticity. Perhaps, we can define analyticity in the following way: a statement is analytic if it is true according to semantical rules. Here, Quine grants that 'truth' is unambiguous.

But, analyticity clarified in terms of truth according to semantical rules only shifts the mystery from the former to the latter. To sum up, limiting the scope of languages to the artificial ones does not help with analyticity. In the first case, semantical rules of these artificial languages can help us designate a class as analytic statement relative to an artificial language, but do not help with the clarification of the term. In the second case, we can provide a definition of analyticity via semantical rule, but as soon as that is done the meaning of the definiens is dimmed.

At this point, "It may be instructive to compare the notion of semantical rule with that of postulate" (Quine, 35). The purpose of doing this is to attempt to pin point statements that are true by semantical rules, and distinguish them from statements that are true by some other means. Now postulates are, like semantical rules easy to identify if we are doing it relative to a set. Postulates are members of a set and relative to the set of semantical rules so are semantical rules. "But given simply a notation mathematical or otherwise, ...,"

who can say which one of its true statements rank as postulates?" (Quine, 35). Any set of true statements can be said to be postulates as much as any other set. It only makes sense to favor one such set over another, if we are attempting to identify a group of true claims as postulates if what we are trying to do is to derive another set of statements via set rules and given the previously designated postulates. There is no independent way of picking postulates, or making their truth different from the truth of any other statement that can be derived from them. Quine thinks that the case is similar with semantic rules, "no one signalization of a subclass of the truths of L is intrinsically more a semantical rule than another; and, if 'analytic' means 'true by semantical rules,' no one truth of L is analytic to the exclusion of another" (Quine, 35). In short, we have not been able to find a sharper definition of analyticity in terms of semantical rules, because any such definition would already assume a clear notion of analyticity.

Thus far, all our attempts to define analyticity have been circular. We attempted to define analyticity by appeal to cognitive synonymy, where our efforts have been to find an independent definition of the latter term. All those have failed, because we found them all to presuppose synonymy rather than explicate it. Then, there was an attempt to assume analyticity in order to define synonymy via interchangeability *salva veritate*, where we said that two terms are synonymous if they can be substituted for each other in all context without change in truth value. This attempt did not succeed because of the use of the adverb necessarily, because this modal was found to be circularly dependent on

analyticity itself. So, we could not define analyticity without synonymy, which could only be defined via necessity, which was circularly related to analyticity.

The attempts to define synonymy were relinquished in favor of looking directly to define analyticity via semantical rules. Here, too, we found that analyticity could not be defined via semantical rules because all the attempts relied on an assumption of analyticity. Semantical rules could help us designate a class of analytic statements, but it turned out that it was difficult to differentiate the class of truths that were designated as analytic via semantical rules as opposed to statements that were true but not analytically. Thus, it turned out that there is no sound definition of analyticity even if we are only looking to artificial languages.

We should be led to conclude that there is no good definition of analyticity, as well as that there is no good way of drawing the distinction between analytic and synthetic statements. Moreover, since there is no good distinction we should be compelled to conclude that all statements that are true are true in the same way. Prior to this argument it was possible to assume that claims could be true in different ways. After Quine's argument one should be compelled to conclude that all true claims are true in the same way. The argument for ontological relativity supports the view that all true claims are synthetic and empirically testable.

Thus far I have said that one distinguishing feature of commonsense beliefs is necessity, and I claim that Quine's argument shows that there are no necessary beliefs. I now wish to say how all this makes the first premise of

eliminativism possible. Eliminativists use Quine as their starting point, so they must be committed to those arguments. The argument that there is no distinction between analytic and synthetic beliefs leads into the argument that all beliefs are empirical. This opens the door for the eliminativist to construe our beliefs about mental states as empirically testable. This enables the claim that what we believe about mental states constitutes a web of empirically evaluable beliefs. The following is Quine's argument against the second dogma.

The Second Dogma, which I will use as a stepping stone to indeterminacy of translation and inscrutability of reference, is the refutation of verificationist theory of meaning. That theory proposes to establish a criterion for synonymy in the following way: two statements are synonymous if and only if they are confirmed by the same empirical context. Thus, synonymy is formulated as to hold between two statements, and in relation to the state of the world that confirms each of those statements.

The way Quine disputes this view is by putting a dent into reductionism, which is, in this case, the view that each meaningful statement can be translatable into a statement about immediate experience. This should be the familiar view, often encountered in the 17th and 18th century. Both Lock and Hume advocate for this type of view where knowledge is built up of sense experience, going from simple ideas, which are the direct product of external object acting upon the senses, and resulting into complex ideas by uniting, or

abstracting them from the basic ones.⁵⁰ According to this view all statements can be traced back to some combination of simple ideas, which are the aforementioned immediate experiences. This is the classical empiricist view. The thing that will become disputed is, of course, the claim that such a reduction to singular statements is possible. It is known that Quine will claim that no such reduction is possible, and that no singular statement can be a candidate for empirical confirmation. Quine, ultimately claims, that we do not have a pyramid of knowledge built on solid foundations but a web of belief, where the entire conceptual framework faces the tribunal of experience. Moreover, all statements are potential for revision. Logical and mathematical truths are closer to the center of the web, and observational beliefs hover around the edges. Consequently, for the central areas of the web to be revised one would have to have more violent perturbations, and very slight shifts can cause change at the edges.

The web of beliefs where each belief is revisable, places us on shaky ground, one almost feels at sea, on a boat or some such thing. There is no certainty or verification for miles. All things we know, even things in the very center like logical truths, are in principle revisable. Such a revision does not seem likely or imminent but still if one can not trust the logical postulates one has nothing of knowledge. But, worse of all, the dent in classical empiricism annuls the comforting conviction that our knowledge is knowledge about the world. Our

⁵⁰ Locke, John. An Essay Concerning Human Understanding. Everyman, 1995, pp. 91-92.

beliefs, we used to think, should somehow represent or track the real world unmediated. Not so, and I will provide reasons right bellow.

The argument for ontological relativity supports the conclusion that individuation is always relative to a theoretical background. The way in which we are able to tell things apart from each other is called individuation. Our ability to individuate has been long thought to be the product of the world. This view is that we can tell chairs apart from tables, sort apples from pears. Moreover, the existence of those categories has been established, according to empiricist epistemology, in the mind in reaction to the world. We have the categories of objects that we have, because the world has those categories. The objects as such exist without any theoretical backing and the mind's job is to represent those objects. The view is rooted, and begins, with the argument for indeterminacy of translation. It is a known argument; thus I will not dwell on it for very long. I will attempt, only, to approximate Quine's argument.

An explorer of foreign lands finds himself in an interaction with a native. The explorer and the native do not speak the same language; furthermore, the explorer does not have any knowledge of the natives culture. This is a case of radical translation. Using this situation as a device, Quine attempts to recreate an attempt to communicate between the two people. Famously, the native points to a skipping rabbit, in front of him, and utters, "Gavagai!" The situation seems to compel both the explorer and the reader to conclude that the correct translation should be something like 'Gavagai' means rabbit.

However, Quine's argument will be that unless we already have a conceptual framework, or "individuation machinery," as our background, there would be no non-arbitrary way to decide between two or more candidate translations. When the native points to the space in front of him and says, "Gavagai," we would not be able to decide whether the native means 'undetached rabbit parts,' 'rabbit stage,' or 'rabbit.' A decision between those three cannot be made prior to the establishment of a conceptual framework that would propose a parsing of the world in terms of rabbits as opposed to undetached rabbit parts. A choice between those three proposed translations is a decision between three ways in which one could individuate the "rabbit space" in front of the native. If there were no additional resources by which we can establish which of the proposed individuation the native favors, our explorer would not be able to translate 'Gavagai' as rabbit, based only on the native's behavior.

The issue of translation, the decision how to translate the native's utterance, concerns indeterminacy of translation. But, Quine argues that it is more than that because the inability to decide between proposed meanings, or intentions, is trailed by an indeterminacy of reference. The indeterminacy of reference is manifested in the indecision between the three candidates for individuation. The explorer is not only unable to tell you what the native means, but he cannot even tell you what the native is pointing to. "The indeterminacy of translation now confronting us, however, cuts across extension and intension alike. The terms 'rabbit,' 'undetached rabbit part,' and 'rabbit stage' differ not

only in meaning; they are true of different things. Reference itself proves behaviorally inscrutable” (Quine, 35).

Quine foretells that indeterminacy of reference should make a greater impact on us than the indeterminacy of translation, since meaning is always less precise than reference. Squabbles about the meanings of words occur even within one language. The inscrutability of reference should prove more surprising, because disputes about reference hardly ever arise within one language. This is as it should be because it is the language that establishes a system of individuation. A language already entails a choice between ‘rabbit,’ ‘undetached rabbit parts,’ and ‘rabbit stage.’ By learning that language the native acquires a particular apparatus of individuation and so indeterminacy of reference does not arise within a single language. “No...indeterminacy obtrudes so long as we think of the apparatus as fixed. Given this apparatus, there is no mystery about extension; terms have the same extension when true of the same things” (Quine, 35).

It should not be assumed, however, that the conclusion from the scenario of radical translation is limited in scope. The exotic setting highlights both types of indeterminacy, but the discovery that reference is inscrutable applies across the board. Radical translation is only meant to alert us that reference, sans apparatus of individuation is inscrutable. It is this apparatus that settles the issue of individuation, not reference or ostension alone.

Indeterminacy occurs even in English, only we are accustomed to accommodate the meaning of our interlocutors based on the principles of charity

(Quine, 46). Even speakers of the same language differ sometimes about what they mean by the same word. Our construal of what our friends and neighbors mean is not only mediated homophonically, rather we tend to adjust what a person says in such a way as to assign them the most charitable interpretation. These reinterpretations of our neighbor's speech can also entail a readjustment of his apparatus of individuation, thereby changing her references. Thus, we are reproducing here inscrutability of reference, even within a language. Ultimately, inscrutability of reference arises even applied to us, because "...inscrutability of reference is not a inscrutability of fact; there is no fact of the matter" (Quine, 47). Thus, even for ourselves we cannot make a principled difference between referring to 'rabbits' and referring to 'rabbit parts.'

Quine's argument is aimed to support the claim the reference does not make sense unless it is in relation to a background language. There is no fact of the matter, outside of theory. "...Reference is nonsense except relative to a coordinate system. In this principle of relativity lies the resolution of the quandary" (Quine, 48). The question of whether the word 'rabbit' refers to a rabbit is only meaningful relative to an individuating apparatus, which is in this case English. The way to figure out what the native is referring to with 'gavagai' can only be settled in relation to a particular language. We can either attribute the native our own way of parsing rabbits or we can come to know his background language. "Querying reference in any more absolute way would be like asking absolute position, or absolute velocity..." (Quine, 49).

This relativity principle also answers the question about the objects of theories. The precise nature of the objects is only meaningful in reference to a theory. So Quine claims that it is nonsense to speak of objects absolutely but only in terms of how one theory can be reinterpreted into another. This reinterpretation is in some cases reduction, whereby one background theory has as its part a subordinate theory, covering a lesser universe, and can be reduced to an even lesser theory by reinterpretation. Reference is inscrutable and therefore there is no fact of the matter about the existence of objects absolutely. We know objects to exist only in terms of properties that they possess and those are always determined in reference to the theory that features them.

“We cannot know what something is without knowing how it is marked off from other things. Identity is a piece of ontology” (Quine, 55). If there is no background language there are no resources left to distinguish or identify any objects, because we do both of those only in terms of this or that property. Two things are identical only if a theory does not distinguish between them, but it identifies them only in terms of a property that they have in common. Now if there were no theory, there would be no resource left for identification, since no such relation is possible of objects taken abstractly from any theory. For example, in a language only distinguishing between fruits and vegetables, a pear and an apple would be the same type of objects and could be substituted for one another. To distinguish between kinds of fruit we would have to rely on a different background language that takes into account alternative properties.

All of this applies to platitudes about mental states. The first part of Quines' argument should establish that no claims are analytic. Therefore, none of the platitudes about mental states are true because they are analytic, and hence they lack one of the marks that would be able to distinguish them from other statements as commonsense. The possible claims of commonsense psychology that we listed in section one as analytic statements about the mind then turn out to be just a more central part of the web of beliefs. Statements that are constitutive of folk psychology can be revised because they are not analytic. Also the nature proscribed to mental states is the result of endorsing the folk psychological framework. The properties that help individuate mental states as we do also fix their nature as it is in current folk psychology. But because of indeterminacy of both kinds, changes in FP theory, or the reduction to another theory, will change the properties and nature of mental states. Conceptually there are no obstacles to a complete replacement of all that we thought about mental states. In this way elimination is made possible in principle. It is Churchland's contention that it will happen in practice.

FP construed as a conceptual framework faces the tribunal of experience and this or that part of it can be revised. Ultimately, nothing prevents the entire framework from being revised. We could not claim that any statements about mental states are analytic and we further saw that folk-psychological entities are in place as a result of holding a theory, and then mental states do not frame psychology. We do not begin from mental states as established phenomena that require explanation by a theory. We begin from a theory that proposes a way to

individuate inner states. If there is, then, a new conceptual framework that proposes an alternative way of individuating inner states, and in case there is a reduction of one to the other framework the properties of the entities that were “essential” on the FP framework might not be such on the other. In the competition between the two theories, FP and scientific psychology, only the quality of the theory will make the difference. The better theory should be the one to become or stay the predominant theory about inner states.

By equalizing the playing field when it comes to the truth of claims, we make all claims alike. If it is theories that propose ways to individuate, then all entities are individuated as a result of theory. Consequently, it seems to me that all theories and all entities are of the same type. No claims are necessary. Nothing is known without knowledge of a conceptual framework. Thus, all we claim and know is a result of theories that are empirically evaluable.

Section III--Pretheoretical Beliefs

In this section, I wish to address the issue of noninferential beliefs and direct knowing. In the previous section one could clearly make up that observational statements, as a result of inscrutability of reference, are not such that they are true noninferentially. The references of our observational sentences are fixed only after the institution of a conceptual framework. Thus, in order to see this or that object as such one must possess a conceptual framework. Sellars proposes an argument against noninferential knowing specifically about mental states and in what follows I will present the relevant aspects of his

argument. In the end I will show how Sellar's argument ties into Churchland's claim that perception is shaped by the conceptual framework that we endorse.

Sellars proposes an argument that revokes the claims of sense-data theorists and in the process puts forth an argument directly attributing the status of posits to mental states. Sellars' argument is largely aimed at disputing the idea of givenness, or what he sees to be the Myth of the Given. This myth is what Sellars thinks is at the base of the arguments put forth by sense-data theorists. The view about the mind is mainly fueled by a distinction between sensations, or immediate impressions, and thoughts. I will further elaborate on that, but I will first briefly sketch Sellars' view on the commitments of the sense-data theorists. I use this argument because it precludes the grounding of knowledge on immediate perceptual experiences. As we will see perceptual experience, that is propositional, presupposes a conceptual framework.

The following two ideas are the core of the Myth of the Given:

- (1) The idea that there are certain 'inner episodes,' e.g. the sensation of a red triangle or of a C# sound, which occur to human beings and brutes without any prior process of learning or concept formation, and without which it would be--in some sense--impossible to see, for example that the facing surface of a physical object is red and triangular, or *hear* that a certain physical sound is C#;
- (2) The idea that there are certain 'inner episodes' which are the noninferential knowings that, for examples a certain

item is red and triangular, or in the case of sound, C#, which are the necessary conditions of empirical knowledge as providing the evidence for all other empirical propositions.⁵¹

The first idea supports what I earlier promoted as the idea that commonsense presupposes direct access to particulars, or entities. In the first premise the idea is that one can have a sensation, or some such 'inner episode,' without having any prior concept and which makes it possible for people and brutes to detect properties of objects in the world.

Sellars is recounting the idea that sensations are supposed to accomplish the task of informing us about things in the world from scratch. Sensations are supposed to provide knowledge without any prior reliance on concepts. You can know nothing and then learn something. This ability is supposed to assure the ascent from simple to complex ideas.

The second premise is the recounting of the familiar foundationalist view, where inner episodes provide propositional material that is noninferential. Sensations provide us with propositions about appearance properties of objects that will ultimately serve as grounding for other inferred propositions. Sellars plan is not to attack the existence of inner episodes, but to refute the idea that inner episodes, that are propositional in character, can be had without any reliance on antecedently acquired concepts.

⁵¹ Sellars Wilfrid. "Empiricism and the Philosophy of Mind." Science, Perception and . Atascadero, California: Ridgeview Publishing, 1991, p140.

Sellars begins by asserting that *being* red is logically prior to *looking* red. But wishes to support the necessity of the statement, X is red if and only if X would look red to standard observers in standard conditions. In order to achieve that, Sellars presents us with a thought experiment or as he calls it “a piece of historical fiction.” Jones works in a necktie shop and he is used to looking at colored objects only in standard conditions. And we are asked to suppose that Jones observed all these colors, in his shop, before the advent of electricity. The introduction of electricity seems to affect colors of the ties. At this point the ties look different in the shop than they do in the daylight. Thus when a customer comes to the necktie shop where Jones shows him a “handsome green tie,” the customer, John, disagrees with Jones and tells him that the tie is not green, because when looked at in natural light it is blue. Jones finds himself in a quandary, because the tie seemed to be green in the shop while blue outside. He proposes to Jim that perhaps electricity changes the color of physical objects, whereby the tie was green when looked at inside but turned blue outside. But, since it is unlikely that ties change colors, Jones accepts that it is not the physical color that has changed. He concludes that he just does not know what to say about the color of the tie. So, he learns to suppress his initial response to the tie and now says inside the store that the necktie is blue. This is how he expresses his indecision, “I don’t know what to say. If I didn’t know that the tie is blue--and the alternative to granting this is odd indeed--I would swear that I was seeing a green tie and seeing that it is green. It is as though I were seeing the necktie to be green” (Sellars, EPM, 143). Jones is now getting to the sentence ‘This tie is

blue,' via an inference. He is not using it in its reporting role, he does not see the tie as blue, rather he is concluding that it must be blue given what he know knows about the color of the necktie in natural light.

Sellars wants to reject the view that Jones is somehow reporting on a fact, the fact of the matter concerning the color of the necktie. This way of characterizing it would assume that there are such minimal facts that are what Sellars calls logically independent of the perceivers conceptual framework. Still there seems to be a distinction between something looking green and it being green. Sellars will say that the difference is that in the latter case the perceiver is endorsing the claim *that* a tie has the objective property of being green. When one utters 'The necktie looks green,' he attempts to describe the experience one is having, while 'The necktie is green' endorses that claim that an object has a particular property. The latter claim ascribes a propositional claim to Jones's experience. Thus, the essential difference between the two claims is that the sentence "X looks green" only ascribes a particular claim to Jones, while "X is green" ascribes and endorses the claim. "...(F)or it is clear that two experiences may be identical *as experiences*, and yet one be properly referred to as a *seeing* that something is green, and the other *merely* as a case of something's *looking* green" (Sellars, EMP, 145, author's emphasis).

Saying that something looks green is a report on an experience that is, from the first person perspective, indistinguishable from the experience involved in seeing that something is green. But making the report about the character of the experience indicates that for some other consideration the claim is not being

endorsed. Thus, we have the two equal experiences but when we speak of *looks* we are withholding endorsement, while when we speak of things being this or that we endorse the experience. All this is supposed to deliver what was promised earlier: that things being this or that way is logically prior to them looking this or that way. The concept of something looking green presupposes the concept of something being green. Moreover, being able to endorse a claim that something is green, presupposes the knowledge of what constitutes standard conditions for detecting such properties. In this way we get to preserve the necessity of the claim, X is green if and only if X looks green to standard observers in standard conditions. This is because the increase in the level of sophistication when it comes to perceptual experiences, results in knowledge of which circumstances are favorable for the detection of the actual color of objects. Thus, the above mentioned proposition is necessary "...not because the right-hand side is the definition of 'X is red,' but because 'standard conditions' means conditions in which things look what they are" (Sellars, EMP, 147).

What we seem to have is a sort of circle, where to report that something looks green one has to have a concept of being green which presupposes knowledge of what constitutes "standard conditions" for perception of color. And those conditions are not possible to detect, if one cannot already perceive some objective properties of the object. It seems that reporting on the looks of things is possible only after one has acquired an entire conceptual framework. Sellars' response to this problem is that his view presupposes only that in order for somebody to have a concept that something looks green, that person would have

to have a whole battery of other concepts. Perhaps one need not have an entire conceptual framework pertaining to perceptual experience, but one would have to have a lot of them. Sellars distinguishes between rudimentary color concepts, which are perhaps prior to a richer concept, where it would be possible to have one before the other. Nonetheless what he claims is pretty strong: "...(T)he process of acquiring the concept of green may—indeed does—involve a long history of acquiring piecemeal habits of response to various objects in various circumstances, there is an important sense in which one has *no* concept pertaining to the observable properties of physical objects in Space and Time unless one has them all..." (Sellars, EPM, 148).

The target here is logical atomism that we presented earlier. That position assumed the primacy of looking green, which was supposed to capture a minimal fact, or a sense datum, presumably out of that one could build the concept of being green and then the rest of the concepts for colored objects in the same manner from ground up. But, the argument showed that the concept of looking green does not come first. Moreover, the ability to report on one's experience in terms of looks presupposes at least some prior concepts. This goes against the idea that we have the non-derived ability to have immediate experiences that endorse a certain propositional content.

At this point Sellars has disputed that concept formation is aided by an immediate ability to have sensations. The claim is that in order to have concepts pertaining to the appearances of things one would have to have concepts

pertaining to their existence and those would presume an even larger conceptual framework.

At this point I wish to present only one last part of Sellars' argument, which is meant to distinguish sensations from immediate impressions. Sellars' argument is that sensations, as conceived by the sense-data theorists, have the character of thoughts. This argument will reemerge in a different context in chapter four. Sensations have been assimilated into the group of propositional attitudes by Descartes. So, an example of a sensation would be something like, 'There is an red triangle over there.' The sensations construed as such would carry with it the commitment to both objective red properties and triangles. We saw that this type of ability would presuppose the ability to know and use a whole number of concepts. Sellars then proposes that an alternative view whereby immediate experiences would be experiences as of a red triangular object. This immediate experience is what is common to all instances where a person is likely to make a report of seeing a red triangular object. But the immediate experience common to all those episodes is not itself a seeing of a red and triangular object. In order for it to be a seeing it would require a battery a concept. The primitive ability we might have is for immediate impressions rather than for sensations. But, the former are not enough to establish a foundational basis for knowledge since they are not propositional. An immediate impression of a red and triangular object might be necessary for a thought that there is a red and triangular object over there, but it is not enough to establish the observational basis for any conceptual framework. Sensations can provide the basis for

knowledge only if they are construed as thoughts that have specific propositional content.

We come to the end of Sellars argument which concludes much like Quine that any belief is fair gain for revisability. “For empirical knowledge, like its sophisticated extension, science, is rational, not because it has a *foundation* but because it is a self-correcting enterprise which can put *any* claim in jeopardy, though not *all* at once” (Sellars, EPM, 170).

Sellars proposes another piece of historical fiction, where he develops a picture about how a conceptual framework about mental states comes to be instituted; it is called the Myth of Jones. I discuss the Myth in chapter three in detail and will not mention it here. I will just emphasize that the story establishes mental states, both thoughts and sensations as posits. Mental states are invoked to explain the overt behavior of others, and to provide reports of our own inner states. The introduction of mental states as posits should be considered a bold move, because of the entrenched view that mental states are a result of some non-mediated ability to have such episodes. But, we see that this is not so, it is theory or conceptual framework that makes everyday psychological platitudes possible.

To remind ourselves, after a long digression, EM relies on the claim that folk psychology is an empirical theory like any other. The arguments establishing the inferential nature of individuation make the premise possible. The ability to tell thoughts apart from sensations, or the ability to have thoughts and sensations is a result of the piecemeal acquisition of a conceptual

framework. “For we now recognize that instead of coming to have a concept of something because we have noticed that sort of thing, to have the ability to notice a sort of thing is already to have a concept of that sort of thing,…” (Sellars, EPM, 176). All those times we invoked beliefs and sensations for our own purposes; we could do so because of the individuating machinery of folk psychology.

With the argument that knowledge is not based on any kind of immediate experience, nor is there an ability to have experiences that are propositional from conceptual scratch, we can also see a revision in the view that mental states cannot be posits because they are experienced. The idea that mental states are experienced is nothing more but the idea that there are experiences that are propositional, that are there prior to theory, and some of those experiences pertain to mental states.

The argument goes that we feel sensations, or have thoughts and because of that we know them in some noninferential way and thus, they cannot be posits because those can be known only inferentially. But, the fact that we are able to experience mental states is not an indication that that experiencing is noninferential. As we said earlier, although an immediate experience might be underlying some overt reports, those immediate experiences are not enough for those reports. The reports are backed by a conceptual framework, furthermore the thought that a table over there is a green table, and the triangle on the page is red are all experience as such because of an individuating machinery that allow us to notice things as red and triangular or as green and rectangular. The

same is true of mental states, the experiences of having thoughts and sensations, whatever those are, are experiences made possible by a conceptual framework. The experiences we have are molded in some large part by conceptual frameworks. Consequently, change in conceptual frameworks will result in changed experiences. Invoking experiencing as a way to solidify the existence of mental states, and use it against eliminativism, rests on a misunderstanding whereby experiencing is thought to be possible prior and outside a conceptual framework.

As stated before our conceptual framework attributes properties to entities which we then use to individuate them, and the way we tell them apart from other objects is part of the way in which we experience those same entities. Churchland's argument from perceptual plasticity relies on this collapse between the nature of entities and the way in which we experience those entities.⁵² The way we perceive things is affected by the theories we have about the nature of those phenomena. Churchland further expends this to claim that there aren't many limitations to what can be perceived and because of that what we perceive currently cannot in anyway restrict the range of our new theories. The way we are currently experiencing our mental states is no guide to what we can experience, and because of that it cannot be regarded as the observational basis for any new theory of inner states. This is how I construe Churchland to be arguing that perceptual plasticity can allow for the endorsement of any new scientific theory.

⁵² See chapter 2 in Scientific Realism and the Plasticity of Mind. Cambridge, U.K.:Cambridge University Press, 1979.

The argument that immediate impressions are not propositional shows that there is no unrevisable observational basis for our theories about mental states. The conceptual framework is what provides the individuation and consequently molds the way in which we observe things. Folk Psychology then does not restrict the way in which one can do science about the brain, and I would claim that this is the second reason why FP is not common sense. All that said, it is two distinct arguments to say that it is conceivable that folk psychology is revisable and quite another to say that it will be revised. The arguments by both Sellars and Quine, I take to be supporting only the argument that all frameworks are in principle revisable. Churchland's eliminativism is an argument that inflates the conceivability of revision to a probability of replacement. One can easily agree with the former while being against the latter part of the view.

To conclude, Folk Psychology then is a conceptual framework that individuates inner states in terms of propositional attitudes and sensations. The framework is revisable like any other framework and the motive to revise it should be found in empirical evidence against that conceptual framework. The conclusion that I wish to draw from this is that one must grant that the first premise of eliminativism goes through.

It was stated in section one that all the features that support the status of folk psychology as a theory are in turn support for that claim that it is not commonsense. Further still, I claimed that the motive to eliminate FP can be held strong only if one can maintain its status of a commonsense theory.

Sections 1-3 should have proven that there are no features that could distinguish folk psychology as commonsense.

Perhaps at this point it would be useful to revisit the different candidates for common sense and show how it is that the arguments presented deflate the distinction between common sense and theory. The first distinguishing feature of common sense was that the beliefs constitutive of a commonsense theory would have to be necessary. With Quine it was argued that there is no good definition of necessity and because of that we concluded that all statements that are true are true in the same way.

Sellars argument more directly disputes the idea that there is any such thing as direct knowing. With that it also goes against the view that commonsense constitutes the empirical or observational basis for any scientific inquiry. Common sense cannot set the categories of any science. Direct knowing or introspection presupposes pretheoretical individuation of objects or mental states. It was shown that no such individuation is possible. Therefore, commonsense proposition cannot be ones that are known directly, or pretheoretically.

Commonsense beliefs used to be different from other beliefs because they are not such that they stem from a theory. This way of distinguishing commonsense beliefs from all others accounts for the special role that commonsense used to enjoy. The role of scientific theories would be limited by its obligation to account for commonsense beliefs. Because of that we used to be able to claim that commonsense can set the criteria for the quality of a theory,

where theories that are able to account for the entities proposed by commonsense, and features allotted to those entities, were better theories. The relationship between commonsense and science was supported by a firm distinction. But, that distinction was one that was made at the level of belief. One could tell either by the type of belief or by the method by which a belief was acquired, that the belief was commonsense.

At this point it is worth asking: what is left of the rivalry between commonsense and scientific psychology? It seems that the two theories are not different in kind; the rivalry is only about quality. Folk Psychology, the eliminativists would argue, is just much worse than any scientific attempt to explain the mind or the brain. The claim the eliminativism used to be able to endorse is that FP is in the way of scientific psychology. FP, as commonsense theory, could put in place categories that would have to be explained by a scientific theory about the mind. Since FP is false, the categories of FP do not exist and any theory based on those categories would be false as well.

This last way of juxtaposing commonsense and science is possible only if commonsense has some special status. FP cannot restrict scientific psychology, because it no longer frames the field of inquiry. After the equalizations of commonsense with science, I choose to claim that not only are there no commonsense beliefs, but I go further and claim that there is nothing that is commonsense. If all beliefs are theoretical then none of them are commonsense. Therefore, there is no distinction between commonsense theories and scientific theories, since there are no commonsense theories.

The issue that the eliminativist are raising is then only the mild claim as to the quality of FP. Is FP a better empirical theory than any other theory about the mind or brain? The answer to that question seems much more scientific than philosophical, and ultimately it can be answered in the trenches of science.

Part II

Section I--The Changes in Common Sense

According to Churchland, current FP and that of the Greeks are the same.⁵³ The static nature of FP makes it stagnant and old fashioned. FP is considered to be a repository of religious beliefs and dualistic theories about the mind. In order to argue for the replacement of FP with neuroscience, critics usually liken it to long disputed theories about phlogiston and caloric fluids. Rorty argues that the categories of mind might disappear as did the mystical frameworks that provide for the individuation of daemons and witches.

In what follows examples will be presented to support the claim that commonsense psychology changes under the influence of science. Before I present the examples, I think it is important to remind the reader why it is that folk psychology should cause so much trouble. It was said that the categories of commonsense are such that they can limit the scope of science, but we said that this was only possible on the view that there are either analytic statements or that there are such things as noninferential beliefs. However, I maintained throughout

⁵³ Churchland, P.M. A Neurocomputational Perspective: The Nature of Mind and the Structure of Science. MIT Press, 1989.

this chapter that the arguments that show FP to be a theory rely on the rejection of analytic statements or noninferential beliefs. The shifts in commonsense, that I will attempt to document in the rest of this chapter, should show that the point is not only theoretical; rather it is true in practice that the categories of commonsense are loose. The change in conception and reports about the nature of mental states is obvious even in everyday attributions of mental states. It seems that if there is plasticity in our conception of mental states, elimination is not necessary because the categories of commonsense can change as far as it is necessary for them to be in congruence with science.

Also, I wish to argue that a firm distinction between commonsense and science is needed in order to characterize the change from one framework about the mind to the other, as a change from commonsense to science. It should be obvious by now that because there is not distinction, the shifting frameworks are all of the same kind. Thus, if there is change from speaking of behavior as being caused by propositional attitudes to this same behavior being cause by localized brain activity, that change would not be a shift from commonsense to a scientific framework. The change in reports would only signal a shift in endorsed conceptual framework of the same type.

The current FP is distinguished from scientific explanation of inner states by ubiquity, but as I said before ubiquity is not a criterion capable of making the distinction of types between scientific and commonsense explanations of those states. FP is influenced by science, and this means that some of the things people believe about their inner states are due to discoveries in scientific

psychology as well as neuroscience. Scientific approaches to psychology are then becoming part of the way in which we interpret ourselves in our everyday.

If we characterize FP as the view that is shared by most human beings-- that is used to report and predict the behavior of others in terms of inner processes expressed in behavior--we can observe changes in the character and locus of the inner processes over time. It must be admitted that nowadays FP includes among its platitudes that the locus of mental states is in the brain. Most people endorse, at least superficially, the idea that memory, perception and other such processes are a result of brain function. And since science nowadays easily penetrates everyday language, lay people are gradually more and more aware that a lot of their physical and mental functioning, including personality traits are a result of brain activity.

FP is usually characterized in a way that makes it incompatible with science. The scope of commonsense is drawn out in such a way that it includes the view that mental states are distinct and incompatible with physical states. The mind is characterized by first-person access where what we know about the mind is less disputable than what we know about physical objects. Mental states have certain phenomenal properties; they feel this or that way and those feels depend on those states being conscious. FP characterized this way can be easily contrasted with more physicalists attempts at the explanation of inner states, and as the source of the mind-body problem. That construal presents FP as endorsing some type of dualism. If the mind has properties that are above the physical, then physical explanations of the mind fall short. The incompatibility

between the mental and the physical seems to be built into folk psychology. This construal makes it possible to argue for elimination and it makes it much easier to achieve the comparatively higher quality of scientific psychology.

Examining closely the claims that are usually attributed to commonsense psychology, one can easily trace their origin to philosophical theories that have become old-fashioned. Most of the claims concerned with privacy, incorrigibility and irreducibility of mental states are loosely based on Descartes views. And although it is true that Descartes' view had great influence on theories about the mind within the philosophical tradition, it is just a guess that the Cartesian view became a staple feature of FP in terms of being widely accepted by laypersons.⁵⁴

More modern construal includes the commitments of commonsense to mental states in general and more specifically propositional states, those views where mentioned earlier. Furthermore, FP is said to be committed to the view that behavior is caused by the appearance properties of object. And the more core commitment that mental states have causal powers. As before, it should be stressed that the disputes concerning the boundaries of FP are arbitrary; but even granting that those claims are in some way part of FP, it is still contentious that those views are incompatible with science. The incompatibility of mental states with physical states stems from the particular construal of the mind. The

⁵⁴ For some evidence, one can look at the exchange between Descartes and the Queen Elisabeth, who was skeptical that one can conceive of the mind and the body as two distinct things. Obviously, then, Descartes' view required a conceptual shift at least for some people. See, Rosenthal David "Letter to Elizabeth, 28 June 1643" The Nature of Mind. New York: Oxford University Press, p.33, 1991.

mind is incompatible with the brain only if the features attributed to mental states are irreducible. The category itself is empty unless it is filled out. And although the Cartesian view of mental states might create problems, other views might not. The claim that mental states have causal powers is only a problem if those powers are traced back to nonphysical features of those states. If minds are just brains, it is a matter of course that they have causal powers. Similarly for propositional attitudes, their incompatibility is all in the construal of those states. It is all in the filling; thus far nothing has strictly tied commonsense to a particular view of the mind.

The incompatibility can be dissolved if the boundaries of FP are redrawn in a way that adheres to a more contemporary view of the mind. I will attempt to do just that in the hope that it will render the argument for elimination unnecessary. The primary task will be to show that FP changes, but I will not attempt to accomplish a complete list of those changes. The complete list of shifts in the character of FP is not feasible. It is my hope that only few examples will be satisfactory to show that shifts have occurred over time. The examples that will be presented should accomplish a dual task: to show that FP is influenced by external sources, especially science; and that it does not endorse a dualistic view of the mind.

The first example is aimed to show that there was a change in the location of mental states. Obviously, the connection between mental states, and more broadly cognitive processes, was established by discovery. The very limited claim I wish to build is that the current location of mental states according to FP

is the brain while the Greeks thought that some mental states, and faculties, were located in the heart. The localization of mental activity in the brain was an outcome of the discovery that there is an association between the two. There was then a shift in locus from the heart to the head.

I deemed Aristotle as a good enough example of an ancient Greek. In the following I will briefly state Aristotle's view of sense-perception. This exposition will have two objectives: the first is to show that sense-perception is classified away from thinking and as part of the body and sense-organs and the second is to show that at least one ancient Greek thought that sense-perception, a type of mental state, originates in the heart.

The terminology that Aristotle uses is not current. He speaks of souls rather than minds, but some faculties of the soul are close to what we currently call mental states or processes. Aristotle characterizes emotions, thinking, and perceiving as motions associated with the soul. The soul is moved because the motion either reaches it as in sense-perception, where the motion is initiated by external stimulation, or originates within it, which is the case with thinking. But it is false to say that the soul is thinking or perceiving, rather it is the person that is doing that with their soul (Aristotle, 164).

The soul is associated with thinking, or understanding, and perception where there is a distinction between the two kinds of processes (Aristotle, 192).⁵⁵ They are distinct because most animals have some kind of perception while only

⁵⁵ For Rorty the formation of the mind-body problem is precipitated by the collapsing of this distinction. Descartes makes sense-perception a type of thinking and thus, we get a firm distinction between bodily and mental states.

few, such as the rational animal, have thinking and understanding. In thinking and understanding one can be right or wrong, but not in perception. In some cases perception is always veridical. Perception is infallible when it comes to the perception of its special object. For example, color is the special object of perception for the eye, and in perceiving color the eye cannot be wrong, but it can be wrong about the additional features of the thing that is perceived as having a certain color. Here, we can see that Aristotle makes what would be currently the distinction between sensations and perception which entails the endorsement of some propositional content. The eye can perceive the redness over there, but not that there is a red tomato over there. The latter would be an instance of thinking on Aristotle's account because it could be true or false. The perception of an object with features entails the "common objects of perception." Features such as movement, rest, number, figure, size can be perceived by more than one sense-organ.

"Perception consists in being moved and affected...for it is thought to be a kind of alteration" (Aristotle, 174). We already said that each sense organ has a special object and objects that are common to all the senses. Thus, the sense-organ is changed or altered by its special-object. The way in which the special-objects of perception are chosen must stem from the idea that this alteration of the sense-organ by external stimuli is guided by the principle that "like is affected by like." The sense-organ contains a potentiality of being like the object of perception which by acting on the sense-organ makes it like itself. But in order for this alteration to occur the sense organ must be potential like the object of

perception. A sound cannot be perceived with the eye because the eye is not potentially like the sound in any way, while the ear is⁵⁶ and because of that we get the specialized objects of perception. In the end the sense organ becomes like the object that it perceives, as a wax receives an imprint of a shape. “Wax receives the imprint of the ring without the iron or gold, and it takes the imprint which is gold or bronze, but not qua gold or bronze” (Aristotle, 186). The sense organ mirrors the object of perception not in terms of its matter, but in terms of its form.

The faculty of sense-perception is not distinct from the body but the intellect is. Although, most creatures that can be said to have sense-perception are “ensouled,” (Aristotle, 192-194) not all such creatures are capable of thinking. Thinking presupposes reason, which, I assume Aristotle attributes only to humans. Aristotle claims that the locus of sense-perception in sanguineous animals is in the heart. “Sense-perception in animals originates where movement does ...in sanguineous animal is the mid way between the head and the abdomen” (Aristotle, 212). The heart, for the sanguineous animal, is both the origin of movement and of sense-perception. In a section about dreaming, Aristotle attempts to explain the phenomena by pointing to spontaneous movements in the sense organs as well as the movement of the blood inwards when sleeping. “If anything moves the blood, some one sensory movement will

⁵⁶ There is a further argument by Aristotle that aims to show that since the sense organs are made by all the elements, air, water, earth and fire, the movement of those elements outside the body affect those same elements in the sense organs. The movement of the air outside the ear provokes the motion of the air within the ear, and sound is perceived. (Aristotle, 177-180).

emerge from it, while if this perishes another will take its place;...”(Aristotle, 216). The claim is that sense-perception is influenced by the heart and the movements of the blood.

Aristotle also mentions the connection between the heart and emotions. The movements of the soul involve matter, thus when one is angry there is a corresponding physical process, or movement of the body. Anger corresponds to “the boiling of the blood and hot stuff around the heart” (Aristotle, 163). There is even an explicit mention of possible levels of explanation where a dialectician would define anger with reference to other mental states, such as desire to retaliate, while a student of nature would seek to define anger in terms of the above mentioned movements of the body.

As promised earlier, I wished to use Aristotle to show that the locus of inner states has changed over time. It seems from what was stated above that Aristotle thought that the physical medium of the mental states is the heart and blood. One could say that by reading Aristotle one might not be able to ascertain the commonsense psychology of the ancient Greeks, but it is unlikely that the layman Greeks would have located their soul in the brain. The attribution of particular commonsense theories to the folk is always tentative anyway, thus my aim is not accuracy about particular views. I only wish to be right that there are movements in the stale waters of FP, which can be circumstantially linked to the changes in science. Thus, far I have shown that the locus of inner states has changed from heart to head. Moreover, the change of locus, or at least the current locus, of mental states has been noted in the

current FP. Nobody nowadays refers to the heart as the locus of thinking or perception, and even when it comes to emotions the heart is mentioned only metaphorically.

The only other Greek I wish to mention is Hippocrates who was, historically, the first to make the association that particular parts of the brain are associated with cognitive processes. Hippocrates is effectively the person that discovered that there is an association between brain and mental states. Before him then the idea that mental states are in the brain must not have been prevalent. It is today. Thus the formed habit among the folk of pointing to the head when one asked them about mental states must be in some extended sense credited to Hippocrates. Due to the lack of a good criterion by which one can distinguish scientific from commonsense theories, the discovery that the brain and the mind are connected is a scientific discovery because it was made by a physician. It turns out, that what is commonsense psychology now is a result of scientific discovery.⁵⁷

Other scientific discoveries about the brain have become part of the everyday psychological explanations. The association between “chemical imbalances” in the brain and moods has become extremely prevalent. The existence of neurotransmitters and their association with conditions like

⁵⁷ Hippocrates lived before Aristotle and believed unlike his contemporaries that the locus of mental states was in the brain rather than the heart. Because Aristotle maintained that some mental states are associated with the heart and the blood despite Hippocrates scientific discoveries, I take this to show that Aristotle’s view must have been more in harmony with the ancient Greek’s FP. Thus, even if the scientific discovery of the association of the brain and the mind is dated back to an ancient Greek, it did not immediately take hold in the commonsense of the day.

depression, or other mood disorders has become quite well known. Sometimes even specific neurotransmitters have become part of commonsense, like serotonin, which is said to be associated with joyful moods. People who exercise often report that they have a high after physical activity and a lot of them cite the overproduction of serotonin in the brain as the cause of that high.

The association of memory loss with brain damage is part of FP. I would venture to say that more and more people know that areas of the brain that are associated with memory function. Most people know a bit about Alzheimer's and how damage to brain cells can result in loss of memory. People know that strokes are bad, because they cause brain damage which in turn can cause loss of speech and motor functions. In general, it seems obvious that medicine and science about the brain is progressively changing the way in which we explain our own psychology. This could indicate that science is replacing commonsense as the predominant framework, or it could mean that there is no distinction between the two. Based on my previous arguments I think it should be clear that I think the latter is true.

It has been the long standing view that commonsense psychology is committed to mental states being conscious. Consider pain as an example, it seems to depend on consciousness. In order to have a pain, you must be aware of it. Even if there are no physical causes of your pain, as in psychosomatic pains, you are still experiencing pain. This strict connection between pain and our conscious experience seems to entail that a person experiencing pain cannot be wrong about that experience. On this view there is no distinction between

having an illusion of pain and having an actual pain. More broadly speaking of mental states, the distinction between mental states and physical states is consciousness. This view is in part what creates the friction between science about the brain and mental states. If consciousness is essential of the nature of mental states, then no reduction of mental to brain states is ever possible. Property of being conscious would be permanently out of reach of science. The elimination of commonsense psychology would include the elimination of the conscious mental state, and would allow for a physical explanation of all the remaining states.

Setting aside the issues of whether or not mental states are necessarily conscious, let us evaluate whether commonsense makes this necessary connection. Again, using ubiquity as the only way to gauge what is included within the body of FP, I would say that there is no strict connection between mental states and consciousness. Commonsense psychology does not seem to include among its claims that in order for a state to be mental it has to be conscious. Unconscious mental states have become a standard feature of psychological explanation in our everyday lives. Behavior is explained, if not predicted, in terms of unconscious mental states. This becomes even more obvious if we credit Freud with the popularization of this type of explanation. The claim is not that Freud is the first to speak of unconscious mental states; rather it is that his theory is the first to make them popular.

The way in which people who are not experts in the theory use Freud is perhaps quite limited. In everyday explanations we use just the more easily

accessible features of Freud's theories. Freudian slips are used quite frequently in everyday explanations of behavior. The two kinds that are most frequent are associated with either forgetting or misspeaking. The following is an example of incriminating forgetfulness. If a wife is often forgetting her cell phone at a time she is expecting to hear from her husband, the behavior would become suspicious. It would seem as if there is a reason for her forgetfulness, and people would be likely to say that perhaps she has an unexpressed aversion towards her husband. One could imagine that the wife is asked if she is doing this on purpose, and even with her denial the repeated behavior would be suspect.

When people misspeak in certain circumstances, the pattern of their error is sometimes taken to reveal repressed feelings. A very common one is calling the person one is speaking to by the name of somebody else they know. If while speaking to a friend you called them by the name of somebody else, this is taken to mean that the other person is somehow on your mind. It is circumstantial evidence of an unconscious state of mind, or desire if you will.

People also use unconscious states to explain their own behavior. Often one hears explanations involving unconscious attractions, where a person speaks of being attracted to people that are not good for them but then reconciles the apparent irrationality by claiming that the feeling was unconscious. Another frequent explanatory tool is used as an excuse for a myriad bad behavior. People use unconscious desire as a way to explain their own

misbehavior. One often hears excuses of the form, "I must have wanted to hurt you, but unconsciously."

Disregarding the accuracy of the particular examples given above, it seems to be obvious that commonsense psychology deals in explanations that invoke unconscious inner states for the explanation of overt behavior. This goes against the previous characterization of FP. Moreover, these mental states that are not conscious appear to have the same role as regular mental states. Thus, the view purported is that unconscious mental state are just like conscious mental states only there is no direct conscious access to them. The frequent occurrence of these explanations must be credited to the popularity of Freud.⁵⁸ This is relevant because it once again supports the view that FP changes because it accepts influence from theories that are initially outside of commonsense. I am not sure if Freud can be deemed a scientist--although he was a doctor--but his theory as such did not initiate in common sense. In the very least, the explanation of behavior by invoking unconscious mental states has become ubiquitous due to Freud.

The extension of this argument can be used against the idea that commonsense psychology commits itself to a particular view of mental states. Assuming that mental states are only conscious supports the view that conscious access, or introspection, reveals the nature of mental states. This becomes a source of incompatibility between mental states and physical states. There can

⁵⁸ In order for this example to go through, there is no assumption that the person utilizing the explanation knows of Freud and his theories. It is enough for the person to use this type of explanation.

be a disparity, and even an incompatibility, between the ways in which commonsense characterizes mental states and the way science does. In fact there are traditional problems that arise, if the way in which we access mental states is tied up with introspection. Introspective access of mental states produces features unique to mental states. For example, mental states are said to have phenomenal character, there is something it is like to have a mental state. Pain feels a certain way, there is something it is like to eat an ice cream and have sensations associated with that action. All of those features seem to be true of the states we access introspectively, but not true of physical states.⁵⁹ Further still, if a state must be conscious to be mental, whenever there is a mental state there is conscious access of it. Introspection becomes the arbiter of the occurrences of mental states and what is true of such states.

If this is the view that FP endorses, committing to mental state is committing to a particular type of mental state. We have seen above that FP is no longer such that it is committed only to conscious mental states. And because it is not committed to consciousness as the mark of the mental, one should not tie the two together. The incompatibility, then, between FP and scientific explanations of inner states dissolves because contemporary FP no longer entails the commitment to exclusively mental properties. The tension between the commonsense explanation of mental states and scientific explanations of brain states arises because FP is characterized in a way that

⁵⁹ For a discussion of the introspectability of physical states see Chapter III.

creates that incompatibility. There are no reasons to endorse the unfavorable construal above all others.

All of this has consequences on the argument for the elimination of mental states. I would argue that elimination of commonsense psychology is unnecessary, if not impossible. The examples of change are supposed to show that FP is not static. It should lead us to conclude that if there are incompatibilities between FP and science they are only temporary. This point is only auxiliary and the main use of the examples is that the sources of change in FP are external. It seems that all of the examples mentioned above are changes incited by either changes in science, or theories that are not common sense.

The body of FP is not independent from scientific theories. It features causal explanations that are provided by science and therefore the ontological commitments of FP are influenced from there as well. The call to eliminate FP would seem to entail the call to eliminate even the scientific aspects of what is currently commonsense psychology. Furthermore, the shifting nature of FP would make elimination just unnecessary. If it is possible to have a neutral or scientifically friendly way of construing mental states, it seems just futile, cumbersome labor to ask for a reconceptualization.⁶⁰

Eliminativism must maintain that FP is isolated in order to claim that the categories of FP are false and in the way of science. If, however, those very categories are formed by influence from scientific theories, it would seem that FP

⁶⁰ In fact the dispute would become just a haggle about what words should be used. For a view that shows that the rivalry between reduction and elimination is ultimately just a fight about names that shall remain see Stich, Stephen. Deconstructing the Mind. Oxford UK: Oxford University Press, 1996

is not in the way of science but is continuous with it. There is no incompatibility between commonsense and scientific view of mental states because commonsense psychology is itself a repository of easily learnable scientific claims.

The eliminativist could concede that some changes have occurred in FP, and that those changes are examples of elimination in action. It could be argued that the examples show that the scientific frameworks have already begun replacing commonsense psychology. An eliminativist could say that it is not that FP is changing, it is disappearing. The response that is at my disposal is that there has been already established by previous argument that there is no distinction between commonsense and scientific theories. Based on previous arguments from this chapter, the only criterion left for the differentiation of claims that are commonsense from all other is frequency of usage, or ubiquity. If that is our criterion, once a claim becomes ubiquitous it becomes common sense. This is how the examples were chosen.

In order to claim that there are shifts in frameworks that are distinct in types, one would have to have a criterion that could tell us which is which without referring to the context in which each of those frameworks are used. The previous section should have sufficed in proving that no such criterion exists. Thus, the changes in FP are just continuous changes of an empirical framework under the influence of other empirical frameworks. There are no large shifts from one major framework to another, just slow moving progress. In order for

eliminativists to detect that a commonsense framework has been eliminated in favor of a scientific one, they would need a firm distinction between the two.

Ultimately, I am not claiming that there are no real differences between FP and scientific psychology. I think there are differences in quality. Scientific attempts to explain human psychology are likely to produce better theories. All I wish to claim is that eliminativism is not a view that provides for differences between types of theories, even though it does assume it. Moreover, the reason for eliminativists using the claim that FP is of bad quality is a way of shifting the burden of proof to the side of FP. The radical falseness of FP is proof that one should just drop mental states and start looking elsewhere for a better theory. The bad categories of commonsense psychology are supposed to be the impetus behind the move to eliminate, because any enterprise based on false categories is doomed to fail.

But the type and character of commonsense categories are at least partially filled in by scientific discoveries, it seems than the burden of proof is back with the eliminativist. The shifting nature of FP would also deflate the strong motivation to radically change from commonsense to science. If the character of FP can be greatly affected by scientific discovery, then the categories of commonsense could not be in the way of scientific discovery.

The examples that were presented in this section were supposed to show that there is change in commonsense psychology as a result of scientific discovery- although it seems plain that commonsense was always under the influence of some theory or another. If it was not the benevolent influence of

good science, then it was religion and bad science. But the status of FP as a theory is not derived solely from the theories that influenced FP; its status is such essentially. Commonsense is a theory because it is *ipso facto* committed to a way of individuating. The changing type and character of the entities that FP is committed to is the result of the influences of various theories on FP. But, it seems most accurate to say that the boundaries of FP are not traced out by those influences, rather they are drawn out by commentators. The scope of FP is changed to suit whomever wishes to cast commonsense in this or that light. The shifting boundaries of commonsense are such partly because the matter is empirically inscrutable, and partly because there is no distinction between commonsense and science.

Chapter III

Plasticity and Phenomenal Character

Some Eliminative Materialists claim that commonsense psychology creates problems. Commonsense psychology like any other theory posits entities.⁶¹ These entities are then attributed certain properties. For example, that theory posits entities such as sensations or propositional attitudes, and those entities have properties like phenomenal character or intentionality. These kinds of properties seem to prevent the reduction of Folk Psychology (FP) to physical science through the identification of mental states with brain states, since it seems like only a mental state can have a phenomenal property and a brain state does not. And for two things to be the same, they must share all their properties. So, sensations are not reducible to brain states because the property of phenomenal character is not a property that exists on the theory of brain states. Thus, FP posits entities that, when contrasted with science about the brain, are emergent. Phenomenal properties of mental states seem to be outside the reach of a physical science, either because that type of science is still inadequate or because mental states have properties that are not physical or because such properties do not exist. Eliminativists predict that the third option will turn out to be correct. Churchland, specifically, thinks that reductive solutions are of no use because Folk Psychology is radically false; consequently

⁶¹ The status of commonsense psychology as an empirical theory should have been established in chapter II.

the only solution is elimination of FP. Previous chapters should have made clear how such a move is possible for eliminativism, assuming the status of FP as a bona fide empirical theory. In this chapter I will focus on Churchland's eliminativist argument proposed as the solution for the emergence of phenomenal character, or qualia usually associated with sensations.

In section I, I will present Churchland's argument for why milder treatments would not work in solving the problem of phenomenal character. This will involve arguments against the folk-psychological framework that are somewhat independent of arguments directly aimed at the problem of phenomenal character of mental states. It should be noted that Churchland does not often use the term 'elimination', but the eliminative character of his argument can be traced back to his redefinition of the model of reduction. In section II, I will present Churchland's definition of emergent properties.

I will move to review arguments against the two instances of the knowledge argument, put forth by Nagel and Jackson, in section III. In response to the knowledge argument Churchland proposes plasticity to resolve the tension between emergent properties and physical science and his solution will be the focus of section IV. The rest of this chapter will attempt to mount an argument against plasticity. The argument here will not be against eliminativism or plasticity in general; rather I will argue that Churchland's type of plasticity will not resolve the problem of phenomenal character.

In section V, my argument will be that Churchland's real life examples of plasticity, the perceptual change resulting from a change in conceptual

frameworks, where a layperson moves into the realm of experts through training, are not a good model for the reconceptualization involved in moving from the conceptual framework of folk psychology to the adoption of neuroscience as the primary framework. I will show that the examples of training involved in the change from lay person to expert are significantly different from the training that would be needed to accept the conceptual framework of neuroscience. The differences are aggravated by Churchland's insistence that propositions are not the primary mode of storage in the brain, and that there are other ways of knowing and storing information. I will claim that most of what we know about the process of training is steeped in the idea that it involves exchange of propositions. Moreover, I will claim that the models of training used by Churchland are examples of adoption of additional frameworks and not primary frameworks. However, Churchland's proposed reconceptualization from FP to neuroscience would require the institution of the latter as the primary framework. I will also argue that because it proposes a new way of carving up the world, not just the mind, it would also have to be one of the initial frameworks we learn. And the institution of primary frameworks seems different from the institution of any other addition framework, at least in terms of the role training plays in that.

In section VI, I will present a more recent view by Churchland, where he presents a possible reduction of the subjective phenomenal properties of color sensations to neuronal activation. Churchland's view takes advantage of new developments in cognitive neuroscience to propose a strict identity between neuronal coding vectors and color qualia. My argument against Churchland will

be that his new proposed reductions will not solve the problems posed by Nagel and Jackson. The knowledge argument was posed a priori for all reduction of mental to brain states, including Churchland's new proposal. Also, I will argue that each conceptual framework has distinct phenomenal properties, such that the strict identity between the entities of the framework would not entail the identity of phenomenal properties. There are distinct qualia if one is introspecting color sensations as such or neuronal activity as such, even if the two are one and the same. All this should indicate that Churchland's eliminativism is not an adequate way out of the mind-body problem.

Section I--Reduction and Elimination

On the model for intertheoretic reduction, given by Nagel,⁶² a new and more comprehensive theory reduces the old theory just in case the new theory plus correspondence rules entail the old theory. The correspondence rules or "bridge laws" specify identities between the entities in the old and new theory.

"Difficulties with this view begin with the observation that most reduced theories turn out to be; strictly speaking and in a variety of respects, false" (Churchland, NP, p. 48).⁶³ On Nagel's view, from the new theory plus "bridge laws" one can deduce the old theory. But, if one has an identity between old and new entities one can get from the falsity of old entities to the falsity of the new

⁶² Nagel, Ernst. The Structure of Science. New York: Harcourt, Brace, and World, 1961.

⁶³ Churchland, P.M. A Neurocomputational Perspective: The Nature of Mind and the Structure of Science. MIT Press, 1989 (henceforth NP).

entities. "If reduction is deduction, modus tollens would thus require that the premises of the new reducing theory be somehow false as well, in contradiction to their assumed truth" (Churchland, NP, p.48). According to Churchland, in most cases the problem can be solved by adding, to the reducing theory, a counterfactual boundary condition. In this case the falsity in the premises of the reducing theory will be confined to these limiting conditions.

However, this solution will not do for cases where the reduced theories are "radically false" such that their ontologies are largely false and must be rejected. Since the ontologies of the reducing and reduced theories are connected by bridge laws, the status of these laws is put into question if the old theory has an ontology that is "illusory or uninstantiated." The claim is that examples of reduction could include cases where the ontologies of the two theories are neither identical nor coextensive.

This distinction merits a discussion since it is worth noting that it is hard to differentiate between a theory that is false and one that is radically false, and Churchland does not provide a more successful criterion for distinction. Establishing the two kinds of false theories is a problem for eliminativism in general because it requires a good way to tell the difference between reduced entities like tables and chairs, and entities like phlogiston or witches, which cannot be reduced because they do not exist.⁶⁴ The issue is even more pertinent given

⁶⁴ See Lycan and Papas, "What is Eliminative Materialism?" Australasian Journal of Philosophy, Vol. 50(2), 1972. Their criticism of eliminativism rests on that point, only it is directed against Rorty.

that eliminativist think that the mental entities are more like phlogiston and less like tables.

However, since, the objects of commonsense physics were successfully reduced to scientific physics; their existence could be put into question. If we take successful reduction to be elimination⁶⁵, then if all there is to tables and chairs are elementary particles proposed by physics, these commonsense objects are not real because the particles are what is constitutive of them. On the other hand we want to be able to say that phlogiston and witches do not exist because no reduction of either of those is possible. Hence, there seem to be two kinds of ways in which an object or entity can be false. An entity can be like a table, where it has been eliminated via successful definition, or it can be false because it does not exist, like a witch. Eliminativists have to draw a distinction between entities that are false because they do not exist and that are false because things have been discovered that redefine all their properties.⁶⁶ Churchland gives tables and chairs the status of functional objects⁶⁷, the existence of which his eliminativism does not put into question, while phlogiston,

⁶⁵ One can consult Quine on this, see "Epistemology Naturalized." Ontological Relativity and Other Essays. New York: Columbia University Press, 1969

⁶⁶ Rorty also discusses this distinction in his "Mind-body Identity, Privacy and Categories." Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971. The distinction there does not seem to be substantive: we can replace talk of minds easier than we can replace talk of commonsense objects. Convenience is what makes the difference between the two types of entities.

⁶⁷ See Churchland, Paul "Activation Vectors vs Propositional Attitudes" On the Contrary. Churchland Paul and Patricia. Cambridge, Massachusetts: The MIT Press, 1998, p.40.

witches, and minds are just illusory, and those entities are the target of his arguments.

A possible way to draw the distinction could be that a theory is false when some of its entities are illusory, while it is radically false when most of its ontology is illusory. But for reduction via deduction the distinction can be only bivalent, something can be either true or false, and one should not be able to get falsehood from truth since deduction is truth preserving. In this way, the first example of a false theory seems to collapse into the second. In both cases one would be deducing falsehood from true premises, such that modus tollens would end up negating what we assume to be true. A distinction of degrees of falsehood is unsubstantiated. Nagel's model of reduction then has the same devastating consequence for both false and radically false theories.

Also, Churchland claims that bridge laws connecting those radically false theories are called into question if they are connecting the features of the new entities with the illusory features of the old entities. Here, also, it is unclear how there is a distinction to be drawn between illusory features of the old entities, which make the "bridge laws" go bad, and the false features in the previous example where the identities between old and new entities did not compromise the "bridge laws." Attributing illusory features, it seems, is just a way of saying that the old theory ascribed nonexistent features to some of its entities, which should be the same for both false and radically false (or illusory) theories.

Churchland proposes that this deductive view be discarded in favor of a different model of intertheoretic reduction, in order to preserve intertheoretic

reduction for theories that are not radically false. On the new model the two theories would be isomorphic to each other and the relation of identity between the ontologies would be dropped. The new theory T_n (plus limiting assumptions and boundary conditions) would entail a set of theorems that would then be isomorphic to a set of theorems entailed by the old theory T_o . The set of theorems deduced from within T_n would mirror T_o . "The correspondence rules play no part whatever in deduction. They show up only later, and necessarily as material-mode statements, but as mere ordered pairs..." (Churchland, NP, p. 49). Since identity of the entities is replaced by ordered pairs the falsehood from the old theory would not travel, via implication, to the premises of the new theory. In this way the problem of reduction is resolved, for the new theory can reduce even a substantially false theory, since deduction is replaced by isomorphism --a metaphysically insignificant relation. This is the crux of the eliminativist arguments. The view proposed is not a rejection of reduction rather it is a complete redefinition of it.

Cross-theoretic identity is still permitted, but it is conditioned on smooth intertheoretic reduction. The identity between the new and old entities is a result of smooth reduction not a precondition for it. The goal of reduction remains the same: the new theory should be able to replace the old theory without loss in explanatory or predictive powers.

Section II--Emergent Properties

Churchland is directing his arguments against irreducible or emergent properties. Eliminativism is supposed to show that these properties are not the obstacles that they are thought to be, mostly because they do not exist. Initially the task is to distinguish emergent properties from nonemergent ones, this distinction is said to follow from the above exposed view of reduction.

Properties that are not emergent, presuppose the reduction of T_o to T_n , and that the old properties are paired by correspondence rules with the new properties. The reduction was smooth enough such that the ontology of the old theory is sustained by T_n and the properties of the old and new theory are paired up as identical.

Emergent properties are properties that are not reducible in such a way. “..(A) property F will be said to be an emergent property (relative to T_n) just in case: 1) F is definitely real and instantiated, 2) F is cooccurrent with some feature or complex circumstance recognized in T_n , but 3) F cannot be reduced to any property postulated by or definable within T_n ” (Churchland, NP, p.50).

Churchland points out that properties that are usually cited as emergent, for example the appearance properties of H_2O or molecular motion, are not good examples of such properties. They are considered emergent only on a much stricter view of reduction. For example, it is impossible to get blueness of water from the molecular theory concerning H_2O because it presupposes deduction of

those properties either directly or indirectly, via correspondence rules, from the molecular theory.

Indirect reduction is impossible because, as it was stated previously, one should not be able to deduce a false theory from a true one. A direct reduction is too strict a requirement; it would be deduction without correspondence rules. A molecular theory of H₂O does not contain in its lexicon the term 'blue' and because of that one cannot directly deduce that property from it, without relying on bridge laws to connect 'blue' of the old theory with a molecular property in the new theory. To have a direct reduction, the new theory would have to already contain all the terms designating the properties of the old. In fact, if direct reduction is a requirement one would never be able to reduce any theory to any other, since all theories have disparate ontologies that are designated by different terms.

Section III--Elimination and the Knowledge Argument

Nagel and Jackson are considered proponents of the knowledge argument. Both authors present arguments that support the view that phenomenal character or qualia of our experience are not reducible to physical properties.⁶⁸ Their arguments are based on thought experiments where knowledge of all physical properties does not result in knowledge of all facts.

⁶⁸ In this section I will not distinguish between emergent properties, qualia or phenomenal character. This should not be taken to mean that no such distinction exists or that I support such a view.

Those thought experiments are designed to show that some facts are left out and that those facts are nonphysical. Nagel, in his 1974⁶⁹ article, proposes a thought experiment where the reader is asked to assume that they know all that is known about the physical constitution of the bat and that knowledge of all the physical facts about the bat is complete. The choice of the bat as the protagonist in this story is purposeful because the bat is said to be sufficiently like us because it is a mammal, but it is also radically different because it orients itself solely based on echolocation. Therefore, the perceptual experience of the bat must be strikingly different.

Considering that we have all the physical knowledge of the bat and we know all the declarative sentences about its perceptual experience, we should know all there is to know about the bat and its experience. Nagel will, then, want to know if all the knowledge we have about the bat will also include the knowledge of “what it is like to be that bat” (Nagel, 439). It would seem that the answer to that question would have to be negative. If what it is like to be that bat constitutes a fact, then the physical knowledge we had about the bat will not exhaust all the facts about the bat and its experience. The subjective experience of the bat would escape the physical explanation of that organism.

Nagel defines consciousness in terms of this subjective experience. For an organism to be conscious, according to Nagel, there has to be something it is like for that organism to be that organism (Nagel, 436). Moreover,

⁶⁹ Nagel, Thomas, “What Is It Like to Be a Bat?” *The Philosophical Review*, Vol.83, No.4, October, 1974:435-450.

consciousness is tied to the first person (or bat) perspective. Unlike publicly viewable phenomena such as a vase dropping on the floor--or any other phenomena that involves physical objects where the event can be viewed and confirmed by anybody in the vicinity of that event--conscious experience seems to be accessible only to the creature having that experience. Consciousness is tied to a single point of view, the first person (or creature) perspective. Science on the other hand aims towards objectivity, which is always defined in terms of the third person perspective. This type of perspective aims to explain things that are publicly observable and strives towards explanations that can be confirmed in that way also.

Reductive views usually attempt to capture the mind by looking for scientific explanations of mental events. That task seems impossible given the nature of consciousness, which is that it is tied to the subjective perspective and cannot be captured by this third person perspective. The more science moves in the direction of objectivity the further away it is from consciousness. Consequently, a scientific theory cannot capture what is exclusively subjective. So, as Nagel says, the problem of consciousness is either intractable or uninteresting. If we care about capturing subjective experience via objective methods, the problem is intractable; on the other hand without consciousness the problem loses its flavor.

Jackson presents a similar argument. In Jackson's scenario, we have Mary who is well versed in neuroscience but has been deprived of color experience. She has lived in a black and white room and has never seen any

colors. In this case Mary knows all there is to know about her brain, her physical make up, and that of other people's brains and physical constitutions. Moreover, we are at the end stage of development of physics, since the knowledge about all the physical phenomena in the world is complete. When Mary is let out she experiences color for the first time and, Jackson concludes, she learns a new fact by gaining a quale of red, when faced with a tomato. Now Mary's sensation of red and the quale associated with it constitutes an extra fact that was not previously captured on the physical framework of explanation. Therefore, Mary must have gained knowledge of a fact that is not physical.

Both Nagel and Jackson rest their arguments on the assumption that having subjective experience amounts to having knowledge of a fact. But, because both arguments begin by assuming that physical knowledge, either of the bat or Mary's knowledge of the brain, is complete they conclude that this new fact must be nonphysical. In the following section I will present Churchland's attack on both of these arguments and I will in the process elaborate further on aspects of both of those arguments.

As was stated, Nagel claims that consciousness is constitutive of our mental states. The phenomenal features or qualia usually associated with sensations are the distinguishing feature of our mental states. Science aims at an objective point of view while phenomenal character is subjective, and moving away from subjectivity in order to provide an explanation would mean leaving out these essential properties of mental states. Consequently, reduction cannot work for mental states. This is an argument in principle. Nagel is not claiming

that a reduction to a particular theory will not work; rather he is claiming that the objectivity of science cannot capture the subjectivity of consciousness.

Churchland tracks three distinct arguments in Nagel's paper⁷⁰ and mounts an attack on each of them separately. The first argument goes as follows: successful reduction usually excludes phenomenological properties by "kicking them into the head." Color, warmth and other such properties are usually said to be the result of nature acting on our brains. The brains of human observers react in a certain way when they are presented with a particular physical stimulus. Now, this theory aims only to explain the stimuli itself, independent of their effect on the human observer. Thus, Nagel claims that phenomenal character is left behind since it is outside the scope of theories aiming to cover only the physical from the objective point of view. This same treatment cannot work in case of a possible reduction of mental states to neuroscience, since phenomenal character is constitutive of mental states. However, Churchland contends that reduction in the case of ordinary substances is much smoother than Nagel claims.

Churchland's argument hinges on the distinction between subjective and objective phenomenal properties of the object. He claims that the warmth of the morning sunshine and the redness of tomatoes are objective phenomenal properties of those objects. Consequently, a theory that covers the physical features of those objects would obviously include all their objective properties, including warmth and color. "Redness, an objective property of apples, is identical with certain wavelength triplet of electromagnetic reflectance

⁷⁰ Nagel, Thomas, "What Is It Like to Be a Bat?" The Philosophical Review 83, no. 4 (October 1974).

efficiencies” (Churchland, NP, p. 56). Since, redness is identified with a physical feature, then redness becomes an objective property of the object that has that physical feature. So, the phenomenal property so construed is not excluded from the reduction of ordinary substances.

The reduction of mean kinetic energy, for example, is so complete, according to Churchland, that we could replace our commonsense vocabulary for the vocabulary of the new reducing theory. In fact, our perceptual mechanisms are sensitive to these objective properties; one can detect the presence or absence of electromagnetic properties. And, through practice, our perceptual mechanisms could get better at revealing the microscopic reality of our world in greater detail.

The same treatment could apply to subjective qualia by making them objective properties of the human observer. The sensation of red could be identified with activity in the brain and through training humans can learn to introspect that activity.

The second argument that Churchland addresses is Nagel’s argument that qualia are tied to a single point of view--the subjective point of view. The physical states of the brain are accessible from the third person perspective, usually associated with the objective perspective. Brain states can be accessed by various people, while mental states seem tied to the perspective of the person experiencing it. Mental states are accessed by introspection and brain states are not.

Reduction of mental states to brain states would entail that they were identical things. If brain states and mental states are identical then, by Leibniz's law, they should have all the same properties. Well, it seems that if one can access mental states introspectively, and one cannot do the same with brain states, then mental states and brain states have at least one disparate property-- that of being accessible by introspection. The following gives the form of the argument:

1) The qualia of my sensations are directly known by me, by introspection, as elements of my conscious self.

2) The properties of my brain states are not directly known by me, by introspection, as elements of my conscious self.

∴ 3) The qualia of my sensations \neq the properties of my brain states
(Churchland, NP, p. 58).

The problem with this argument, according to Churchland, is that it commits the intentional fallacy. Brain states and mental states are here assumed to be coreferential, but introspection is an intensional context; it is on a par with knowing, believing or perceiving. Intensional contexts are such that substitution for coreferential terms might result in a changed truth-value of a claim. Thus, the substitution of mental states for brain states in the above argument is an attempt to substitute into an opaque context. The second premise then is wrong. This first version of the Nagel's argument seems not to be referring to genuine properties of the object rather to ways of knowing about the object.

Churchland reformulates Nagel's argument:

- 1) My mental states are knowable by me by introspection.
- 2) My brain states are not knowable by me by introspection
- 3) My mental states \neq my brain states (Churchland, NP, p. 60).

This version of the argument is modified to be fallacy free. The challenge is then made against the second premise. Churchland wants to challenge the idea that brain states cannot be introspected. It is worth noting that in cases where reduction is successful to the degree that the entities of the old theory are identified with entities of the new theory, an argument of the same form as above would indeed be trivially true. For example, if temperature is identical to mean kinetic energy then when one senses one then the one is also sensing the other.

Churchland's claim is underpinned by his own model of reduction and brain states are not knowable due to their identity with mental states.

Churchland aims to prove that one can access brain states directly whatever their relation to mental states. For the introspection of brain states one need not arrive at a successful reduction of mental states to brain states. I will come back to this point later on in the section featuring a discussion of perceptual plasticity.

The third attack on Nagel is mounted against the conclusion that knowing all the physical facts about bats and their experience will not include knowing what it is like to be a bat and therefore that knowledge of physical facts does not exhaust knowledge of all facts. This last streak in Nagel's argument overlaps largely with Frank Jackson's⁷¹ argument. So, the two can be tackled together. Jackson's argument goes as follows: Mary is a brilliant neuroscientist. Mary has

⁷¹ Jackson, Frank, "What Mary Didn't Know?" in The Nature of Mind, ed Rosenthal, David, New York: Oxford University Press, 1991.

lived her entire life in a black and white room; she has access to a black/white television and can read about the outside world only from books that also feature only white and black color. Mary learns all there is to know, all the physical facts, about the human brain. The argument rests on the assumption that, at the time Mary is reading about the human brain, neuroscience is a completed science and physics has uncovered a total theory. So, if reductionism is true, Mary should know all there is to know about human experience just by knowing all the physical facts about human brains.

After she is let out, Mary experiences, for example, the redness of a tomato. Jackson claims that the experience associated with the redness of a tomato constitutes an extra fact. Now if Mary knows all the physical facts, and yet when she is let out she learns a brand new fact, physical facts do not exhaust all facts. What Mary learns is a nonphysical fact, according to Jackson. "Therefore, complete knowledge of the physical facts of visual perception and its related brain activity still leaves something out" (Churchland, NP, 61).

The argument reformulated:

- 1) Mary knows everything there is to know about brain states and their properties.
- 2) It is not the case that Mary knows everything there is to know about sensations and their properties.

Therefore, by Leibniz's Law

- 3) Sensations and their properties \neq brain states and their properties.

The criticism of the argument so formulated is that the phrase “knows about” has a different meaning in each of its occurrences in the argument (Jackson, p.393). The first instance of the phrase entails propositional knowledge, while the second instance entails ability. Knowing everything there is to know about sensations is not exhausted by propositional knowledge but also requires “know how;” Mary learns how to make sensory discriminations.⁷² When Mary finally experiences a sensation of red she does not learn a nonphysical fact but a physical fact that requires knowledge by acquaintance.

Churchland claims that as long as there is equivocation in the use of the phrase in the premises to its use in the conclusion, the criticism still goes through. The argument loses its force because presumably one can have different types of knowledge of the same thing. So the difference is not in the thing that we know something about but in the way we know it. Jackson’s argument needs there to be a distinction in objects known, one physical, one nonphysical, the epistemological distinctions seem not to be enough.

Although I see the distinction between the metaphysical and the epistemological issues here, I do not see that pointing to this distinction resolves the issue of whether or not the thing that Mary learns is a physical fact or a nonphysical fact. To know a thing means to know some of that thing’s properties and those could become known to us by particular ways of knowing. Brain states

⁷² This objection rests on the view that one cannot have a sensation without making a discrimination of that one sensations from other ones. Mary could have had a sensation of red without actually being able to discriminate between sensory inputs. In that case, Mary might not have acquired an ability to discriminate but only prelinguistic knowledge of a sensation of red.

could have two kinds of properties, physical and nonphysical. We could know the physical properties by propositional knowledge while qualia associated with particular brain states could be known to us by acquaintance. Now, each way of knowing could reveal to us a different type of property, exclusively. In that case a different way of knowing a thing could make a difference in its properties and consequently on the metaphysical issue. Thus, different ways of knowing could impact on the metaphysical status of the thing being known.

But let us look at the argument without the equivocation, as Churchland presents it:

- a) Mary has mastered the complete set of true propositions about people's brain states.
- b) Mary does not have a representation of redness in her prelinguistic medium of representation for sensory variables.

Therefore, by Leibniz's Law,

- c) The redness sensation \neq any brain state.

The point being made is that materialism is not limited to only one way of knowing. One can know all there is to know about brain states, one can master all the sets of sentences relevant to brain states, and still lack some knowledge. "This does not mean that sensations are beyond the reach of physical science. It just means that the brain uses more modes and media of representation than the simple storage of sentences" (Churchland, NP, p. 63 Churchland's emphasis). So, when Mary leaves the room she acquires a representation of red, but that representation is not excluded from physical science because physical science is

not limited to propositional knowledge. Mary, in the black and white room, was limited to propositional knowledge and so did not actually know all the physical facts about brain states. One should take this argument to show that Jackson's argument, without the equivocation, does not go through. However it certainly does not establish that there are no nonphysical facts. Churchland is making a prediction about the scope of physical science; but so was Jackson.

Perhaps, Churchland's objection can at most support the claim that the brain has more than one way of representing knowledge not the claim that physical science could cover all those modes. Now, let us consider the distinction between propositional knowledge that is "simple storage of sentences" and other modes of storage. The distinction seems less than clear because it seems to be drawn in terms of modes of storage or representation in the brain. However, although there is a distinction between the ways in which we might acquire those two different types of knowledge, that difference need not be reflected in different modes of representation or modes of storage. In fact, there is even a distinction between storage and modes of representing and I will elaborate on that presently.

Propositional knowledge is somehow transmitted via propositions while other types of knowledge are not because the information transmitted is not limited to things that can be expressed by propositions. Still, that does not mean that those two types of knowledge are differently stored in the brain. Unless one is looking for sentences in the brain, it seems difficult to specify how stored information in the brain can be somehow propositional. The brain can have a

way of representing or storing propositions without that storage or mode being propositional. The sentences (some of them propositions) constitutive of my dissertation chapter are stored in my computer's hard drive, but, I will not, after inspecting the inside of my computer, conclude that my dissertation does not contain any propositions because I did not find any attached to the side of my hard drive.

Churchland also claims that this idea that knowledge is stored in the propositional form is a staple of Folk Psychology. He takes it to be a proof for the falsity of FP that, as it turns out, the brain's main mode of storage is not the sentence. First, as it was just stated, I do not think that for something to be a proposition it has to be stored as a proposition, or more generally as a sentence. There are two ways information can be stored as a proposition: one could look into the brain and find a sentence--this is, I hear, empirically false, since people have looked there and no sentences were found. But, one needs to define what one means when one says that the brain should have a sentence like mode of storage. Thus, a second way to look for propositions in the brain is to look for something that is perhaps not superficially like a sentence but is a mode of storage with representations that are syntactically structured. This version seems more plausible and perhaps true (although I will leave it to others to worry about that problem). In that case what one would need is an explanation of how these syntactically structured representations achieve their true sentence status. But even if such representations are not found in the brain, this will not make it so

that there are no propositions. I think two notions are conflated here, storage and representation.

The issue of representation is one that has to tackle the task, just mentioned above, of either finding a sentence in the brain or discovering some proposition-like structure in the brain. But that aside, the issue of storage seems more like the question of: "How does a sentence fit into the brain?" The mode of storage is more related to the physical questions about the brain, like what cells are the ones that are constitutive of the brain. Since we know which cells those are, we can just point to those and proclaim that this is the way we store things in the brain. We can just point to neurons. Things are stored in the brain by taking up various areas in the brain, but physically those areas are all alike and none of them seem to have the features that are used to describe the tasks that that storage space accomplishes. When it comes to storage, all things in the brain are stored in the same way. Images are not somehow duplicated in the gray matter as they are on a Polaroid. Musical scores are not stored in the brain the way they are represented on the paper, or in the computer. But none of that could compel us to say that neither images nor musical scores exist, because they are not stored in the brain in the same form in which they appear on musical scores or the way they appear on photographs.

Consider an image of a horse and now imagine that it is represented in the same way in the brain as it is in a photograph. I am not sure how either of those represent a horse, but others can worry about that too, all we need to imagine is that it is represented in the same way by either corresponding or

mirroring some feature of the horse and that all those features stand in relations that mirror or correspond to the relationship in which the various body parts of the horse bear onto each other. This representation could be specified, in some way (maybe via logic) in abstract, such that we could say that both the brain and the picture are accomplishing the same task in the same way by representing the horse. However, the mode of storage of both of those representations would be entirely different, because the only thing for storage to accomplish is somehow to provide a physical medium that would sustain that representation, but that physical medium is certainly different from picture to image in the brain. Thus, representation is distinct from storage, and the mode of storage need not match the mode of representation. Consequently, if the two are not the same then one can store representations in ways that are not representational. Thus, if Churchland means that propositional attitudes do not exist because we do not store them as such, he is wrong.

Second, I think that the claim that FP proposes a preferred mode of storage in the brain is unsubstantiated. In both of the previous chapters I maintained that I will not attempt to designate particular claims as folk-psychological, at least not yet. My goal is old fashioned: I wish to find a general criterion that would provide a way to sort some claims about the mental as folk while others as scientific. No such method exists so far and I do not think that at this point we can, with surety, call some beliefs common sense. Therefore, I do not think the scope of FP can be traced out. But, even if one were to venture a guess, according to all the proposed demarcations of the scope of FP, claims

about how the brain stores information remain outside the reach of the folk-psychological platitudes. If one uses the Lewis criteria, by which we need to collect the commonly held beliefs about the mental, issues about storage would certainly not make their way into the body of platitudes. In order to gather claims that treat the brain so specifically, one would ultimately have to collect scientific platitudes (if that word applies here).

If one uses an alternative way of making the distinction, one could say that commonsense theories are theories that are made by lay people while scientific theories are devised by scientist. Obviously, this cannot work because, as I said in chapter one, a good criterion is one that makes that distinction based on the claims themselves and not based on who uses them or utters them.

Alternatively, the distinction between two types of theories would rely on the distinction between a person of science and a lay person.

Section IV--Perceptual Plasticity

The second part of Churchland's objections is the substantial one because it presents the view of perceptual plasticity. Churchland's objection partly revolves around Jackson's view of what a total science and therefore neuroscience would look like. Both Jackson and Nagel are underestimating the amount of knowledge one would have if one knew all there is to know about the brain and the nervous system. Churchland will not attempt to prove that a person knowing the whole of neuroscience will have knowledge of sensations.

The task is, in fact, to bypass sensations altogether and propose conceptual change as the solution for phenomenal character. Churchland's better science does not propose a view of physical science that includes sensations but a view that proposes a new conceptual framework that includes only brain states. One of the problems with the knowledge argument is that it rests on the assumption that sensations are known to us through introspection, while brain states are not - Churchland's purpose is to dispute that claim.

Churchland's argument will be that introspection is not tied to mental states. There is no reason to believe that one could not introspect in terms of any other conceptual framework even, conveniently enough, in terms of a conceptual framework provided by neuroscience. Introspection for Churchland is a way of individuating brain states. But, individuation is done in terms of a conceptual framework that is an outcome of a theory. This argument is made possible by the collapse of the distinction between theoretical and observational terms. As a result of this collapse, observational terms are said to be theory-laden, where what we observe is affected by the theory that explains the phenomena observed. Observations are not independent of the theory; rather they are determined by the theory that explains the nature of the objects that are seen. It is possible, then, to change observations as a result of change in theory.⁷³ The more an observation is theory-laden, the less restrictions there are on what can be observed. Churchland's view is committed to very few, if any,

⁷³ This argument is supported in Churchland, P.M. Scientific Realism and the Plasticity of Mind. Cambridge, U.K.:Cambridge University Press, 1979, especially Chapter I. For a similar view one can turn to: Feyerabend, Paul. "Science without Experience." Journal of Philosophy, Vol. 66, no.22 (1969).

restrictions on what can be the object of an observation, or of introspection.

There will be more on this throughout this and other chapters.

Thus, FP is a theory and it provides us with a conceptual framework that we are trained to use and as a result of this training we introspect mental states. If we learned to individuate mental states as a result of training, Churchland then thinks, we could be trained to individuate in terms of another conceptual framework. Provided a scientific theory about the brain emerges, it could yield a conceptual framework and so we could use training to institute this scientific conceptual framework in place of the folk-psychological. In other words, we could learn to introspect brain states just like we do mental states. The way we will accomplish this is via plasticity. A discussion about plasticity and its application to the mind-body problem will follow right bellow. As advertised, I will dispute the claim that introspecting brain states will solve the issues concerning phenomenal character.

According to Churchland FP is radically false and irreducible (on any model of reduction) to a physical science. Of course, neuroscience, although not complete, is a highly promising theory of brain states. Thus, it seems warranted to replace our folk-psychological framework in favor of a neuroscience.

Churchland attempts to illustrate how this project would develop on the case of Jackson's Mary. If neuroscience is complete, then Mary will not be introspecting mental states but brain states. She will be doing this as a result of a "reconceptualization of the relevant perceptual space." She will not be identifying sensations, but she will reach out directly to mental states and identify

“various spiking frequencies in the nth layer of the occipital cortex.” Although Mary in the black and white room might not have had her nth layer activated she would be able to imagine being in that cortical states. The point is that Mary, by being able to introspect mental states, could more keenly imagine being in a particular cortical state.

One must wonder if it is relevant how far Mary’s imagination can be stretched. Jackson, in fact, says that the question is not about what Mary can imagine; rather it is that Mary lacks some knowledge about other peoples’ brain states. In general, to bring up what looks like a truly philosophical issue, it seems that it must be that there is a distinction between imagining a qualitative state and having that same state. That difference could be spelled out in terms of how much information a person has: it has to be that knowing what it is like to see red entails more informational content than imagining what it is like. There was a time at which I did not know what it was like to taste a quince, and the usual description is something like an under-ripe apple with the texture of a pear. And one can certainly use all that information to have a premonition about what it would taste like to eat a quince, perhaps even come very close to the actual experience. Still the actual tasting of the quince will add something extra to the imaginings of the taste. What Churchland should aim at is to eradicate the difference in experience between Mary in the room and Mary outside. This cannot be done by appealing to imagination. Thus, I do not think talking about what Mary can imagine will resolve the issue of what Mary should know. Mary has never been in a particular cortical state, during her confinement, she will not

know what it is to have her, or other peoples', nth layer in the occipital cortex activated. The most Churchland's argument will do for us is activate the cortex associated with imaginings of future neuroscience states.

The broader point that Churchland is trying to make is that reconceptualization of particular perceptual fields could rid us of the view that introspection is wedded to mental states. Churchland introduces perceptual plasticity as support for the argument that brain states can be introspected directly. Plasticity is the perceptual change that occurs as a result of conceptual change. Plasticity is found in nature since conceptual change is not rare, so this proposal should not seem outlandish. Consider the perceptual change involved when one moves from a layman, in a particular field, to an expert in that same field. For example, to a child or a musically untrained person chords sound like undivided wholes, while a musician can discriminate the notes in the chords. Presumably the perceptual change that occurs is due to the musical training, where the student moves from wholes to particular notes in chords. Also, the musical expert can hear a set of notes specified verbally and be able to recall the sound (Churchland, NP, p.65).

The trainee can even imagine a new, never heard before, chord. This is how: "Specify for him (the trainee) a relatively unusual one -- a F#thadd13th for example -- and let him brood a bit. Then play for him three or four chords, one of which is the target, and see if he can pick it out as the sound that meets the description" (Churchland, NP, p.65).

This argument should work for anything with parts. Here is another example from real life. Consider the difference between a wine connoisseurs and untrained drinkers. Presumably the wine experts perceive distinct qualities in the wine while the untrained person perceives it roughly as just tasting nice. In this case, as in the previous one, a person could be trained to become sensitive to additional qualities in the wine that previously remained unnoticed. The taste of the wine is initially just a unitary sensation, but after a while the expert can discriminate various qualities in the wine. Plasticity enhances our discriminatory power.

If one thought that sensations are unlike wine or chords, because they do not have parts, unless you have an a priori argument to rule out the possibility that sensations can be broken up into parts, one should immediately drop it (Churchland, NP, p.65). So, the real life examples should work to support two points. The first point is that Mary can imagine being in a particular cortical state and the second that humans can be trained to introspect brain states.

Section V--Plasticity and Phenomenal Character

In this section I wish to address how plasticity can solve the issue of the emergence of phenomenal properties. One should recall that when Churchland was challenging Nagel's argument, he put forth the claim that qualia are not subjective but objective properties of the things in our perceptual field. The color of red is a "certain wavelength triplet of electromagnetic reflectance efficiencies."

The later part of the identity statement is covered by physical science, while we kept introspecting sensations that are the preferred posit of folk psychology. Since we wish to replace FP, then it would be best if we could introspect the part of the identity statement that features no folk-psychological posits. When it comes to sensations what Churchland proposed is that we adapt to perceiving the objective properties of the world, thus there is no more 'red' only wavelengths, which we have been trained to perceive. Moreover, we can replace mental states by learning to introspect brain states. Both, of these tasks are somehow to be accomplished by plasticity. Since, we can be trained to perceive anything, we can perceive certain wavelengths directly and we can also introspect activation in our occipital lobes directly. With this move we have gotten rid of sensations and all the problems associated with them.

But I will set that aside to tackle the problem of training. The general point will be that one can draw a disanalogy between the real life examples of training, cited above, from the proposed reconceptualization from introspecting mental states to brain states. In his attack on Jackson, Churchland introduces the claim that the brain has more than one way of storing knowledge. There is the distinction between propositional knowledge and knowledge by acquaintance. The latter type of knowledge need not be stored in linguistic form, because it is not a matter of mastering sets of sentences. It is easier to see that conceptual change can occur if one assumes knowledge is stored just in linguistic form. In these cases all that is required of the subject is switching from one set of

sentences to another set of sentences. One can just merely stop believing that that set of sentences is true and discontinue using them.⁷⁴

Training seems much harder when the subject either has not mastered a language or the conceptual shift entails some sort of change in the prelinguistic mode of encoding in the brain. The initial question to raise is how does propositional knowledge influence change in knowledge that is not propositional? Training, it seems, would entail the influence of propositional knowledge effecting a change in this nonverbal type of knowledge. Perhaps this type of interaction occurs, but it is not a process that much is known about.

Children would prove even more difficult. A child has the large task of learning a language and establishing a conceptual framework. The way a child does this is hard to recount. If folk psychology is the framework we use for explaining our mental states, a child has to be trained to use the folk-psychological framework. Some people think that this training is akin to the training we get in learning a mother tongue and the problems of learning a language are notoriously pernicious. This is why those people⁷⁵ are motivated to claim that FP is an innate theory.⁷⁶

⁷⁴ This is not to say that change in endorsed sentences does not entails change in experience, rather it is aimed at the claim that the change in experience is stored in a way that is not reducible nor can be captured by sentences.

⁷⁵ Carruthers supports such a view in his Carruthers, P. Language, Thought and Consciousness Cambridge: Cambridge University Press, 1996.

⁷⁶ Innateness of FP is usually interpreted to mean incompatibility with reconceptualization. If FP is innate, then it is not revisable.

So, there is a question about how we get trained to introspect mental states, as well as whether we introspect only as a result of training.⁷⁷ If we introspect as a result of training, the question is still open about whether we can be trained to accept any type of framework, perhaps there are reasons for the universality and resilience of FP. There is also a good chance that the type of training that we get in the examples of the musician and the wine expert are significantly different from the training that occurs in children. As stated previously, for Churchland, introspection is a way of individuating mental states, but is not tied to it. Introspection is perhaps just a method of individuating internal goings on.⁷⁸ Preverbal children, which must begin without the developed ability to individuate mental states and then gradually begin to do so, must acquire information in nonlinguistic form and if there is any type of training involved it is probably, in some respects, unlike the type of training of the music student, who can explicitly interact with their teacher and can make use of propositional knowledge. Although children learn to individuate physical objects, the process by which they learn to do so is quite murky.⁷⁹ Since the process of learning to individuate is not yet obvious, it is then not transparent how much of it is learned as due to training. Furthermore, the obscurity of the process makes it

⁷⁷ It is worth pointing out that even if FP is a theory the adoption of which required training, as Churchland certainly believes, that would not have the immediate consequence that reconceptualization is possible.

⁷⁸ Since, Churchland uses introspection as a way of individuating mental states, it is unlikely that one could have a conscious mental state without introspection, although consciousness is not directly addressed by Churchland.

⁷⁹ For some research supporting the idea that infants individuate see Baillergeon, R. "Object Permanence in 31/2 and 41/2-Months-Old Infants". Developmental Psychology, Vol. 23, No. 5, 1987: 655-664 and Fantz, L. Robert "The Origin of Form Perception" Scientific American, Vol.204, 1961:36-42.

difficult to extract principles by which one could teach a child something like individuation, and this goes for physical objects and even more so for mental states which are individuated through introspection. If we do not know how children learn to individuate, then we do not know how to use training to teach them to individuate in terms of other frameworks. Thus, even if it might be possible for an adult to start introspecting brain states, it might seem impossible to start doing that from nonconceptual scratch. And part of Churchland's argument, or merely hope, is that there could be a complete replacement of the folk-psychological framework by a scientific one. This complete replacement should begin from infancy, such that the first framework, about inner states, that children learn is scientific. Alternatively, one would have to use the commonsense framework as a permanent crutch, first learning common sense about the mental and then later replacing it by a scientific one. This would not be complete replacement and would give common sense a special role that the eliminativist do not want to attribute to FP. For all those reasons it does not seem prudent to erect a theory on the assumption that training can untangle introspection from mental states.

The picture of how one can incite change or establish a new framework with training perhaps has its roots in the Myth of Jones, presented by Sellars in "Empiricism and the Philosophy of Mind."⁸⁰ The myth of Jones presents a picture of how our ancestors adopted the folk-psychological framework of mental states. My aim is to show that this model cannot be used for the adoption of the

⁸⁰ Sellars Wilfrid. "Empiricism and the Philosophy of Mind." Science, Perception and . Atascadero, California: Ridgeview Publishing, 1991.

neuroscientific framework, because it is not a model that provides for the adoption of frameworks that entail nonpropositional knowledge.

The Myth catches humans at a stage in which they have already mastered a Rylean language, “a language of which the fundamental descriptive vocabulary speaks of public properties of public objects located in Space and enduring through time” (Sellars, 91). The reason this myth begins in medias res is because, according to Sellars, the problem does not lie in how we acquire this Rylean language, but in how we learn to speak about inner episodes. Sellars’ task is to describe how humans come to use the vocabulary of inner episodes, like thoughts, and immediate experiences, such as sensations. In the end, I think, the late introduction of FP, or its separate introduction into the vocabulary is what disables it from being used as a model for the introduction of scientific theories in Churchland’s sense. Commonsense psychology is introduced into the parlance of our ancestors on top of a commonsense Rylean vocabulary, but reconceptualization required by Churchland goes as far as the external properties of objects; more about this later.

The first significant milestone in the development of our mentalistic language is the addition of “semantical discourse.” This addition enabled the ancestors to start attributing semantic properties to utterances. Previously our Rylean ancestors limited their verbal exchanges to causal statements but as a result of the addition of semantical discourse they now speak of verbal productions as having meaning and attribute truth-value to them. And Sellars urges us to note that “(A) semantical statement about a verbal event is not a

shorthand way of talking about its causes and effects, although there is a sense of “imply” in which semantical statements about verbal production do imply information about the causes and effects of these productions” (Sellers, 93).

The addition of these semantic properties to our Rylean ancestors’ vocabulary, thereby making it semantical discourse, brings them closer to us. Our ancestors are closer to having thoughts. This is because the properties that thoughts have, such as intentionality, reference or aboutness, derive their structure from this semantical discourse.

It is therefore all the more tempting to suppose that the intentionality of thoughts can be traced to the application of semantical categories to overt verbal performances, and to suggest a modified Rylean account according to which talk about so-called “thoughts” is shorthand for hypothetical and mongrel categorical-hypothetical statements about overt verbal and nonverbal behavior, and that talk about the intentionality of these “episodes” is correspondingly reducible to semantical talk about the verbal components” (Sellers, 93).

Before we go onto the next step in the story, I will report on a distinction that Sellars makes between philosophical and methodological behaviorism. The former is a kind of metaphysical thesis that all mental terms can be analyzed in terms of overt behavior. But, Sellars wants to establish behaviorism as a methodological thesis which is compatible with the introduction of theoretical concepts. This methodological behaviorism is less restrictive because it allows for concepts that are not restricted to the vocabulary of overt behavior, these

concepts are theoretical. Also, it should be noted that even though Sellars deems his methodological behaviorism, as well as the theory that Jones will later introduce, as akin to a scientific theory, but it is not meant to be used as a theory about the physiology of behavior. This runs counter the usual usage of Sellars, I believe, because Jones' myth is thought to be the template for the introduction of commonsense psychology which then is accused of making claims about physiology. Sellars thought that Jones' theory has most of the features of a scientific theory and he indeed thought that commonsense and science are continuous. A claim, I think, also runs counter to some eliminativist claims which, as was argued for in the second chapter, seem to attribute scientific properties to commonsense psychology, but then continue isolating FP from other theories by ascribing to it faults that they think are derived from its status as a commonsense theory.

Moreover, Churchland's attacks center around the idea that FP does make claims about the physiology of mental states, while in Sellars we see that there is room for compatibility. Since he seems to think that each field is somewhat able to function in isolation while keeping an eye on the "total picture", such that it can maintain coherence with other fields. This gives Jones' theory a kind of neutrality that could save it from elimination, since commonsense psychology might not infringe on the sciences that deal with the physiology of behavior and mental states, and so it could turn out to be compatible with a scientific psychology aiming at physiological explanations. Thus, there is a distinction between the two construals of FP, Churchland's and Sellars'. The

distinction matters only if Sellars' views are used as models for what happens in cases of reconceptualization proposed by Churchland.

Taking into account the definition of theoretical terms, the Rylean language is one that contains no theoretical vocabulary, but only utilizes references to overt behavior. At this point, Jones decides to develop a theory that is supposed to recast the role of behavior, where now it becomes the outcome of inner speech. "In other words, using the language of the model, the theory is to the effect that overt verbal behavior is the culmination of a process which begins with "inner speech" (Sellars, 103). On this theory the causes of overt behavior become these inner episodes, where the inner utterance of a sentence is the impetus for the behavior. It is not the overt utterance of "Here is the glass of water I wish to drink" that causes the behavior, but the inner speech that precedes the overt expression of thirst.

Since inner speech is modeled on its overt counterpart we can see how the introduction of semantic categories can help in the development of the theory. The semantic properties, mentioned previously, attributed to overt speech can now be applied to inner speech. So, we have instances of inner speech that have meaning and aboutness. It should be noted that even though inner speech is modeled on overt speech, the relationship between those two is not that of identity. The role of Sellars' model is kind of like that of an analogy, but there are limitations set forth by the commentary of the model, which restrains the analogy to only some aspects of the new entities and the entities that they are modeled on.

With the introduction of inner speech as the causal precursor to overt behavior, plus the semantic properties of overt utterances, Jones has at his disposal thoughts. These thoughts are theoretical entities but it should be stressed that they are not entities proper; rather they are a methodological device. One could go as far as to say that this view is instrumentalist, because the claim is just that thoughts are introduced as a methodological tool, since they are neutral when it comes to their own physiology. Sellars calls thoughts “methodologically pure theoretical concepts”, since their introduction is limited to the realm of commonsense psychology, they are merely marking off the field of inquiry. But, they could become true entities on the condition that a theory that covers the physiology of the inner episodes vindicates their existence. Again one should contrast this view with Churchland’s which attributes to entities or concepts of Folk Psychology a full blown realism. The entities of FP are entities with properties that infringe upon theories that propose physiological explanations of brain states.

Since Jones has realized that our overt verbal behavior is caused by thoughts, he teaches his compatriots how to give self-descriptions in those terms. When Jones observes one of his friends and he can reliably conclude that his friend Dick is thinking, “I am hungry,” Dick himself can use that same behavior to conclude that indeed he is thinking, “I am hungry.” Jones uses a more or less behaviouristic method of positive and negative reinforcement to teach his friends how to describe themselves, and later self-ascribe thoughts. Ultimately, and this is how we acquire privileged access, Dick no longer has to watch for overt

behavior in order to know what he is thinking. “Jones brings this about, roughly, by applauding utterances by Dick of ‘I am thinking that p” when the behavioral evidence strongly supports the theoretical statement ‘Dick is thinking that p;’ and by frowning on the utterances of ‘I am thinking that p,’ when the evidence does not support this theoretical statement...What began as a language with purely theoretical use has gained a reporting role” (Sellars, 107).

Jones has taught his friends and neighbors to introspect thoughts. Through the introduction of the theoretical concepts combined with the behavioristic method of training, Jones has instituted a conceptual framework which results in the direct introspection of thoughts. The mastery of the new conceptual framework runs parallel to the mastery of language, but introspection is the final stage in the institution of the theory, since it can occur only after overt speech has been learned. The myth of Jones is a recounting of the institution of a conceptual framework, where introspection becomes a way of individuating thoughts.

Although our ancestors now have thoughts as part of their everyday parlance and are able to report and attribute these entities, immediate impressions or sensations are no yet part of their theory. Sellars claims that all we need is a rudimentary concept of sense perception, all we need is: “(T)hat the hero of our myth postulates a class of inner--theoretical--episodes which he calls, say, impressions, and which are the end results of the impingement of physical objects and processes on various parts of the body, and, in particular, to follow up the specific form in which I have posed our problem, the eye” (Sellars, 109).

The way in which we get trained to report having these impressions is similar to the way in which we are trained to report on thoughts. In presence of particular objects, we are trained to report having impressions that usually occur in the presence of those particular objects. However, as in the case of thoughts, sensations are theoretical concepts such that they cannot be reduced to overt behavior or utterance, but assume an inner episode, which we then become able to introspect. Thus, in the presence of a red triangle we are able to overtly report the presence of the red triangle as well as to introspect the inner episode where “it is looking to one as though there were a red and triangular physical object over there.” At this point our ancestors are said to have the completed commonsense framework and are able to use it as a tool for self-description, so they are like us in that way.

I will now argue that Churchland cannot use the Myth of Jones as a model for the reconceptualization from commonsense psychology to neuroscience. The first problem arises when one inspects more closely the purported neat separation between the external and internal vocabularies. It turns out that distinction is not so clear cut, or at least it is not always drawn in the same place. In Jones’ story, theoretical entities are introduced with the theory about mental states. Obviously, our Rylean ancestors do not have a language that is devoid of any theoretical entities. They speak of public events, but those events refer to public objects and talk of public objects is informed by a theory about those objects and all those theories feature theoretical entities. Moreover, Churchland thinks that our theory about those public objects should be continuous with a

theory about brain states that should replace mental states. Thus, the theory that covers those public objects ultimately covers brain states.

On the neuroscientific theory, which is ultimately a theory subsumed under materialistic monism, the sense in which one would use inner states would be distinct from what is meant when we, Jones' ancestors, speak of inner states. On the neuroscientific framework, stating that an event is inner means "under the skin", to borrow Rorty's expression. FP on the other hand is often charged with imputing a much stronger meaning to 'inner,' entailing further a much stronger kind of privacy. For the commonsense framework, inner might be construed to mean accessible only to the person having that state, while on the neuroscientific framework the word 'inner' means something that is not immediately accessible to other people. But, there is nothing about brain states that is inner in the sense that it also entails the type of privacy that we usually attribute to mental states. For example, a person has events that are inner, like that of internal organs, such as states of the liver or states of digestive organs, but all those states are contingently inner because they are not immediately accessible to the public. Brain states, on the Churchland view, would be kind of like liver states. They are accessible publicly given the right tools and somebody able to individuate those states.

Another issue that arises from the distinction between inner and outer vocabularies is: what is one to do about a property like color? Specifically, Churchland claims that the properties that are taken up by commonsense psychology and attributed to sensations, like the subjective phenomenal

properties of sensations (sometimes associated with sensations of color), are not at all the properties of those entities, rather they are the objective properties of objects. This is the initial move that Churchland makes to prepare for his argument that proposes to solve phenomenal character through reconceptualization--he kicks some phenomenal properties out of the mind. In this way, we move from introspection to perception. Consequently, the myth starts a bit too late, because talk of color seems to begin with the institution of the commonsense psychological framework. While for Churchland color is a property that should already have been part of the vocabulary of publicly accessible events. Speaking here about what Churchland calls the objective phenomenal property of color, our ancestors before Jones should have already been individuating "certain wavelength triplet of electromagnetic reflectance efficiencies." On Sellars' scenario color perception is tied to the institution of inner states and occurs only after Jones.

Thus, the internal/external distinction between Sellars and Churchland is not held constant.⁸¹ The reconceptualization from FP to neuroscience would not involve just the commonsense view about the mind but would entail change in the view about objects external to the mind. So, the reconceptualization for Churchland would have to start even earlier than Sellars proposed as the date for the addition of commonsense psychology into the parlance of Jones and the rest of his compatriots.

⁸¹ It is not my aim to attribute to Sellars the view the mental states must be robustly private. The argument is limited to the claim that a large shift in the nature of inner states—as proposed by Churchland—would not remain localized.

Given what was just said, I do not think that it is possible for Churchland to maintain that a shift in frameworks about the mind can be done in isolation from a shift in, at least a part, of the physical framework, because the boundary between the mental and the physical is not where it used to be in the Myth of Jones. Thus, one might not be able to learn about the mind independently from learning about objects, because theories about objects are intertwined with theories about minds. Although the two can be pure, at least partially, when it comes to discovery--namely, a scientist can worry only about psychological entities without worrying about entities or objects of other fields--in training I think that distinction does not exist. Frameworks about the mind take a stand about physical properties of objects, either attributing or taking away properties, and that makes the distinction between inner and outer objects smudged. Thus, a change in theory about the mind would have an impact on the theory about external objects, moving properties from in to out or vice versa, and that, in turn, would make a difference in the process of acquisition of a framework.

Another large problem comes from the heavy reliance, in the Myth, on the semantic properties of sentences and the modeling of inner speech on outer speech. Churchland believes that this view makes claims about the physiology of thoughts. Namely, he thinks that the FP view takes the sentence to be the only unit of knowledge, which Churchland thinks to be empirically false since the brain has more than one mode of representation, and in fact "sentence crunching" will be the secondary mode of representation in the brain. Thus, a myth that takes sentences, and propositions, as central in the formulation and institution of a

framework, could not possibly be the guide to the institution of a framework that aims to utilize the full potential of the brain, including all that nonpropositional way of storing information.

The model of training emerging from the myth of Jones is one that exploits only exchanges of sentences, whereby we learn to introspect and report all these inner states that are modeled on sentences. This model then cannot give us a way of training people to report properties in their brain that are entirely nonpropositional and cannot be captured by sentences. Although it might become obvious in due time that the brain does not use sentences very much, what will still remain true is that humans do and that all of our views and models about instruction and training cannot help but rely on the exchange of propositions. To qualify further, even though there are things that occur in learning that might not be directly influenced by the exchange of propositions, the part of the process that relies on that exchange is the only part that we know anything about. Obviously this does not mean that reconceptualization from FP to neuroscience is not possible, rather what I am claiming is that these old-fashioned proposals about how this reconceptualization would be possible in humans are not a good guide for the science fiction put forth by Churchland.

The commonsense distinction between mental and physical states permeates the institution of the initial framework that humans learn. Thus, if one wishes truly to eradicate common sense, one must do that from the start, such that the first framework that children learn is one that establishes scientific, rather than commonsense, categories. If we then take the model of learning a

language as a parallel to the case of learning a conceptual framework, there is a marked distinction between learning a first language, as opposed to learning any subsequent language. The issues of training are distinct and the strategies that work in learning a second language are not the same that work for learning a first language. Thus, one cannot model the learning of the latter on the former. So far Churchland's proposed models of training are ones that are like the training involved in the acquisition of a second language. But, the reconceptualization proposed by Churchland would require the institution of neuroscience as the primary framework that is the first one we learn.

Section VI--Evaluation of a Proposed Reduction

In this section I will attempt to argue against a more recent view presented by Churchland. Originally, Churchland's solution for the emergence of qualia relied on plasticity. By reconceptualizing from FP to neuroscience, the problem of emergence would be solved because we would be introspecting brain states noninferentially and those states would already be part of the physical framework. Currently, Churchland is proposing a reduction of color qualia. I will attempt to show that Churchland does not succeed at this argument, mostly because his argument is couched as a response to arguments resting on the subjectivity of qualitative states.

Both Jackson's and Nagel's arguments rest on FP, they assume (or defend) the existence of mental states. Churchland's initial strategy was to

prevent the move of objective phenomenal properties of objects, like colors, into the head. Colors like red and green are objective properties of objects and those can be perceived as such. All of that was discussed earlier. The issue that remains is that of the status of subjective phenomenal properties such as qualia of color experience. Churchland's solution to this problem is the identification of those subjective properties with brain states. Churchland's more recent view is that there is a "strict identity of human visual color qualia on the one hand and human opponent cell coding triplets on the other."⁸² On this view Churchland proposes reduction for color qualia where subjective qualitative states are assumed to be systematically identical to neuronal coding vectors (Churchland, 528).

I will present a brief exposition of this view, which takes advantage of some more recent developments in neuroscience. The colors that are perceivable by humans are said to bear a set of similarity and dissimilarity relations, which together determine the position of each color within a continuous manifold formulated by Munsell (Churchland, 529). An account by Hurvich-Jameson provides an empirical structure of the phenomenological color space for humans. One can provide an account of how this color manifold is instantiated in terms of the functioning of the various cells in the retina that are sensitive to

⁸² Paul Churchland, "Chimerical colors: some phenomenological predictions from cognitive neuroscience," *Philosophical psychology*, Volume: Vol. 18, Oct 2005. The cited reduction of color qualia should not be taken to be a change in Churchland's more general strategy. Churchland's position always was that the entities of FP that cannot be reduced should be eliminated, and he remains an eliminativist about propositional attitudes.

different regions of the visible spectrum and the second rung color coding output cells (Churchland, 529-533).

This is an example of how the activation of cones results in the activation of a Green/Red opponent output cell:

“The...Green/Red cell is the simplest case, since its activation level registers the relative preponderance of the lone wavelength light over/under the medium wavelength light arriving to the cones at the tiny area of the retina that contains them. A local preponderance of long over medium excites the L cones more than the M cones, which yields a net stimulation at the Green/Red cell. This net stimulation sends its activation level above 50% by an amount that reflects the degree of the mismatch between the excitatory and inhibitory signals arriving from the L and M cones. The Green/red opponency cell will then be coding for something in the direction of an increasing saturated red. Alternatively, if the local preponderance of incoming light favors medium wavelengths....The activation level will be pushed below default level 50%, and it will then be coding for something in the direction of an increasing saturated green” (Churchland, 529).

And so on for the Blue/Yellow and the White/Black opponency cells. The input to the retina is four-tuple; the short, medium, and long wavelengths plus

background illumination. The H-J model then converts the four-dimensional retinal input into a three-dimensional opponent cell output space. The range of possible activations in the retina is mirrored in the possible activations in the three-dimensional space of the H-J network. This three dimensional space of the H-J network, in turn, is isomorphic to the Munsell color manifold we mentioned earlier.

“The isomorphism of internal relations is joined by an isomorphism in external relations as well. For example, the visual experience of white and the opponent cell coding vector (50, 50, 100) are both caused by sunlight reflected from such things as snow, chalk, and writing paper. The experience of yellow and the coding vector (50, 100, 65) are both caused by sunlight reflected from such things as ripe bananas, buttercups, and canaries. And so on for the respective responses to all of the objective colors of external objects” (Churchland, 538).

Thus, Churchland’s view is the colors are objective phenomenal properties of objects while subjective phenomenal properties are identical to opponent cell coding vectors. The H-J model provides, according to Churchland a reductive explanation of the color qualia of visual experience.

One question that remains unanswered is whether the strict identity between the color qualia and opponent cell coding triplets, would make reconceptualization to a scientific theory unnecessary. The question is important because even if two things are identical and introspecting one might be introspecting the other, but it will not be that introspecting one is *like* introspecting

the other. In other words, subjective qualia and opponent cell coding triplets might be one and the same but it seems quite likely that introspecting qualia as qualia or introspecting them as opponent cell coding triplets is quite different in terms of phenomenology. I will continue this argument a bit later in order to consider the case where no reconceptualization is required.

Assuming Churchland, since he has proposed reduction as the solution, does not require the reconceptualization, it is not clear what in his proposal poses a new challenge for the knowledge argument as well as other arguments that make subjectivity a defining feature of qualia.⁸³ Both Nagel's and Jackson's argument responded to reductionism in the first place. In the case of Mary in the black and white room, the strict identity between brain states and mental states is assumed. We can add to the story that Mary knows that there is strict identity between subjective color qualia and opponent cell coding triplets, but still does not know what it is like to be in a particular subjective state. I read Churchland to be only proposing a new way of speaking about the side of the reduction involving brain states. Since the arguments Churchland is attacking are supposed to work in principle for any physical reduction, I'm not entirely sure he succeeds in the rebuttal of those arguments.

The strict identity that Churchland proposes is not between subjective color qualia and opponent cell coding triplets; rather it is the just the isomorphism between objective phenomenal properties of objects and objective phenomenal properties of brain states. To put it simply, the pairing is between the

⁸³ Churchland's (2005) attacks Jackson's, Nagel's as well as Chalmers'(1996) arguments. See p. 428.

wavelengths reflected by objects like bananas and the corresponding activity in the opponent cells. Although, the explanation of one in terms of the other is quite useful, it does nothing for the explanation of subjective qualia.

The argument that qualitative states escape physical reductions is not the argument that red, or even the sensation of red, are not reducible; rather it is the argument that what it is like to be in a particular state is not reducible. This seems to me to be the distinction between objective phenomenal properties and subjective phenomenal properties. The latter can always escape reduction because there is an a priori disconnect between the two. If the argument is aimed at the latter, I fear that it will always fail because it seems impossible to know with certainty that there is such a thing as inter or intra personal constancy of subjective phenomenal properties. I can know what it is like for me to see a banana today, but I cannot know that my qualitative state associated with seeing a banana was exactly the same as the one I had yesterday. It is even more difficult to know that my qualitative state associated with yellow is the same as the next person's. My claim is not that there is no such constancy de facto. My claim is that one does not have a third-person argument to prove that constancy exists, if qualia are characterized as purely subjective. Subjective qualitative states cannot be reduced because anytime one posits an internal state one can ask questions about what it is like to be in that type of state, where the character of the later can always escape the explanation of the former. My aim is not to take sides on the issue of the subjectivity of qualia; I only wish to evaluate Churchland's argument against such a subjectivity.

Churchland dislikes a priori argument and he attempts to provide proof that there is a strict identity between subjective and objective phenomenal properties. The proof is that based on the H-J model and the three dimensional reconstruction of the state space for color qualia, we can make predictions about qualitative states. On Churchland's side of the argument these predictions are supposed to support not just the strict identity between the opponent cell coding vector and color qualia, but they should also support the view that ordinary language about color experience fails in comparison to the predictive power of this new model. I assume that this should also be taken to imply that science wins out over FP, in this way.

Churchland believes that H-J model can make predictions about "what it would be like" to have opponent cell activity for areas of the color manifold that are outside the normal visual experiences.⁸⁴ Examples of such qualia are chimerical qualia, self-luminous colors, hyperbolic colors. All of the listed color experiences are outside of the three dimensional color space of the H-J model.

Based on the H-J model, Churchland attempts to provide predictions about what it would be like to be in states corresponding to the points outside of the usual color space of the H-J model. Part of the reason this is possible is due to the complex relationships that color experience are supposed to bare to each other such that Churchland can claim that:

⁸⁴ These colors cannot be experienced via retinal activation because no real objects have those colors and also because the cells in the retina are limited to detecting only some wavelengths. Churchland provides images that are supposed to induce visual experiences approximate to those one could have if direct activation of the brain cells was possible or ethical.

“ Extrapolations from what we already know about the coding significance of the three major dimensions of the color spindle and the H-J opponent cell activation space, the anomalous activation triplet must code for color appearance that is:

1. fully as dark as the darkest possible black(...), but nevertheless is of
2. an obvious and distinctive hue(...), a hue that must be
3. more similar to blue than any other hue around the spindle’s equator” (Churchland, 545).

This is Churchland’s prediction about chimerical qualia and it should work similarly for the other unusual qualia.

Again, my response to this argument is similar to what I maintained previously. The prediction can be only made about the activity of the opposing activation cells-- about the objective phenomenal property. But the prediction about the objective states makes no determinably correct predictions about the subjective state. Again, the model can provide an account about the position of the possible color within the space, but cannot make a prediction about what it would be like to have that color experience. Moreover, the emphasis placed on the idea that ordinary language would fail in the description of these qualia, seem to aggravate the issue, because it is precisely this characteristic of qualia that make them so difficult to capture objectively. The feature that seems to stack the case against reduction of qualia is precisely that they cannot be fully

described with ordinary language. Churchland wants this to be more an affront to ordinary language, and ultimately to FP, but it seems more directly an argument against the objectification of qualia.

It was much more promising to claim that colors are in objects and that sensations are brain states in stead of attempting to reduce subjective phenomenal properties. It is unclear whether Churchland's reductivism about color qualia entails that there is no longer any need to reconceptualize from FP to neuroscience as far as colors are concerned. Since, there is no explicit answer I will attempt another argument assuming reconceptualization.

Countenancing a reduction of at least some mental states Churchland could still claim that it would be possible to drop the old vocabulary of sensations of red and green, in favor a of a more scientific vocabulary. It is continuous with Churchland's argument for plasticity that it would be possible for humans to start introspecting activation in opposing cells as opposed to color qualia. In principle, the explanation of color qualia in terms of activation of opponent cells would make the folk-psychological framework obsolete. In fact, the predictive power of the H-J model far outstrips the predictive power of FP. FP is limited only to naturally occurring stimulus situations. I am assuming that Churchland would claim that FP would not be able to make a prediction about the phenomenal character of chimerical qualia.

Setting aside the issues about what is being predicted based on the physical states; the issue that remains is whether the subjective experience will remain the same after reconceptualization. Based on FP, we are introspecting

color sensations and the H-J model at its best is explaining the phenomenal character of those. However, if we get rid of FP, we could introspect the physical activity as such. Even if the two are identical, it is possible that introspecting one is not exactly like introspecting the other. In other words, what it is like to introspect a red qualitative state and what it is like to introspect the activity in the corresponding opponent cells might not be the same even though there is strict identity between the entities.

Consider Churchland's old-fashioned, and much more intuitive example, of the experience of the chord for a layman and a musician. The chord is nothing but the notes of which it is comprised and yet the experience of the chord as a whole and the experience of the chord as comprised of, let us say, three separate notes are not the same. This is in fact Churchland's argument. The change in framework will result in a changed experience regardless of the strict identity between the two entities. Similarly, the change from a framework introspecting sensations to introspecting brain activity via retinal cones might add up to quite different subjective states. Hence, the reduction of the entities does not amount to a reduction of the phenomenal properties associated with introspecting those entities. This is true in principle, whether or not Churchland's argument asks for a reconceptualization. Each conceptual framework, then, has distinct phenomenal properties associated with it and in some sense reduction would entail the elimination of at least some of those qualitative states even if the frameworks are compatible.

It seemed as if Churchland's argument previously (1989) was that reconceptualization would solve the problem of emergence by denying that there are any such things as phenomenal properties. If one learns to introspect brain activity directly, one need not worry about irreducible phenomenal properties. Eliminativism construed that way is that plasticity can enable us to noninferentially detect the objective properties in the world, like a thermometer. On the more current view, Churchland accepts the existence of qualia and attempts to reduce them, but by accepting them he must answer all the problems that are associated with reductionism. I think he fails to do that.

Chapter IV

Incorrigibility and Mental States

In Chapter two, I presented a challenge to the view that there was an unchanging folk-psychological theory and that it was common sense in any significant way. In that sense, I reject the claims that the problems with the mind are commonsense problems, and will attempt to argue against the idea that certain properties attributed to the mental are properties that commonsense is firmly committed to. In chapter three, I argued against the view that irreducible phenomenal properties are the consequence of the folk-psychological view of the mental.

In continuity with the last chapter, in this chapter I plan to argue that incorrigibility is not a commonsense property. Furthermore, I will argue that Rorty does not present a convincing argument whereby incorrigibility is the mark of the mental. Ultimately, I will present a view that I feel is arguing against the idea that there are any properties attributed to the mental that are in principle outside the reach of science. Mostly, because I find the mental to be a moving target, since the scope of the folk-psychological view about the mental is not well established. That this is so should have been established in the second part of chapter two.

Rorty argues for incorrigibility of the mental being the distinguishing feature of mental states. Mental states are marked by incorrigibility as being

distinct from physical states. In fact, Rorty claims, the contrast between the mental and the physical is established because mental states have this essential property of being incorrigible. But, the incorrigibility of mental states is, for Rorty, derived from the establishment of a linguistic practice. Because of incorrigibility, the mental has a genuinely emergent property, one that is not amenable to treatment by reductive materialism. This emergent property makes the mental incompatible with the physical. I will present this part of Rorty's view in the first section of this chapter.

Rorty's view of incorrigibility, and in some places indubitability, is derived from the establishment of a linguistic practice which prevents the questioning of the veracity of the reports people make about their mental states. There is no appearance-reality distinction for mental states because there is no language-game that has established rules for the attribution of wrongful reports of mental states. Rorty believes that most of the problems of contemporary philosophical theories about the mind lie with the modernized reintroduction of the problem of universals. Universals are now replaced by concepts, and what most theories about the mind are attempting to do is find a way to account for a universal category of mental under which one would subsume particular instances of mental states. The solution, according to Rorty, is found when one shifts from the talk of concepts to the talk of attribution of particular mental states to creatures having those states. Nothing more than an established linguistic practice sets the rules for the attribution of mental states.

This view prepares the groundwork for the Antipodeans. Rorty in “Philosophy and the Mirror of Nature”⁸⁵ presents a scenario where creatures physically identical to us have nothing like our mental states and there is nothing that they are incorrigible about. In fact they speak of themselves as having brain states. The claim is that talk of brain states is compatible with the absence of mental states and that the mark of the mental is this feature of incorrigibility. One could conclude that the elimination of our talk of mental states could get rid of the problem of incorrigibility. According to Rorty what was established by a verbal practice can also be taken away by the establishment of a new verbal practice featuring none of the predicates used in the initial parlance. Further still, the description of the Antipodeans is meant to suggest that the switch in the linguistic practices will not result in any significant loss. So, if humans were to discard talk of mental states and substitute them for a linguistic practice featuring only talk of brain states, nothing more would be lost than just the talk of mental states. I will present this view in the second section of this chapter.

In section three I will emphasize some differences between the Antipodeans and humans. These differences will then be used to claim that any analogies drawn between the two populations are false. The case of the Antipodeans cannot provide any insight into what we should do about our mind-body problems. This is because Rorty infuses everyday discourse about the mind with Descartes view about mental states. Rorty makes humans Cartesian creatures, which limits the number of creatures we can be compared to. I will

⁸⁵ Rorty, Richard. Philosophy and the Mirror of Nature. Princeton University Press, 1979 (henceforth PMN).

claim that, from the start, the Antipodeans are not like us because they do not have the Cartesian contrast between the mental and the physical.

Another way in which we are different is in regards to appearances and reality. Rorty says that we make that distinction while the Antipodeans do not. The Antipodeans make only the straightforward division between being right and wrong about things. These creatures, unlike us, do not have any problems that are created by appearance properties. However, I will attempt to show that the distinction between the appearance and reality of mental states and the appearance and reality of physical states are not the same. Phenomenal properties of mental states are not appearances properties in the sense that shapes and textures of physical things are such properties of external objects. When we speak of appearances of physical objects we speak of them as representing the world in this or that way, but phenomenal properties need not be conceptual in that way.

In section four, I will further challenge the Antipodean scenario. The Antipodean story could be altered in many ways, and some of those ways could show that incorrigibility and mental states need not be mates for life. One could conceive of a scenario where people have mental states but do not feel like they are incorrigible about them. Moreover, I will claim that incorrigibility is a problem only if the endorsed theory is false. Assuming that our resources for conceptual change are not limited then we can imagine holding a more scientific view of our selves and in that case incorrigibility would not be a problem, but an outcome. This will lead to the argument that incorrigibility is not the mark of the mental

since one can become incorrigible about physical states of the brain. Even further, I will claim that the contemporary vocabulary about mental states has incorporated rules for the attribution of wrongful reports about mental states. The contemporary talk of mental states has established areas about the mental where we could speak of ourselves and other people as being wrong about mental states.

Section I--Is the Contrast Commonsense?

According to Rorty, there is a contrast between mental and physical states, which results in an incompatibility between the two realms and creates the mind-body problem. And that contrast must be there, if one captures the meaning of mental correctly. For the notion of mental to be maintained, we must specify a feature that rightly characterizes those states. Rorty proposes incorrigibility. If a state is incorrigible, then it is a mental state, while no physical states have such properties. Incorrigibility is both the common thread and the distinguishing feature of mental states.

Incorrigibility, phenomenal character, and intentionality are usually proposed as candidates for marking the mental.⁸⁶ If any of those succeed in being strictly mental properties, the mental would be incompatible with the physical. If the mental is found out to be incompatible in some way with the

⁸⁶ Later in this section there will be an explanation of how incorrigibility came to be the only real distinguishing feature according to Rorty.

physical, then materialism is either false--not an easily tolerable conclusion--or there are no mental states.

The contrast between the mental and the physical as described here relies on the identification of the property that marks the mental. Rorty locates this property partly in common sense because his assessment of the meaning of 'mental' is guided by the everyday linguistic practices. Given what I have argued earlier about common sense, I disagree that there is an unchanging linguistic practice concerning mental terms. As a consequence of that, locating properties in common sense that would permanently identify the mental is not possible. This is in part due to the changeable nature of commonsense psychology, and partly because those changes are derived from theories that are not common sense. I argued before, and will underline here, that it is not a good strategy to point to features of the mental that seem to be attributed to it by a commonsense theory and to proclaim those properties as strictly mental. The things that the folks believe about the mental are a web of collected beliefs often borrowed from influential theories about the mind or brain that originate outside of common sense.⁸⁷ In this sense, I think Rorty is wrong in looking for marks of the mental in commonsense. Further sill, in this chapter, I plan to show that incorrigibility could

⁸⁷ Based on chapter two, my argument is that FP is not common sense because it is a revisable framework. Setting that aside, there are issues concerning the scope of FP regardless of whether folk psychology is common sense. One of the problems is how to demarcate folk psychology in a way that could actually be representative of the layperson's theory. I am of the conviction that such an accurate characterization is not possible because FP changes, but also because the precise boundaries are mostly indeterminate. This problem is observable in the various attempts to lasso in the actual folk theory. Mostly, the commentators attribute to commonsense psychology a philosophical view that they wish to attack.

be an outcome even on a scientific theory about the mental, where talk of mental states has been replaced by talk of brain states, transitively making states that are not mental incorrigible.

It is said that the incorrigibility of mental states is considered a problem because it is emergent, and by that I mean: impossible to subsume into the framework of a science that aims at explaining everything only by appealing to physical states. Incorrigibility being a feature attributable only to mental states makes the same irreducible to physical things that lack that property. I will take issues with the claim that incorrigibility is only a mental feature. I will argue for the idea that, among the folk, there is an increased tendency to use a verbal practice by which a person can be corrected on their utterances referring to mental states. Rorty falls short of explicitly attributing the claim that mental states are incorrigible to a commonsense psychology, such that the contrast between the mental and the physical is a contrast that results based on the commonsense view of the mental. Still, this accusation is implicit, because the meaning of 'mental' that Rorty is attempting to capture is one established by the rules of everyday discourse.

In the recounting of the history of the mind-body problem, Rorty clearly states that this problem is traced back to the moment where sensations were relocated from the body to the mind. The relocation was a move made by Descartes, according to Rorty (PMN, Chapter one, pp.17-61). This view must have permeated into everyday discourse, making most of us Cartesians. Before that time, before the problem existed, sensations were thought to be a function of

the sensory organs, a view attributed to Aristotle. Interestingly enough, Rorty notes the change in philosophical theories, but does not offer to trace the change in everyday discourse, if indeed there was such a change. The issue to address is concerning the influence of philosophical theories on everyday discourse. It seems enough to note that with philosophical theories about the mind, the scope of the mental is restricted or broadened in order to assert that the contrast between the mental and the physical is not steady. One could add that if commonsense views changes, the meaning of mental, in everyday discourse, changes. Attempts to capture its meaning are at most attempts to capture the meaning of 'mental' in the current context.

When it comes to philosophy of mind, the distinction between the mental and the physical produces an incompatibility, if it is buttressed by the Cartesian conception about the mental. Descartes defines the mental negatively in contrast to the physical. But, if the contrast is produced by a particular philosophical theory, it will only hold with the backing of that theory. Hence, if one fails to maintain the theory, the contrast can be dropped as well. Ultimately, if one takes the position that Descartes is wrong they should stop maintaining the contrast, between the mental and physical realms, that is created by his theory.

In the third chapter, I argued that if phenomenal character is emergent on the folk-psychological framework, it will become so on the neuroscientific as well. I will have a similar argument in this chapter. I will attempt to show that incorrigibility can be obtained on a physical framework and therefore if it is emergent on one framework it will be emergent on the other. Thus, I will argue,

that the real task is to attempt to explain incorrigibility. Although, in some places⁸⁸ Rorty does not argue for an eliminativist solution, but only points out that the absence of a vocabulary containing mental terms does not result in any other kind of loss. In other places,⁸⁹ he does argue for eliminativism, which could allow us in principle to drop talk of commonsense mental states in favor of talk of brain states. I will draw from all those sources and ultimately argue that I do not see a benefit to elimination, since the problems of what is considered commonsense psychology are likely to become problems on an alternative scientific view of brain states.

Let us begin by clarifying the claim that eliminativism requires properties that strictly demarcate the mental. Consider the following two criteria for identification of entities (paraphrasing Rorty, PMN, p. 80): Either you are talking about X's but practically everything you say about them is false or, since practically nothing you say is true of Xs, you can't be talking about Xs.

Rorty claims that there is nothing empirical that could point us in choosing between the two options. The first criterion of identifying entities with one another is a reductive view. We say X and Y are one and the same thing, only the descriptions of X do not match the descriptions of Y. The identification between X and Y sometimes happens when one theory reduces another: we say that water is the same as H₂O, only how we speak of water is very different from

⁸⁸ See PMN Chapter two, p. 70-125.

⁸⁹ Rorty, Richard. "Mind-body Identity, Privacy and Categories." Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971.

how we speak of H₂O. Still we do not decide to claim that water does not exist because there is no distinguishing feature of water that would make it incompatible with the molecular theory of H₂O.

If one were to decide that either tastelessness or fluidity is a property that marks the presence or absence of water, the molecular theory of H₂O could not cover all the properties of water. Water would have emergent properties when contrasted with the theory covering H₂O, and if we wanted to be physicalists we would have to eliminate water. Water cannot be H₂O because nothing we say of water is true of H₂O and vice versa.⁹⁰ But, if there is no special attachment to particular properties of an entity, it is difficult to argue for elimination because those properties are needed to mark the existence of that particular entity. In order to claim that a particular property does not exist one must be fixed on one or more properties that are necessary for the existence of that entity. In all other cases, if the view about the character of a particular entity can be adjusted, that entity can be reduced.

The eliminativist argument here begins by choosing properties that mark the presence of the mental and attributing those properties to the commonsense conception about the mental. But if FP is construed as theory that changes, the properties that are taken to mark off the mental can change as well. Thus, what is taken to be a property that is constitutive of mental states as part of one framework might not have the same status on another framework. In that way, there is no view about the mental that is indigenous to common sense, and no

⁹⁰ This is in part the outcome of Churchland's argument about direct deducibility discussed in the previous chapter.

properties within folk psychology that are permanently, exclusively mental.

Therefore, there are no restrictions that are imposed on the character of mental states via the attribution of particular mental properties. If one conceives of folk psychology as malleable and not restricted to particular properties, the presence or absence of any properties are not indicative of the presence or absence of the mental. In that case, one cannot eliminate the mental because one can never clearly distinguish it from the physical. This is how the contrast between the two realms can be dissolved.

Marking properties are needed to support arguments for elimination because they provide a criterion by which one can clearly tell what is mental and what is not. Thus far I have not seen any properties, including incorrigibility, which are parts of the commonsense framework of the mental and are essential to the mental in that sense. This claim is not reliant only on a particular scope of commonsense; rather it is based on the view that no framework is common sense. The categories of commonsense are changeable because they are all in principle revisable. So if one were to propose incorrigibility to be part of some folk psychology, this commitment is not restrictive of any other framework of the mental. Moreover, folk psychology changes and the properties it attributes to mental states are revisable even in practice. We can disagree with Rorty both that incorrigibility is what marks off the mental, and that a view attributing incorrigibility to mental states is not revisable.

Still, let us review how Rorty settles on incorrigibility as the mark of the mental. Rorty distinguishes between two kinds of mental states, on the one hand

there are mental features and on the other there are mental events. The only mental states that are candidates for incorrigibility are mental events; those are the only ones that have the status of mental entities. Rorty claims that only thoughts and sensations are mental events. Thoughts and sensations are the source of the mind/body problem because they are recalcitrant to any type of behaviorist reduction.

Intentionality is not a feature of sensations and therefore cannot be a unique property of mental states. Rorty focuses on introspectability, nonspatiality and privacy. Introspectability cannot be the mark of the mental because one can introspect physical states, like indigestion or other internal physical events in the body. Nonspatiality will not work either because there are ways to fix the location of mental states; for example a sensation has a location wherever the person having that sensation is located.

Privacy of mental states rests on a distinction between inner and outer states, mental states are usually considered to be inner states. Mental states are private because they are inner states, accessible only to the person being in that particular state. But, Rorty will claim that an inner state does not have to have any nonphysical properties. One could have an inner state that is physical, for example a brain state. So privacy is also not a mark of the mental, if by private we mean inner state. Later Rorty will make the mental necessary for the establishment of inner states, or an inner space. If there are no mental states inner can only mean under the skin or inside the skull (Rorty, PMN, p. 86). Then, even if privacy is not essential to mentality, there is no interesting way of making

the distinction between inner and outer without mental talk. Since, the claim is that unless something is incorrigible, it cannot be mental, and if it is not mental it cannot be incorrigible. I will dispute that claim a little later on.

But, privacy could also mean incorrigibility and in that sense it could be the mark of the mental. “We have no criteria for setting aside as mistaken first-person contemporaneous reports of thoughts and sensations, whereas we do have criteria for setting aside all reports about everything else” (Rorty, IMM, p. 413).⁹¹ This is what gives the mental its special flavor. This special flavor rests on the establishment of a linguistic practice where certain reports are not such that they can be refuted. If there are such reports, then those reports signal the presence of mental properties.

Rorty’s search for the mark of the mental should accomplish a few tasks: it should identify a property that captures the meaning of the mental completely, and it should be a property that marks the mental exclusively. Thus, the property should capture the meaning and the meaning produces the contrast, therefore the exclusively mental property should maintain the incompatibility of the mental and physical. Rorty builds the incompatibility between mind and body into the meaning of ‘mental.’

It was stated earlier that the distinction between inner and outer is usually a consequence of a theoretical position, and theoretical positions about the mind draw that distinction differently. There is no clear reason for Rorty to insist on drawing the distinction the way he does, unless it is to maintain a contrast which

⁹¹ Rorty, Richard, “Incorrigibility as the Mark of the Mental,” The Journal of Philosophy, 67, no.12 (June 25, 1970) (henceforth IMM).

might not clearly exist in the commonsense view he is trying to attack. Also, contrasts need not entail incompatibility. Thus, just because two things are contrasted in some way does not mean they are incompatible. There are differences perhaps between mental states and physical states, but those differences need not render the mental irreducible to the physical. Only because the mental has special features those features need not be classified, a priori, as nonphysical.

Further still what we mean by physical also can change. Perhaps this distinction is not so substantial; in fact it could be contextual. The mental could be mental only in contrast with the physical. Mental entities are united together in virtue of having some distinct properties but none of those properties need be nonphysical by definition.⁹² The distinction is in fact more a useful way of speaking about certain entities under investigation rather than a way to give a permanent distinction between two realms:

Rorty overlooks that the mental-physical contrast is just one of a number of cases in which we contrast a range of phenomena with what is physical, and so he misinterprets what the mental-physical contrast involves. In the context of chemistry, for example, one isolates properties that are special to chemical compounds and processes as such, counting those properties as chemical in contrast with physical properties. But we also contrast the properties and processes

⁹² Rosenthal, David M., "Mentality and Neutrality" *The Journal of Philosophy*, Vol. 73, No.13, (July, 1976): 386-415 (henceforth MN).

that are special to life forms with physical properties and processes and, in that case, the physical includes the chemical as well.⁹³

The distinction between the physical and the mental can be drawn in such a way that biology is included in cases where we decide to contrast the physical with the mental. If we view the distinction between physical and mental as contextual then the mental need not be incompatible with materialism. If we alter the character of the distinction then the mental is not really emergent; it merely has special characteristics that are common to all mental states. The distinction is there for the purpose of investigating the phenomena in question, but it does not render the entities incompatible with the physical or with materialism (Rosenthal, KMM, p. 303).

To be fair to Rorty, one should mention that his insistence on the contrast between the physical and the mental was meant to support an attack on topic-neutral translations. To solidify his attack on those views that propose the translation of the mental into the physical, Rorty amps the mental-ness of mental in order to point out that topic neutral translations are only succeeding by failing to capture the meaning of mental. But, Rorty also fails at capturing the meaning of 'mental' because meaning of the term changes as a result of change in linguistic practice. Thus, there are no grounds to claim that there is anything particularly mental about incorrigibility, especially if all there is to it is linguistic usage.

⁹³ Rosenthal, David M., "Keeping Matter in Mind" Midwest Studies in Philosophy, V (1980), pp. 295-322, especially p. 303 (henceforth KMM).

In the next section I will present Rorty's thought experiment, the upshot of which is that there could be creatures which are physically identical to humans but have no mental states. The creatures in Rorty's scenario have no mental states by virtue of not having a language that refers to mental states. Rorty's description of these creatures without minds rests on the view about mental states and incorrigibility that was just presented.

Section II--Mindless Creatures

Rorty in "Philosophy and the Mirror of Nature" proposes a scenario where there are creatures that are like us in every way except that they lack mental states. The Antipodeans, named after an anti-Cartesian school of thought, consider themselves persons. These creatures will be caught speaking of "believing that X" or "desiring that X" and they admit that those utterances are different from "having a leg cramp" or "being thirsty." They also know that they are distinct from other creatures as being persons. None of these distinctions are made in terms of mental states. The Antipodeans do not think of themselves as persons in virtue of having a mind.

They are also not dualist and yet some of them believe in an afterlife. This afterlife is not such that it begins by the soul or spirit separating from the body. Their philosophical problems are devoid of the mind/body problem; they mostly

concern themselves with metaphysics, ethics and some philosophy of language. Their philosophical tradition is also without the problems concerning the distinction between appearance and reality. They do not know anything about ideas, perceptions and mental representations.

By a serendipitous turn of events these mindless creatures made great strides in the development of neurology and biochemistry such that their discourse centers mostly on nerves. Due to the development of those physical sciences the Antipodeans started talking about the physical states of their brains first and they continued talking about them only as physical. Their discourse featured talk of C-fibers as in: "Stop kicking me, my c-fibers are being stimulated!" or "If you touch me again, I swear I will hit you so hard your bundles will quiver for days!" They could also admit of illusions only they did not speak of them as such but only as false beliefs. An Antipodean on illusions: "How odd! It makes neuronal bundle G-14 quiver, but when I look at it from the side I can see that it's not a red rectangle at all" (Rorty, PMN, p. 71). The development of neurology provided a framework where most well formed sentences were correlated with a neural state such that one could just speak of those in stead of the sentences themselves.

Neural states also played the traditional causal role of propositions. A neural state could be at the beginning of a chain reaction resulting in overt behavior like turning off the stove. Or, "I was suddenly in state T-567 and decided to check the dog for ticks." These very scientific creatures would suffer some of the same problems as their mindful earthly counterparts. The following

embarrassing error could happen to an Antipodean: “I was walking on Lex and I saw a guy that looked like my cousin Ivan, but I know he is not in New York so it must be his evil twin.” Conveniently these utterances are interchangeable with sentences featuring neural states in all the important parts, like: “I was walking on Lex and I had T-678 with Z-11, but then I had R-234, so it must be his evil twin.” The neural states here are shown to play the functional game; they interact with each other just like a mental state would with other mental states. These creatures without minds have all they need just with their talk of neural states.

To prove this point Rorty makes the poor Antipodeans endure the company of humans. Earthlings come to visit and they bring philosophers with them as part of their contingent of experts. These Earthlings decide to empirically investigate the difference between the Antipodeans and us; more specifically they wanted to make sure that the Antipodeans really did not have minds. The “tough-minded philosophers,” as Rorty names them, were the ones concerned with truth, wanted to investigate if the Antepodeans had minds, and they mostly concentrated on sensations. They wanted to establish if there was such a thing as phenomenal character of C-fiber activation. It turned out that that this was not an empirically significant question. But, let us see how come.

The investigation started with the usual getting to know you conversations. Earthling wanted to see if there are relevant similarities between “us” and “them.” “It was clear that the Antipodeans had the same behavioral dispositions towards hot stoves, muscle cramps, torture, and the like as humans. They loathed their C-fibers stimulate” (Rorty, PMN, p. 74). Although, the earthlings were reassured

by all the things they had in common with the unusual creature, they quickly began behaving in the typical manner. They immediately wanted to ask about the others' feelings. The "tough-minded" philosophers subjected the Antipodeans to a list of questions, most of which attempted to get at the issue of phenomenal character. The philosophers were clear that the vocabulary between the two kinds was different, but they wanted to know all about mental "feels." The "tough-minded" truth mongers wanted to know if the Antipodean's neural states also had the accompanying qualitative character. For example, they wanted to know if having one's C-fibers stimulated feels as bad as it does for an earthling when she is in pain. But, the mindless creatures kept insisting on reporting no such phenomenal character. They hated the stimulation of C-fibers and avoided those like the plague, but they knew nothing of phenomenal character. They behaved mostly like earthlings, but they seemed not to have mental states.

Irritated with the reluctance of the Antipodeans to admit to at least a little bit of a mind, the Earth team decided to hire some neurologists and to decide the issue experimentally. They wired an earthling brain to an antipodean one and decided to stimulate them artificially. Apparently this was not too successful either. The Antipodeans, even after getting input from the C-fibers of a human, still kept reporting only the activation of those and did not speak of any pains or "feels." The earthlings remained stubborn as well and whenever their speech center was activated they kept talking of pains and not of C-fibers. When asked about colors the Antipodeans could correctly identify all the colors but they could

also report activity in the brain associated with the different colors. So far there was no empirical difference.

The Antipodeans were extremely reticent about their feelings; they kept denying that they had any. When asked again about colors they kept insisting that those were some sort of objective property, they kept claiming that things just are a certain color. They had neural states that corresponded to the presence of particular colors and they could access those noninferentially. The Antipodeans said they knew nothing of possible unconscious inferences that could bring them to reporting neural states, and they could not tell what unconscious inference meant. They also claimed that the connection between a particular neural state and a particular color are kind of like the connection between H₂O and water, one could not imagine them apart.

The philosophers also asked the Antipodeans about incorrigibility. The smug mindless aliens admitted that they could be wrong about seeing particular colors but not about seeming to see those colors and the same was for the neural states. The problem was not solved. The philosophers could not tell two things: first they could not clearly conclude if the Antipodeans were talking about two types of states: that of seeing a color and that of being in a particular neural state. Or are the two the same state? Also, the “tough-minded” philosophers could not figure out if the Antipodeans had two feels, one for each state, or one, or none.

The Antipodeans were then asked about “seeming to be” in a particular neural state. The philosophers concluded that the Antipodeans indeed did have

states where it seemed to them that they were in a particular neural states but when they, in fact, were not. The humans wanted to know if there were neural states that were associated with those states of “seeming” and the Antipodeans admitted that there were and listed those states. They also admitted that they had empirical evidence that errors occurred even about those neural states; an Antipodean could be wrong about seeming to be in a particular state, but there was no scientifically significant pattern to those mistakes.

The philosophers wanted to know if the Antipodeans had minds, the empirical investigation did not lead to any results where one could attribute to the aliens phenomenal character and consequently a mind. The Antipodeans only reported that they were incorrigible about how things “seemed.” But, that incorrigibility derives from the fact that “seeming to seem” has no use in the language that we use to describe appearances and this would be no evidence that the Antipodeans had minds.

The important thing to note about the Antipodeans is that Rorty means them to be like us in a much stricter way; they are like us not just physically but their cultures are quite similar to ours, they also have morality and art and a sense of aesthetics. The point that is supported here is that they are not missing much, by missing mental states. In fact the difference between the Antipodeans and us could be insignificant. Thus, if there are any differences between them, and us, it is not one that is easily detectable empirically.

Thus, the decision between using a vocabulary with mental or brain states, is not based on empirical disconfirmation of entities such as sensations.

The reasons to eliminate sensations must revolve around concerns of simplicity which favor explanations that invoke a smaller number of entities and coherence of the theory in question with other theories. A separate issue is the replacement of observational statements--most notably noninferential observational statements--that would result from changing one theory for the other. These two consequences of identification, I think, hinge on two distinct types of simplicity, one being theoretical and the other practical. Rorty distinguishes between the two as well.

The reason why one might replace mental entities for c-fibers are the hinge on the quality of the theory that features those entities:

The Y-laws must be better at explaining the kind of phenomena explained by the X-laws (not just equally good). Indeed, they must be sufficiently better so that the inconvenience of changing one's linguistic habits by ceasing to make inferential reports about X's is less than the inconvenience of going through the routine of translating one's X-reports into Y-reports in order to get satisfactory explanations of the phenomena in question (Rorty, 184).

The motivation behind changing one's observational reports is: "Either Y-reports may themselves be made noninferentially, or X-reports may be treated as reports of mental entities. For we must be able to have some answer to the question "What am I reporting when I noninferentially report about an X?," and the only answers available are "you're reporting on Y" or "you're reporting on some

mental entity” (Rorty, 184). The first answer presumes that X and Y are identical, such that trivially if one was reporting ‘seeing X’ one was reporting ‘seeing Y.’ The second answer presupposes that X and Y are not identical and that X does not exist except as a mental entity.

Rorty asserts that there are no substantial reasons against the elimination of terms referring to mental states; more specifically there is no true reason not to drop talk of sensations and use talk of C-fibers instead. In fact, Rorty claims that no materialist should request such a change in vocabulary, because it would present a large inconvenience:

If the Identity Theorist is taken to be predicting that some day “sensations,” “pain,” “mental image,” and the like will drop out of our vocabulary, he is almost certainly wrong. But if he is saying simply that, at no greater cost than an inconvenient linguistic reform, we could drop such terms, he is entirely justified. And I take this latter claim to be all that traditional materialism has ever desired (Rorty, MPC, 185).

The issue hinges back on the criterion that distinguishes reduction from elimination. Upon the discovery that a certain entity is completely re-described by a theory that is better and more powerful than the theory that features X among its entities, what is one to do with X? Should one eliminate X altogether from the vocabulary? Or should one identify X with some Y in the new and better theory? The decision is between reduction and elimination. If it is discovered that all that we thought of mental states is false and our current psychology is

entirely replaced by neuroscience only featuring talk of brain states, a decision has to be made in regards to whether mental states should persist in our vocabulary, or should we start using brain states in our self-reports.

There are precedents with regards to such decisions. In the case of tables sometimes it is said that reduction was appropriate, identifying tables with whatever their molecular structure is without change in the vocabulary because “something *more* has been found out about the sort of situation reported by ‘This is a table’” (Rorty, MPC, 182, Rorty’s emphasis). This is according to Rorty *identification of observables with theoretical entities*. In this case what we thought about tables was not false; we just discovered something more about their nature. But how are we to distinguish the cases of successful identification like that of tables and clouds of molecules from the identification of demons, reported on by witch doctors, with the presence of viruses? Why is it that in the case of tables we wish to still impute the existence of tables while denying the existence of demons? In both cases we identify the reports of one with the reports of the other and it does not seem immediately obvious why the change of vocabulary in the case of demon talk is much more urgent. Rorty claims that asking people to stop reporting tables seems largely inconvenient, and so we opt for reduction. The reports on daemons, on the other hand, seem highly replaceable with reports on viruses, and we are more likely to claim that daemons do not exist.

The decision to use a term like ‘table,’ ‘daemon,’ or ‘virus’ are not strictly determined by scientific concerns or issues involving the quality of two competing

theories. Rorty elaborates that we are less likely to opt for elimination of an entity if we are more used to using it in our non-referential reports, such as “I see a table over there” or “I just saw a daemon skirt by me,” both cases where the appeal to observation seems to be enough to justify the veracity of the report. If we are habituated to using noninferential reports referring to tables we are more invested in The Table as an entity, and it goes the other way around the less used you are to report demons the more likely you are to back its elimination. Ultimately, Rorty claims, even entities such as tables and chairs are likely to fade out of our vocabulary and yield to reports of molecules (Rorty, MPC, 183-84). Rorty’s eliminativism is more like a slow reforming socialism as opposed to a revolutionary communism. He is calling for a spontaneous, slow change, at the end of which most of the predicates used in our vocabulary will be replaced.

Still, it seems arbitrary to say that habit is the only thing that makes the difference between daemons and tables, and becomes obviously arbitrary if it is indeed true that even tables will eventually disappear from our vocabulary. If even the names of common objects, which were successfully reduced, disappear, in time, from our vocabulary there is no difference between the two kinds of identity theory: reduction and elimination.

Ignoring for the moment the lack of substantial distinction between things that do and do not exist; sensations, Rorty likes to say, are more like daemons and less like tables. But, the problems with observational terms referring to mental states have special problems. In the case of daemons, or other non-existent entities, the observational reports could be blamed on the occurrence of

mental states. After the reduction of two entities, one must ask about the status of observational reports. What was the witch doctor reporting on all those times he seemed to be seeing daemons? It was stated earlier that we could just say that there are no daemons so the doctor must have either hallucinated or had some other kind of an illusion. So, the observational reports were of mental entities. "Reference to mental entities provides noninferential reports of X's with something to have been about" (Rorty, MPC, 186).

But, noninferential reports of sensations are noninferential reports of mental states. The usual demotion from entity to "merely mental entity" is prevented. Also, it seems almost impossible to use c-fibers as objects of noninferential reports. It seems unlikely that the reporting of firing c-fibers is something one could make the object of a noninferential report. This is a problem for eliminativism in general; the discussion of Churchland's answer to this problem was the subject of the previous chapter. Churchland claimed that noninferential reports of brain states are possible and likely because conceptual change usually occurs as a result of change in theory and results in perceptual change.

For Rorty, the solution begins in a similar way. Rorty locates as the only possible place to defend eliminativism at the level of observational reports. Sensations cannot be pushed back into the mental realm, because if they exist they can only be mental entities. The reports of mental entities, if there are no such things, can only be reports on the firing of c-fibers. There is a resistance to

assert this because c-fibers are not things we are accustomed to reporting and it seem like it would not be possible to report them noninferentially.

Rorty, like Churchland, calls this rejection unsubstantiated. The burden of proof is not on the eliminativist to prove that c-fibers can be objects of reports, rather it is up to the other side, the identity theorists, to prove that one can decide the issue a priori by claiming that no such reports are possible. If no such argument can be formulated, the case of demons and hallucinations will be parallel. “We will, indeed, have been making noninferential reports about brain-processes all our lives *sans le savoir*” (Rorty, MPC, 187). This is Rorty’s case for sensations being like demons rather than like tables, if a good distinction between the entities like demons and those like tables existed in the first place.

Rorty fails to capture the difference between what is conceivable and what is possible. The a priori proof that c-fibers cannot be noninferentially reported might not be easy to produce. However, the mere lack of that argument does not show that those reports are likely to become part of our language. The missing a priori argument only establishes that it is conceivable that brain states can be reported, not that such reports will ever become habitual, more importantly it does not establish a real possibility for those types of reports.

Rorty, I think, must do better than just conceivability, in order to establish motivation for a theory that so radically departs from well established intuitions, even if those were established only as a result of usual practice.⁹⁴ Another

⁹⁴ If anything can be made of intuitions, it is that they can help decide disputes about burden of proof. If the claim that C-fibers can become objects of noninferential reports is counterintuitive, then it is Rorty that has the harder job.

thing that perhaps should be noted is that reports of tables have not, as of yet, been replaced by reports of molecular clouds. Now, obviously what Rorty means by slow, or gradual, might be different from what it might mean to me, but barring those kinds of disputes, it seems as if by now we would have at least begun the shift from commonsense to scientific ways of reporting objects. A long time has passed since matter has been discovered to be made up of smaller particles, but our reports of middle sized objects has not yet been altered. I hope to be forgiven for the pedestrian character of my argument, but if such a shift has not occurred in cases where reduction was so complete, it seems unlikely to happen in the case of mental entities. Perhaps the persistence of reports of middle sized objects is a sign that molecular clouds are not such that they can be reported on noninferentially.

What I gathered from Rorty's argument is that habit makes the difference between daemons and tables and eliminativism is conceivable; neither one of those conclusions seem to be motivational enough to drop any talk of mental states.

Section III--The Relevant Differences between us and them

In this section I wish to discuss some differences between the Antipodeans and humans. I wish to do this to challenge the idea that the way the Antipodeans are provides any useful insight into how humans are or should be with regards to mental states. The ways in which we are different are relevant.

Consider the relationship of support between the claim that Antipodeans speak only of brain states, and the claim that perhaps we should do the same. It is unclear why Rorty seems to be somewhat more positively oriented towards the conclusion that humans are better off dropping talk of mental states in favor of talk of brain or neural states, rather than the conclusion that goes the other way and suggests that the Antipodeans should convert to our talk of mental states. If there is no empirically noticeable difference between us and the Antipodeans then there is no way to tell between the two alternatives: talking of brains rather than talking of mental states. There is no reason to favor a change in any direction.

Rorty claims that incorrigibility is picked in order to maintain the contrast between the mental and the physical, and that property is also there to capture the meaning of mental states. Incorrigibility is picked up based on a Cartesian platform where that distinction not only exists but it produces an incompatibility, being that the mental is also defined as the nonphysical. The Antipodean scenario in turn fails to capture that contrast and is free of Descartes' views. For the Antipodeans there is no contrast between the mental and the physical, and if the contrast is not there they have no mental states, consequently they are not like us. According to Rorty to have mental states you must be incorrigible about at least some of them, thus if it is discovered that Antipodeans are not incorrigible about any of their states, then they are not like us in that way.

Thus if the Antipodeans are not like us in that sense, talking about them lends no insight into what one should do with our mental states. On the

Cartesian view, you cannot have creatures that are just like us but have no mental states, because Descartes assumes mental states to be the mark of a conscious being. Taking over this contrast and singling out incorrigibility as the mark of mental states, Rorty makes us by definition unlike the Antipodeans. In order to have a scenario like the one of the Antipodeans, one would have to produce the compatibility between the mind and brain discourse artificially, by removing the contrast between the mental and the physical. As it stands it is unclear how the case of the mindless creatures illuminates anything about humans and their minds.

Even if we grant Rorty the conceivability of creatures like the Antipodeans, their possible existence does not amount to much. Since pointing to compatible discourses bears no relevance on anything but discourse, which is intentional on Rorty's part. In chapter one of *Philosophy and the Mirror of Nature*, Rorty proclaims that one should stop talking of concepts. Those are nothing more than a rehashed way of talking about universals where particulars are an instantiation of a general property. We should talk only about attribution of mental states to particular people in term of particular "rules of discourse." In chapter six of PMN he distinguishes between pure and impure philosophy of language, impure philosophy being one where issues in language are connected with metaphysical issues, where attempts to solve one are seen as attempts to solve the other. Rorty disapproves of that claiming that metaphysical issues are ones that need to be resolved by science, and problems in the philosophy of

language should steer clear of those. This is meant to counteract the linguistic turn.

But, the story of the Antipodeans seems relevant only if the project Rorty is proposing is one where issues of ontology are intertwined with issues about different ways of speaking. Because if all that is at stake are two populations that have two different sets of vocabulary, where that vocabulary is seen as having no significant consequences on the ontological issues concerning the existence of either mental or brain states, then the compatibility itself cannot lead to any type of conclusion that would compel us to choose one discourse over the other. Not even convenience can oblige us to switch from one to the other, since giving up talk of minds would seem rather uncomfortable and in fact quite a task. Only change in ontological views could perhaps motivate a change in discourse.

If the Antipodeans are like us, save for this one custom, giving up our talk for their talk or vice versa would not change much and would not be motivated by anything. If what Rorty is aiming to show, as he claims, is that there is no difference between us and them, no empirical difference that we can catch, and if he is honest in saying that his project is “pure”, then what he is saying is at most that Antipodeans are conceivable. However, claiming that something is conceivable says nothing about anything actual. The obvious thing to say, as I did in some way before, is that anybody just like us would also have the contrast between the mental and the physical, and if indeed we are the way Descartes said we were, the mental would be nonphysical. This difference would not hinge on the discourse we use, but would stem from our views on metaphysics. We

would number mental states among the things that exist, while the Antipodeans would not.

The mind-body problem stems from this metaphysical issue. Focusing on distinct ways of talking about inner states will not change that, unless there is a connection between the way we talk and our theories about how things are. Rorty is right in claiming that metaphysical issues are not such that they can be resolved by talking about language, and he might be right that the important ontological issues are the province of science, but that is a further reason to notice that the scenario of the Antipodeans contributes nothing to the discussion of whether or not phenomenal or appearance properties exist. Moreover, ceasing to talk about those properties will not make a difference that is either empirical or ontological.⁹⁵

At this point I wish to recast one of the differences between the two populations that Rorty emphasizes as well. In addressing some objections Rorty asserts that the distinction between appearance and reality is just the distinction between getting something wrong and getting something right. For the Antipodeans it would not make sense to speak of phenomenal properties as appearances of mental states, where the appearances specify an additional, instantiated property. This distinction would be one that only an Earthling would

⁹⁵ Although, I think the commonsense is influenced by theories about the mind that are either scientific or philosophical, I do not think the way in which we speak about the mind in our everyday has a determinate influence on scientific theories. I disagree with the idea that the folk-psychological view limits what is done in science. There is a disconnection between the way we speak of the mental in our everyday lives and the nature of the mind as proposed by scientific theories. Therefore, the relevance of commonsense usage on scientific theories about the mind, and metaphysical issues associated with those, escapes me.

draw, according to Rorty. The Antipodean only makes a distinction between holding false and true beliefs. If the Antipodeans are not making the distinction between reality and appearance, mental states cannot be restated as appearance properties of brain states. In that sense, mental states can not even have the status of an appearance property.

The problem for reduction only arises if we think that phenomenal properties are picking out a genuine property, such that it has some sort of ontological status that needs to be captured by neuroscience. The view that there are such properties is captured by principle P: “Whenever we make an incorrigible report on states of ourselves, there must be a property we are presented with which induces us to make a report” (Rorty, PMN, p.84). This principle tends to be appealing mostly because Rorty thinks it fits our intuitions about mental states.⁹⁶

The distinction between appearance and reality is particularly useful in cases where we turn out to be wrong about the nature of objects around us. If the way things seem to us does not track the real nature of the thing observed, the appearance properties of that objects can just become mental properties rather than features of the actual objects. As previously stated, we can just answer the question, “What were we reporting before it was discovered that X does not exist?” by pointing to certain mental states.

⁹⁶ Rorty’s definition of incorrigibility runs counter to this view. Rorty defines incorrigibility only in terms of an established linguistic practice, while remaining neutral on whether that practice might or might not track some property.

But, it seems much easier, according to Rorty, to revise our theories and conceptual frameworks about objects rather than the same about the mind. If one is wrong about the nature of stars and planets and one finds out about it, the appearance of the stars is less likely to change. The appearances of stars do not seem to change in accordance with theories about stars.⁹⁷ In other words, what we are likely to report when looking at stars seems to remain the same even after our theories about those objects have changed. While if we found out that we were wrong about mental states, their appearance, it seems would change. Rorty asserts this as an intuition that people have about their mental states. And it should be added: a Cartesian view as well, where we seem to know our mental states much better than external object. Consequently, a change in view about mind seems much more dramatic.

To make a distinction between the impacts of change in theory for mental states as opposed to the same change in regards to physical objects is to maintain that there is a distinction between appearances of mental states and appearances of physical objects.

How can such a distinction be drawn? Rorty does not seem to make it clear how or where one should distinguish an appearance of a table from an appearance of a mental states. They seem to be distinct only in their content but that cannot be what Rorty means, because it seem unclear why some kinds of appearance properties would be distinct form others. This distinction is hard to

⁹⁷ The lack of change in observational reports I take to be a challenge to eliminativism, because observational reports should track changes in theory, according to both Rorty and Churchland.

draw for eliminativists as it is hard to draw for people who wish to make the mental special in some way. People, who argue for instantiated mental properties that represent the mental in this or that way, usually wish to make a distinction in favor of mental appearances. So they support the Cartesian view that the mental is somehow much closer to us than anything concerning physical objects. Usually, they make the case that one can only make noninferential observational reports of mental states while we cannot use brain states for that purpose. But, they are thought to fail in that task because there is no a priori argument showing that noninferential reports of brain states are not possible.

Eliminativists make the distinction such that it would favor physical objects. Appearances of physical objects really seem to be instantiated, since physical sciences have provided explanations for some of those appearance properties. But I have mentioned before that there does not seem to be a convincing way of distinguishing reduction from elimination, if the commonsense frameworks about objects can be replaced by a scientific framework about those objects. If we can eliminate all appearance properties hereby identified with appearance properties of commonsense objects, there is no difference between the replacement of 'table' for 'molecular cloud' and 'sensation' for 'c-fiber'.

The problem with distinguishing between appearance properties of mind and those of objects refers back to a deeper problem. Eliminativism has problems distinguishing between various ways for theories to be false, as well as various ways for entities to be false. At that deeper level, it is hard to make a distinction between the way in which the commonsense theories about objects

are different from commonsense theories about the mind, as well as how are tables different from minds.⁹⁸

There seems to be no reason to conclude that theory change would be any different for a change in theory of mind or a change in theory about external phenomena. Moreover, the worry about that distinction is not at all intuitive, if by that we mean common sense. In fact, philosophers, I think wrongly, overestimate the human attachment to mental states, an issue I will elaborate on in the last section. This overestimation is in fact the symptom of Cartesian influence on philosophers, which highlights the tendency that they have of drawing the boundaries of common sense in terms of philosophical theories about the mind.

But it is unclear whether laymen are as influenced by Descartes as philosophers are, because it seems that the ordinary folks are much more certain about things concerning the external world. It seems to me that people are much more likely to change their mind about their mental appearances, than they are to change their mind about how it seems to them that they perceive the things in the world. Reports on perceptual experience seem much more entrenched because a lot of the phenomena considered as mental by philosophers are not considered such by ordinary people. It is my impression that the folk live in a world much more Aristotelian than Cartesian.

For example, the eliminativist move of kicking sensations outward seems relevant only to philosophical theories dealing with Descartes' aftermath and not

⁹⁸ See chapter three, section one.

so pivotal for ordinary folks. They already know that things outside themselves have properties, and many of them are very difficult to persuade that those properties are something one can be wrong about in regular circumstances. Doubt is philosophical too, and Cartesian as well. For most people claiming: "I know it because I see it," is perfectly good justification. There are circumstances under which people will accept that they can be wrong about what they see, and there are established rules for the application of that type of discourse and there are circumstances like that even for mental talk.

I stated earlier and I will repeat anew. If one thinks that to get to common sense one needs to collect platitudes among the common folk, one will surely be stunned to find out that most things attributed to ordinary people by philosophers are not truly common sense. But, all of that is irrelevant since what the folk think about the mental cannot be more than hearsay and because of that can be used to boost even incompatible philosophical positions. This is all because there aren't any general principles left to establish what it means for some truths to be common sense.

After all this, I wish here to propose that Rorty fails to make a distinction between phenomenal properties--properties that are associated largely with sensations, such that they produce in us a certain feeling of what it is like to be in a particular state--and appearances. Appearances are such that they represent the world as being in a certain way; they have intentionality and with it also certain semantic properties. The table has the appearance of a large, sometimes rectangular, object with certain height and width and the appearance of being

brown; all of those can be either true or false. Phenomenal properties on the other hand need not have intentionality. A qualitative state, such as what it is like to taste a quince, might not have intentionality. The way it feels to taste quince is not the same as having thoughts with propositional states that ascribe certain appearance properties to quinces. To use Sellars for my purposes, Rorty is confounding thoughts with sensations and the “of-ness” of thought and the “of-ness” of sensations. For example,

Mary is having a sensation of a pink ice cube,

is for Sellars a nonconceptual state that Mary is having, while,

It seems to Mary that there is a pink ice cube on the table,

is a conceptual state. The two are not equivalent. The latter already involves concepts like pink or cube, while the former does not. The mistake is made when the two are equated. What is true of the world and is pre-conceptual is confused with conceptual awareness, or knowledge, of things as pink or cubed.⁹⁹

Sensations are mistakenly thought to give us knowledge of the world as being pink, red, blue or cubed when in fact the sensations we have, and which represent the world, become “physical objects” only through our conceptual framework. Phenomenal character can be nonconceptual and in that way can be distinguished from appearances. Phenomenal properties of sensations cannot be the appearance properties of mental states like certain properties of objects are appearances of those. Phenomenal properties have feels, while

⁹⁹ Sellars, W. “Scientific Realism or Irenic Instrumentalism,” Philosophical : Metaphysics and Epistemology. Atascadero, California: Ridgeview Publishing, 1977, p. 171.

appearances properties are encapsulated by beliefs that represent the world as being this or that way.

Thus, the appearance/reality distinction is not the same as the distinction between reality of mental states and the phenomenal properties of those, since phenomenal properties are not thoughts. Now the question is what are we, humans, incorrigible about? The answer could be: only phenomenal properties. Appearances are obviously things people are and can be corrected; there are criteria for doing that. Consequently, when it comes to thoughts attributing appearance properties to objects, even humans are either right or wrong.

There is a distinction then between sensations and appearances. It seems to me that there is a table over there that is rectangular and brown, is an expression of a propositional attitude specifying appearance properties to external objects. But pain could go either way. Reporting pain could be an expression of a propositional attitude, which presupposes the ability to classify states in terms of them being pains or not. One has to be able to pick them out as pains. Alternatively, one could just experience the phenomenal character of pain. Experiencing the way a pain feels assumes the ability to have that particular experience, but does not entail that the person also be able to classify the state as 'pain' nor to express that "feel" in terms of a proposition. In the second case the phenomenal property associated with having pains is not like an appearance property of physical objects. The Antipodeans might not make an appearance/reality distinction, but they still might experience phenomenal

properties. Sensations are not entirely like 'seems,' where by seems we mean appearances.

Perhaps, "seeming to seem to be in a particular state" is something closer to a sensation and could be a state that is incorrigible. As it turns out both the Antipodeans and us do not have an established way of doubting first person reports, referring to such states. "The fact that 'seems to seem...' is an expression without a use is a fact about the notion of 'appearance,' not a tip-off to the presence of 'phenomenal properties'" (Rorty, PMN, p.77). Rorty is underlying the issue that phenomenal properties are not at stake; rather it is the meaning of the word 'appearance.' We have no rules of discourse by which we could challenge these second level seems. But even if we take the issue to be just about the meaning of a word, we can still claim that the Antipodeans are incorrigible about those higher level seems. This is because following Rorty's rules, incorrigibility is defined only in terms of rules of discourse. Mental states are incorrigible because we have no rules by which we can challenge first person reports of 'seems.' Therefore, if the Antipodeans do not have linguistic rules by which they can question first person reports of 'seeming to seem' they are incorrigible about those states.

Now a further clarification is needed. The 'seems' that the Antipodeans are talking about is different from the ones that the humans are talking about, because we still speak of minds while they speak of brains. It would then turn out that Antipodeans are incorrigible about 'seeming to seem' in a particular brain states. We on the other hand are incorrigible about mental states. In that case

it would turn out that Antipodeans are incorrigible about brain states, making them incorrigible about physical states. That would run counter to the claim that incorrigibility is a feature that distinguishes mental states from all other states. Ultimately, changing linguistic practices would not result in the elimination of incorrigibility.

In the next section, I plan to illustrate the claim that current linguistic practices do not preclude rules for the corrigibility of mental states.

Section IV--The Corrigibility of Mental States

Earlier it was stated that privacy was not the mark of the mental because one could establish inner states using only brain states. Rorty suggests that we could modify the Myth of Jones in such a way that inner states are brain states. Brain states could play the functional role of mental states (Rorty, PMN, p.413). The Antipodean story is just that story. There is a distinction that the Antipodeans make between the states of the body versus states that are provoked by some brain states, brain states are said to have aboutness, and they result in the same type of behavior as mental states would. Brain states are inner states for the Antipodeans, but they are not mental.

Rorty concludes that the only feature that is typically mental is incorrigibility. In the previous section, I argued that the Antipodeans are incorrigible about 'seeming to seem to be in a particular brain state.' In this section I will point to another way in which they could be incorrigible. I will

propose two modifications to the antipodean story; both meant as challenges to Rorty's position.

The claim that Antipodeans are actually incorrigible about their brain states is one of the challenges. I will take as my platform that the Antipodeans do not to have an appearance/reality distinction. The distinction, Rorty claims, is just the difference between getting something right and getting something wrong. Now, if the Antipodeans are good scientists and know most things about their brains, they, then, hold a correct theory about their brain states. This is coupled with a linguistic practice that features brain states in all the right places. The Antipodeans have gotten the reality of brain states right and they are trained to report that reality correctly. Consequently, the reality of the brain states and their appearance are one and the same thing or at least they match perfectly, most of the time the Antipodeans are correct about their mental states.¹⁰⁰ The mistakes that the Antipodeans make are associated with certain areas of the brain which are also accessible to them as brain states, and they are right about the way in which they get things wrong so they are never really wrong.

There is no uncertainty about the nature of the appearances. Now if that is correct, the Antipodeans are incorrigible about their brain states. The Antipodeans are incorrigible not only about brain states, but also about their reports of appearance properties of objects. The Antipodeans are incorrigible

¹⁰⁰ Rorty, unlike Churchland, does not propose plasticity as a tool of perceptual change, but he does seem to claim that theory change would result in perceptual change. See "Mind-body Identity, Privacy and Categories." Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971.

about their observational beliefs. If an Antipodean holds a correct theory about external objects, and knows how to apply that theory correctly in all situations, the Antipodean will never be wrong about the appearance properties of objects. Thus making the Antipodean, and creatures sufficiently like it, incorrigible about all things about which it has a correct theory. But, incorrigibility in itself is not a bad thing; it only has negative connotations through its incompatibility with materialism. If there is not such incompatibility, then there is no problem about always being right. Since, incorrigibility in that sense would not give rise to emergent properties, where emergence implies incompatibility with the physical.

However, Rorty claims that incorrigibility is a feature so tied up with mental entities that even a physical state that has that feature would end up having a mental feature (Rorty, PMN, p.414). So if the Antipodeans were to be incorrigible about their brain states, then Rorty would have two options: to claim that because Antipodeans are incorrigible about their brain states they have states with mental features resulting in emergence, or to accept that incorrigibility is not an essential property of the mental. Incorrigibility could just be an outcome of holding a correct theory. I think the second alternative is best because making incorrigibility essential to the mental could result in emergence for any theory that is correct about inner states.

A second modification to the Antipodean thought experiment involves the ascription of incorrigibility as an entrenched part of everyday discourse. I intend to address Rorty's portrayal of humans. Rorty told us that incorrigibility of mental states is established via the establishment of a linguistic practice. It must be,

then, that a change in linguistic practice could change the properties attributed to mental states. I will argue that such changes have occurred.

This type of argument citing changes in everyday linguistic practices is more anthropological than philosophical, so I will not dwell on it. I will cite some examples of such a change, mostly to support what I argued in chapter two: that the character and boundaries of commonsense psychology shift in ontology as well as in verbal practices. In general, I think it is enough to point to such movements, rather than attempt to retrace, precisely, shifts in commitment.

My estimate is that it seems hard to convince a human that they do not have mental states altogether. Even more loosely, it is hard to convince us that we have no inner states that cause and culminate in overt behavior. But positing inner states to explain behavior is not what creates problems. A lot could be done with our flexibility about the nature of mental states. I mean here to build on my earlier arguments that unless one establishes some properties as strictly marking entities, one can always just reduce. Assuming that humans are lax about commitments to particular properties of those states, all science needs to do is keep the word and change all or some of the properties.¹⁰¹ And if the dispute only comes down to whether to use the word 'mental' or 'brain' state, it does not seem to be all that philosophically compelling.¹⁰²

¹⁰¹ In chapter two, I attempted to buttress the view that humans are not firmly committed to a particular view featuring particular properties of mental states. I did claim that one could at most assert that there are temporary commitments to some properties of mental states. Those properties, I claimed, are only common sense if the criterion is frequency of usage.

¹⁰² This claim is in continuity with chapter two, but will be elaborated on in chapter five as well.

Looking at verbal practices one can notice that there is no obvious commitment to the incorrigibility of mental states. Humans are much easier to persuade that they could be wrong about their mental states than Rorty asserts. Most of us can be persuaded that we could be wrong about mental states, especially if we are told so by persons who have expertise in physical sciences dealing with the body, such as medicine. Doctors, nowadays, have something close to an established linguistic practice by which they can override personal reports of pain. Linguistic practices by which we attribute mental states to persons are determined in terms of responses of normal observers given the correct circumstances. So we set the criteria for when a person should experience pain in terms of the average person and their tendency to report pain states in this or that circumstance. If a person reports experiencing pain in circumstances where people usually do not report feeling pain, it seems warranted to question whether what the person is feeling is actually pain. Furthermore, if a person consistently reports pain in unusual situations we are likely to question the overall physical or mental condition of the observer. Broadly, then, there are ways to correct people on their reports of mental states.

For example, there are cases where a person should report experiencing pain, but in fact they do not. People who suffer from diabetes in some cases lose their ability to report on pains. Such a person would not report pain in situation where normal observers tend to report feeling pain, like when skin is exposed to excessive heat. For such instances, we could say that there is something wrong with the way those people report on their inner states. This example is meant to

establish that there are cases where communal practices can provide criteria for first-person reports of mental states. In this case the behavior of the person is used as a symptom of their internal states, and their reaction is taken to be aberrant compared to others. Thus, from the third-person perspective we have determined that there is something unusual about the mental states of the person with severe diabetes. Obviously, we cannot claim that the person is wrong in not reporting any pain, but the lack of the report is taken as evidence of the deviation from normal inner experience for normal observers. There is then an indication that we have shared third-person criteria that establish standard reports of some inner states. In all those cases where we have standards we can claim, in the very least, that some reports are not typical, if not false.

There are also cases where people report being in pain in situations that are not characteristic for such reports. It is possible to circumstantially determine that a person is lying about being in pain. Doctors regularly make such determinations. The way in which they do them is by referring back to some average, which is established through experience with other patients in similar situations and their reports of pain. An experienced doctor can determine, roughly, the expected level of pain for a dislocated shoulder, or broken limbs. Although there is room for individual differences, doctors are able to suspect nonveridical reports of pain, and are able to tell the difference between a person genuinely reporting pain or reporting it to acquire drugs.

Other examples include psychosomatic pains. If a doctor tells us that the pain we experience is not a result of a physical condition, we tend to accept that

we are not having a “real” pain. We accept that we can be wrong about mental states, in those cases. The realization that there are no physically determined causes of the pain is used as a therapeutic method. Asserting that the pain is caused psychologically relieves the pain. We can claim that based on third-person criteria; the situation is not one that tends to cause pain and the patient reacts correspondingly.

These examples point to a somewhat established method by which we are able to establish the rules for the attribution of mental states. In turn those rules make it is possible to question reports of ‘seeming to be in a particular mental state.’

But how about ‘seeming to seem’? It has been made clear earlier that Rorty thinks that if there are no means by which the Antipodeans can question reports on ‘seeming to seem’ to be in a particular mental state, that would be a fact only about the meaning of appearance. But incorrigibility is for Rorty a matter of linguistic practice even when it comes to reports of mental states. Thus, if we are incorrigible about ‘seeming to be in state X,’ by virtue of linguistic practice, the same goes for states of the second order like ‘seeming to seem to be in state X.’ In the previous section, I argued that the Antipodeans are incorrigible about those second level states. And so are we if there are no ways to question those types of reports.

I gave an argument by which I distinguish appearances or phenomenal character of sensations, and then proposed that perhaps ‘seeming to seem’ of the Antipodeans is akin to those. I claimed this because sensations could go

either way. A person could have sensations that are associated with mental states that have propositional content, but they could be isolated and sometimes occur without being propositional. For a mental state to be a sensation it is enough for it to have phenomenal character. If the Antipodeans are incorrigible about mental seems, those states would be like our sensations and perhaps we could conclude that they have phenomenal character associated with those. The states need not have the same type of phenomenal character as our sensations; it is enough that there is something it is like to be in that state for them. Moreover, the Antipodeans would have phenomenal properties associated with brain states, thereby negating the claim that incorrigibility is strictly a mental feature.

So are we incorrigible about the way our sensations feel? Are the Antipodeans entirely incorrigible about their second level seemings? It is useless to look at verbal practices about the phenomenal character of inner states. I think there is not an established practice by which one could correct a person on how things feel to them, but that is not evidence for or against incorrigibility of those types of inner states. It is just an illustration that everyday parlance does not deal with such issues. Everyday discourse or commonsense psychology does not cover questions about phenomenal character. This raises a quandary: are issues that are not immediately covered by common sense outside of its realm?

It is clear that people without philosophical training are not accustomed to dealing with issues concerning the feels of their mental states. This lack of

coverage is mirrored in the absence of discourse addressing phenomenal character. But if one were to corner a lay person into conversation about those issues, that same person could take a stand. The challenge, then, becomes regarding the status of those answers: are they commonsense or are they hinging towards a philosophical view? It seems obvious to say that if common sense does not address certain issues, those issues are not commonsense. But, if common sense is stretched to cover those issues, in the ways mentioned above, the status of the resulting beliefs could go either way. This highlights the problems of distinguishing beliefs that are commonsense from those that are scientific or philosophical. I think this makes clear that citing lack of established language rules concerning phenomenal character does not support arguments for or against incorrigibility. It merely traces out the current size of the domain of everyday discourse concerning mental states.

My stance is that the commonsense view on sensations, for examples concerning the colors of things, are usually quite Aristotelian. The commonsense view treats sensations of red not as internal states, but we speak of external objects being red. The move by which the eliminativist seek to kick phenomenal properties outward, making them objective properties of things, is already part of the commonsense view. However, if one were to press the folk one could probably push them into accepting the position that although they experience sensations and that those usually have some phenomenal character, they will remain open to the possibility that that character can change. The way things seem to us can be influenced. Churchland's examples of the transition from

layman to experts are illustrative here; the transition entails change in phenomenal character. So I think one can coax the folks to adopt a view that can correct them about their mental seems. In some part the examples that I gave supports the idea that such views are already partly established.

People more and more accept that their brains do all sorts of things that are not consciously accessible to them so they are more likely to accept that they could be wrong about themselves. Humans were persuaded to change the locus of their mental states; most people nowadays feel that their mental states are strictly associated with brain states. Physicalism has become more common sense than dualism, because the folk tend to change their mind about their minds. Rorty does not need to go to space to find creatures that do not feel incorrigible about their minds because people right here on earth are not that sure they are always right about their inner states.

Chapter V

The Original Framework

In the chapters leading to this one, the aim was to establish that commonsense psychology is an empirical theory like any other and that there is no distinction of types between scientific and commonsense views about inner states. One of the primary goals of this dissertation was to show that the first premise of eliminativism establishes that folk psychology does indeed constitute a theory, while at the same time eroding the distinction between commonsense beliefs and all others. Building on that argument, there was an attempt to show that the distinction between folk psychology and other theories about inner states is not firm even when it comes to actual developments in common sense. The latter part of the second chapter should have sufficed in showing that folk psychology is influenced by some scientific views about mental states. In chapters three and four, I attempted to tackle specific problems that some eliminativist attribute to folk psychology. In each of those chapters I have proven that eliminativism might identify the problems correctly, but does not propose an acceptable solution. In sum, the goal was to show that the move to eliminate mental states, especially preemptively, is not well substantiated.

In this chapter, I will attempt to develop a view that could offer a very tentative distinction between commonsense frameworks and scientific ones. The distinction would not rely on a difference of types. Most that can be shown is that

some frameworks are more entrenched than others in practice, but not in principle. In general, I adopt a view where science and commonsense are continuous with each other, and I see progress as a succession of conceptual frameworks.

In the first section, I will propose a framework that adheres to some of the criteria proposed for commonsense theories. The idea for this framework cites Sellars as an inspiration, but is not meant as a complete endorsement of his view. The framework that is a candidate for common sense status is the initial framework that develops for each person, and it will be referred to as the original framework. The acquisition of this rudimentary theory establishes some concepts about objects and mental states. The framework's early development is part of what makes it commonsense. Its appearance is spontaneous because of the limited influence of instruction on the learning of the framework. The original framework also does not presuppose any prior learning; it leaps from no concepts to some concepts. Because it develops spontaneously, the framework is entrenched as the first framework persons acquire, and sediments the basis for all others that develop from it. I will claim that the only immovable aspects of this framework are the individuation of objects as such and the individuation of phenomenal properties as such. But I continue to maintain that in all other ways the framework that is initially established is default: it is there until a better alternative becomes more appropriate.

In section two, I propose that the minimal limits imposed by the original framework can channel, to some degree, scientific discovery, which is another

feature that distinguishes the original framework. Old-fashioned commonsense could restrict science to its particular categories, but the original framework only imposes limits when it comes to the acquisition of frameworks. Most clearly, the limits imposed by the initial framework restrict the pool of theories that can be adopted. I will present several examples meant to illustrate the limits imposed by common sense.

Part of the argument will be that eliminativism's first premise only establishes the conceivability of complete replacement. However, conceptual change in practice presupposes the possibility of perceptual change, which does not rely on conceivability alone but causal and physical possibilities. Consequently, eliminativism requires the physical possibility, not just conceivability. The argument put forth by Quine and Sellars and discussed in previous chapters, establish that there is no way of making a distinction between beliefs in principle, but it does not establish that all beliefs are the same in practice. A way for beliefs to differ in practice hinges on their adoptability, which requires more than the principled replaceability of all conceptual frameworks. I will attempt to show that the states that Churchland proposes are not such that they can be endorsed because they are not part of the states that pass the criterion of common sense.

In conclusion, although there is nothing about this initial conceptual framework that is commonsense in the old-fashioned way, it is commonsense *de facto*. No parts of those theories are nonrevisable in principle, but it is possible that the physical limitations that designated its rise to the surface are such that

they could prevent its complete replacement. Perhaps those types of frameworks are such that they can only be improved, in the same way that a layman becomes an expert, but not in the radical way that would be required to shift from commonsense to neuroscience.

Section I--The Conceptual Leap

In this section, I will attempt to present the view that a framework that emerges as part of normal development of persons is commonsense in the way that avoids the pitfalls of the common sense described in earlier chapters. The framework is modeled on Sellars' view of the original image, which will be briefly explicated below. This framework will be presented as slightly distinguished from all other frameworks in ways that are loosely similar to the old-fashioned notion of common sense. This framework will be commonsense because it emerges spontaneously and sets some limits on the adoption of observational framework.

The commonsense framework that will be presented here is built on Sellars view of the 'original' image presented in "Philosophy and the Scientific Image of Man".¹⁰³ My interest is in the following leap: "... (A) diversified conceptual framework is a whole which, however sketchy, is prior to its parts, and cannot be constructed as a coming together of parts which are already conceptual in character. The conclusion is difficult to avoid that the transition

¹⁰³ Sellars Wilfrid. "Philosophy and The Scientific Image of Man" Science, Perception and Reality. Atascadero, California: Ridgeview Publishing, 1991, p. 6.

from pre-conceptual patterns of behavior to conceptual thinking was holistic one, a jump to a level of awareness which is irreducibly new, a jump which was the coming into being of man” (Sellars, p. 6). The transition here explicitly described appeared elsewhere as part of the arguments against the ‘sense-data’ theorists.¹⁰⁴

The initial framework Sellars calls the Original image which constitutes the Manifest image of man-in-the-world. The Manifest and the Scientific images of man are opposed to each other without being opposites, for Sellars. Although, he sees distinctions between the two, which are not of interest here, the two are conceptual frameworks that present competing alternatives. The manifest image and the scientific image are continuous with each other, since the latter is the “off-spring” of the former. Although, the manifest image is deemed to be the commonsense view it is not such in the way that was defined earlier. The leap that is made with the original image does not require any assumptions about pre-theoretical beliefs. The scientific image of man rests on the foundations set by the manifest image, but the categories of the scientific image are not restricted by the foundations of the commonsense framework. In principle, the scientific image can replace the manifest as the better framework (Sellars, p. 20).

Sellars speaks of the ‘original’ framework as part of the development of men, historically. The objects of the original image are persons, where most things are and do what persons do. The development of this framework is seen in the ‘de-personalization’ of objects, which gradually transforms it into the

¹⁰⁴ See Chapter Two, Part one, section three.

'manifest' image (Sellars, p.10). Refinements of the original image resulted in an early manifest image that no longer attributed to inanimate objects the possibility for action. Inanimate objects in nature no longer did things like persons, as a result of deliberation and in order to achieve a goal; rather they did things in terms of habit and impulse. Still, things in nature were not seen as a separate category from persons, but a more refined category was established. "... (T)he category of *persons* is now applied to these things in a pruned or truncated form" (Sellars, p.13).

The manifest image evolved from the original image both empirically and categorically. The empirical development is seen in the usage of correctional induction to trim the framework of the manifest image. The categorical development was the refinement of the categories of the original image. Through the evolution of the manifest image its primary objects remained persons, but the category person became so refined that it applied less and less to inanimate objects. Thus, through the manifest image human beings found themselves distinct from other things, they became aware of themselves as people-in-the-world. According to Sellars, the successful attempts to delineate the manifest image revealed that there seems to be continuity rather than a brake between the scientific image and the manifest image.

It was stated earlier that because of arguments that were supported in chapter two, commonsense theories and all other theories are the same in kind. At this point, I wish to unfold a view of what a commonsense framework could be without presupposing what was already rejected. It is maintained that conceptual

frameworks cannot be distinguished in kind, but there are differences in practice that could draw a line of distinction between them. In addition, I will attempt to go through some of what I called the meta-intuitions about commonsense, and try to show that a reset view of common sense accounts for some of those. One such intuition was that commonsense beliefs arise spontaneously without assuming prior knowledge. Another intuition was that commonsense frameworks are not replaceable. Commonsense acquires primacy in virtue of not being replaceable. Primacy feeds the assumption that commonsense provides the basis and parameters of science, where the quality of scientific theories is measured in terms of the ability to explain the categories of commonsense. If a framework has any of these features--defined in a way that does not presuppose old fashioned foundationalism or necessity--then that framework could be deemed commonsense.

A candidate framework could be the one that makes the leap from no conceptual framework to “sketchy diverse conceptual framework.” This initial framework would replace foundational beliefs, in the sense that it would provide that basis for the development of other conceptual frameworks. It would be the rest for all other conceptual frameworks, without presupposing foundations because of the wholistic leap described. Sellars calls the framework that makes the leap the Original image and I will refer to it as the original framework. In principle, there is no distinguishing between the original framework and all that follow from it, as frameworks. The differences between those are practical, in

terms of the distinct role the original framework plays in the development of frameworks.

Unlike the Original image, the original framework does not have as its objects only persons. Further still, the original framework here is not to be seen as a stage of development of persons in general. My interest is in the initial framework that is established for every child with development. The framework of interest here is the one that makes the jump from nonconceptual to conceptual in the development of each person. I will contend that this framework cannot be replaced in the same way as frameworks that are build on its foundations, and part of the reason is that it seems to develop spontaneously. Two aspects of spontaneity that are of interest here are the ones that mimic the old-fashioned aspects of commonsense; those are unaided learning or the limited influence on the formation of the original framework. Earlier the spontaneity of acquisition of common sense was explained in terms of direct knowing of pre-theoretical facts. Currently, the leap is made by the original framework, which curbs around the trap of pre-theoretical facts.

The original framework is nothing like the folk theories that are credited to adults, and that elimination targets. It is a rudimentary framework that enables the individuation of some objects and most likely some sensational states. There is evidence that the individuation of objects develops early on in childhood.¹⁰⁵ As early as three months old, infants are able to perceive objects as distinct from

¹⁰⁵ Spelke, E. S. Perceptual knowledge of objects in infancy. In J. Mehler, E.C.F. Wiker & M. Garrett (Eds.), *Perspective on mental representation*. Hillsade, NJ: Erlbaum, 1982.

their background. This was evidenced in the infants surprise or puzzlement, which was measured by the length of time the infant spent looking at the display¹⁰⁶ when the rules of object unity were violated. The infants also displayed a tendency to reach for the nearest of two objects, which suggested they could tell the two objects apart.¹⁰⁷ There is also some evidence that babies around four months old show signs of perceiving occluded objects as unitary as well as some degree of shape and size constancy.¹⁰⁸ Some level of object permanency was documented as well in research by Renée Baillargeon, where infants three and half to four and a half month old spent more time looking at displays that violated the rules of object permanency.¹⁰⁹ In speaking of the original framework I mean to refer only to such a rudimentary framework that is formed early in childhood. The cited evidence only points to some of the developments that occur early in childhood and it is not meant to be an exhaustive list. I am making no attempt to draw out the boundaries of this

¹⁰⁶ The paradigm used in these experiments relies on the phenomena of habituation and dishabituation. Habituation is defined as the decline in interest as repeated stimuli becomes familiar. Dishabituation is the reemergence of interest when the stimulus has change and becomes novel again. The preference for the novel stimuli is said to imply that the baby can discriminate between the old and novel stimuli. 'Surprise' is then attributed to the baby when it shows sign of dishabituation for a particular stimulus.

¹⁰⁷ Spelke, E. S. Perception of unity, persistence and identity: Thoughts on infants conceptions of objects. In J Mehler and R. Fox (eds.), *Neonate Cognition*, Hillsade, NJ: Erlbaum, 1985.

¹⁰⁸ Flavell, J.H. *Cognitive Development*, third edition, Englewood Cliffs, NJ: Prentice Hall, 1993, p. 33-34.

¹⁰⁹ Baillargeon, R. "Object Permanence in 31/2 and 41/2-Months-Old Infants". *Developmental Psychology*, Vol. 23, No. 5, 1987: 655-664 and Fantz, L. Robert "The Origin of Form Perception" *Scientific American*, Vol.204, 1961:36-42.

original framework because I am only interested in the establishment of object individuation and some sensory experience.

As it forms, the original framework makes a leap that was described earlier. This leap should be radical because it is unique. It occurs only once. All other conceptual learning does not entail the bridging of the gap between nonconceptual and conceptual. In the third chapter, an argument was presented that stated that the complete reconceptualisation of commonsense psychology to neuroscience would require the establishment of neuroscience as part of the primary frameworks that children learn. To add to that, complete reconceptualization, as described by Churchland, would require that the initial leap be made by a neuroscientific framework. The reasons that were given there against that prediction still stand. There are no clear explanations and models of how this initial framework is established and therefore it is hard to make predictions about which frameworks can play the role of 'original' framework. Also, the training process required for the establishment of the initial framework is not like the training that is seen with other types of learning. The original framework that attains the rudimentary individuation of objects and in the very least the individuation of some sensational states in terms of particular phenomenological properties seems to be established spontaneously. This spontaneity is seen in a more limited influence of training on the original framework.

I will resort to the reiteration of an example that was presented in chapter three. Churchland's examples of conceptual change revolved around what could

be deemed “enhancements” on initial frameworks. In those examples, we can trace the process of change in concepts and perception that occur when a lay person becomes an expert. In all those situations, the frameworks did not involve the establishment of an initial framework, but merely the development of rudimentary frameworks through training. Those developments build on already established categories.¹¹⁰ This is not to say that all change in frameworks, after the institution of the initial framework, exclude the establishment of new categories. Rather, the learning that is involved in the original leap is not like the learning involved in other conceptual change, because part of the big leap is the learning of categories as such.

To speak in terms more familiar from other chapters, by establishing this first-blush framework the child has to learn to individuate as well as to individuate particular entities. Other conceptual change relies on the already established ability to individuate; it only requires the individuation of new objects. The instructional scenarios provided for reconceptualization rely on the ability to individuate. In the attempts to teach a musical novice how to hear the tones constitutive of the chord, the teacher relies on the student’s ability to have perceptual experiences that represent the tone both as the part of the chord but as simpler whole as well. The teacher is assuming the ability of the student to perceive the sound as individual and distinct from the other three tones. The assumption of that ability is the condition, not the result of that instructional

¹¹⁰ It also was an example of learning after the student has developed all the verbal skills necessary. My contention is that the original framework arises much earlier than that and does not rest on learning that entails the exchanging of propositions.

process. If it were otherwise, individual differences would be eliminated and most people would be able to learn how to individuate tones with similar proficiency. We know that this is false. The instructional process is contributing to the noticing of the various aspects of the cord, but if one were to completely lack the ability to perceive tones discretely the instruction would fail in its influence. What is developed in the described instructional process is the sharpening of a preexisting tendency, rather than the establishment of the ability to make distinction of the type described.

When it comes to objects, assuming that it is true that a scientific framework can penetrate into our observational frameworks and influence the way things are perceived, there is a difference between learning to see a table as particles in motion and learning to see it as an object distinct from all other. It seems likely that the features that are attributed to objects can be changed through instruction. One's ability to perceive an object's color, or the way it seems in size or shape can change as one's framework is adjusted conceptually. For example, the way one perceives a color of an object can change as one is taught how to distinguish a larger number of colors, so what seemed to be dark brown can become more or less so after the exposure to more colors. The size of an object can vary because the property is relative to other objects. All those adjustments in perception are resting on the foundation that is laid in the original framework. The change in perception that would occur as the result of endorsing the scientific view of physical objects is more like the enhancements described above and less like the change from no concepts to some concepts. In all the

cases of adjustment we see changes in features, even radical shifts, but all those shifts seem to settle back on a framework that individuates objects. And although the types of objects we see can be affected by theories, that we see objects seems unaffected. The original framework makes a leap that establishes this habit of individuating objects. We can count on this as being one of the limits of commonsense. The boundaries are not just on what one could call everyday perception needed to make one's way through the world, but is also a restriction on what can be perceived. The latter limits apply to discovery and it also limits what can count as an observation.

At this point it would be exigent to settle on a definition of 'object' as such, and I will shrug the responsibility of that large task. The most I can deliver is that what is meant throughout by object is whatever is individuated. I am aware of the circularity, but I wish to stress here that all I need is the ability to make distinctions of one entity from another. If the distinction can be made, if an occurrence is distinguished as a separate from others it is an entity. The character of the entity should remain open. While the many features of entities are learned over time the ability to distinguish between objects as such seems to date early in childhood. Regardless of the quality of the evidence in support of that claim, the learning that is required for the individuation of independent objects still is different. This difference is seen when one recalls typical instances of learning.

Even if one was keen on disregarding the evidence of preverbal learning cited earlier, there still remains a problem of how children learn to distinguish

objects. One could recount instances where children learn various features of objects, for example names of animals and the sounds that they emit. In all those cases there is no explicit instruction of how to make separations between a cow and all else, or a dog and all else. There is no instruction of individuation as such. This must be in part because although adults know how to individuate, it would be hard to abstract the rules for how to do so. Moreover, the concept of individuation is sophisticated and usually acquired after training as well. In everyday life, with laypersons, one speaks of the existence of objects as being the basis of perception. One does not speak of cows being individuated as a result of learning a conceptual framework that features cows. Nonetheless this kind of learning could happen implicitly. In order to teach individuation, the parent need not know about individuation, but only how to individuate. Usually, instructions of this sort begin by uttering and pointing.

To evaluate this claim let us consider the following example. I will use Quine's example of radical translation and switch from cows to rabbits. The example, as used by Quine, was meant to highlight the indeterminacy of translation, where a decision cannot be reached in translating the utterance 'Gavagai!' as meaning rabbit, undetached rabbit parts or rabbit stages. As is familiar, the indeterminacy of translation is also trailed by an actual indeterminacy of reference. Each of the distinct ways of individuating rabbits is fixed only as part of a conceptual framework. At this point, I am only interested in this example as it relates to distinct ways of individuating the same object.

One should notice that the scenario of radical translation sets up a circumstance similar to the instructional circumstance for children when they learn how to individuate objects. The child in this example would be like the native with whom one does not share a culture. It is precisely Quine's point that the stimulus situation, accompanied by pointing and uttering "Rabbit!" at the right times, is not enough to make the distinction between the three possible individuations. In that case, a parent's pointing and uttering is not sufficient to induce the learning of one framework in favor of the other. It must be then that the pointing and uttering is only part of the way we acquire conceptual frameworks, which although necessary just isn't the entire story.

More generally, I think it is a mistake to confuse the explanation of how cows come to be individuated, in a way that does not require foundations, and the actual learning involved in order to see cows. Although, we could settle on an explanation that is philosophically appealing, about conceptual frameworks, we have not settled on an explanation that is psychological about how it is that one actually learns any of the conceptual frameworks. Although, entities within a particular conceptual framework might be distinguished in terms of their properties, the ability to individuate that entity is not such that can be instituted in terms of only listing those properties. Even if one ignores the fact that when children learn about most animals, they only hear a limited list of their actual properties.

From the point of view of persons, the leap is not explained through the equalization of conceptual frameworks. It is tenable to say that the original

framework has all the same features as all the frameworks that have been expended from it, but it is quite another to equate the process by which they are acquired. The assumption behind complete reconceptualization is that the quality of a framework is enough for it to be indorsed. Such a view has an embeded confusion of the principled reviseability of any belief, with the practical claim than any conceptual framework can be indorsed. The demure argument that is being presented here is that the original framework establishes a basis for other frameworks that cannot be influenced by instruction. The limits of instruction mark the limits in replaceability. A distinction should be made between replaceability and revisability. Revisability points to the conceptual possibility of replacement, while replaceability of beliefs addresses the physical possibility of revising each belief. I take it that the arguments that support the first premise of eliminativism only require revisability and one can maintain that beliefs are revisable in principle without counting on actual replacement.

To turn inward and discuss minds, the folk psychology as described by commentators, and as we have seen it addressed in other chapters, is undoubtedly formed by social influence and learning that happens continuously through life. I have claimed that the folk psychology of the Greeks is not like contemporary folk psychology. It is also the case that the psychological explanations that we use for the interpretation of our behavior, and the behavior of others, obviously changes. This change is not only developmental, but is affected by adult learning. Thus, the mature version of FP is a theory that most certainly changes and could conceivable change almost entirely. But, what

seems likely not to change is the attribution of phenomenal properties to some mental states. This should even be in keeping with some claims that Churchland makes,¹¹¹ because he claims that even brain states have accessible phenomenal properties.

The leap, then, must exist even for the individuation of mental states and it could be in some sense modeled on how physical objects are individuated. Learning to individuate mental states is learning discreteness between one inner occurrence and the other. The leap for mental states is the institution of a rudimentary framework that can make such distinctions and make them in terms of phenomenal feels. The feel of our inner states can change with conceptual change, just as it does for physical objects. The original framework for mental states establishes the individuation of inner states in terms of them feeling this or that way, and all subsequent adjustments are made to the feel. In this way, one could even radically change the way one distinguishes between inner states, but not that that inner states have phenomenal properties.

Sellars draws a distinction between the original image and the manifest image, where the later framework is more developed. The original framework was thus far characterized as establishing the individuation of objects as such. The claim that is being attempted here is not that objects can be individuated independent of any properties. The leap is probably made in terms of fastening some properties to objects, while remaining neutral on the particular properties. The crux is that the leap is made independently of instruction.

¹¹¹ See back in the last section of the third chapter.

The emergence of the original conceptual framework established a certain type of individuation machinery, and then in turn establishes observational beliefs that attribute properties to entities. Those properties are not fixed. One can learn to attribute more or entirely different properties to those same entities. Once one knows how to individuate rabbits, one can learn to individuate the same animal in different ways, even replacing rabbits altogether.

At different stages of development and learning the original framework changes and can change perhaps entirely, but it will always make the leap in the same way. The original framework, in order to make the leap, must emerge individuating only one of the three proposed ways: rabbit, rabbit parts and rabbit stage. The universality of the folk conceptual frameworks for both medium sized physical objects as well as mental states points to a certain type of individuation emerging across the board. In speaking of rabbits, the original framework seems to emerge individuating rabbits. If the original framework emerges individuating rabbits, my claim is not that rabbits cannot be eliminated, but that they cannot be eliminated as part of the original framework. Thus, this original framework is the permanent platform for all other frameworks. Complete reconceptualization into a scientific framework is possible only after the conceptual leap has already been made.

This first-blush conceptual framework can be singled out as the commonsense framework in a way that does not presuppose either foundation or necessary beliefs. This view of 'commonsense framework' is not reliant upon foundational beliefs or sense-data, because it is established by a leap rather than

a gradual ascent entailing small conceptual steps. Moreover, it does not presume any necessary truths that could solidify categories in principle. The first-blush conceptual framework is in principle revisable. But that conceivability of course does not establish the probability of such a revision. An even lesser claim is that even though it might be completely revised, it is not likely that it will be replaced as the initial framework.

The impetus to call this first-blush theory commonsense is because it retains the spontaneity attributed to old-fashioned common sense. The original framework is formed in a way that is distinct from the establishment of other theories, without the explicit influence of instruction. In the very least, instruction does not seem to play the same role as it does in subsequent learning. The child learns to individuate and make the leap from no concepts to some concepts, in a way that seems to be spontaneous. It is of course not true to say that this type of learning occurs completely unaided; there have to be some standard conditions that are required for normal development. The claim is that the leap is at least in part made depending on processes that are not in control of the instructional environment of the child. Moreover, if instruction contributes to the establishment of the first framework, the principles of that learning cannot be anything like the types of learning that occurs later in life.

To use the analogy with learning one's first language very loosely, although there are obvious environmental influences on the learning of a mother's tongue, the way that language is learned is different from the learning of subsequent languages past a certain age. Both types of learning depend on the

learning of grammar, but the type of instruction and its effect on the learner are entirely different from first language to all others. This is not to say that I wish to argue for any innate languages or theories, although I do not argue against them either. Quite frankly, the aim is diplomacy where one remains ambiguous and neutral about pertinent but difficult issues. The original framework, I think, does not presuppose that that framework is innate. Rather I assume that there are preconditions, or dispositions, in the human organism that bias the development of the original framework in the way that supports the development of a particular commonsense framework. One can see this in the way the framework is acquired.

This first framework is default. Because all beliefs are revisable, it is important to say that although one can call a framework commonsense because we thought of it first, it is not commonsense in any way that limits further learning to the enhancement of particular categories. The term 'default' is also there to capture the idea that we hold on to this framework until some further learning and until some better framework comes along. In principle, all the categories that are established with this first framework can be replaced by another better conceptual framework. In practice, I think it could be replaced as well, only not as the first established framework. The limits that can be set by the new kind of commonsense framework are the perception of objects and the experience of phenomenal properties. In the next section I will attempt to argue that those restrictions are permanent even when it comes to scientific frameworks.

Section II--The Restrictions of Common Sense

Earlier we stated that commonsense beliefs used to set the standards for the quality of scientific theories. In order to maintain this type of view it was required to establish special status for commonsense. Sellars spoke of perennial philosophy as attempting to trace out commonsense, because the proponents of the view assumed the manifest image provided for a veridical representation of the world. But, our evaluation of commonsense does not favor this view. Therefore, one would have to find a different way for commonsense to play a special role. In the previous section it was argued that there is some distinction between the original framework and all others. The remaining question is then whether the original framework can set any limits, even normative, for science.

The answer is obviously negative if it comes to the restriction to particular categories. But, if developmentally the original framework has some sort of primacy over science, then it could perhaps point to limitations that are practical. Those practical limitations can contribute to judgments about the plausibility of some theories. For the case of eliminative materialism, this could mean a lot. The theory itself rejects any limitation on the perceptual or introspective abilities of humans. We claimed that the limits that are imposed by the original framework are individuating objects and mental states in terms of some phenomenal properties. If individuating objects is one of the limits, then that could limit the adoption of frameworks to only those which provide for the

individuation of objects. For mind, it would limit to only those conceptual frameworks that propose a reduction of phenomenal properties.

Churchland presupposes a very liberal view of perceptual plasticity, where any conceptual framework that is proven to be true, can then become part of the way we perceive whatever phenomena were under its garb. In this way, science was able to cross over into the boundaries of commonsense. In fact, eliminativism establishes the conceivability of such change, but the possibility of such shifts rests on the assumption that plasticity has no bounds. The theories that explain the nature of entities seep into and affect the perception of those same entities; this much is established by eliminative materialism. But radical shifts, such as the one proposed by Churchland, require more than just perceptual adjustment in accordance with conceptual change. The plausibility of eliminativism presupposes the real possibility of perception being able to adjust to any theoretical framework. Even more than that, eliminativism's plausibility as the solution to problems in philosophy of mind requires unbound plasticity.

The arguments that support eliminative materialism as presented in chapter two, establish the conceivability of complete reconceptualization. All beliefs are revisable and the revisions can be done piecemeal, with the conceivability of complete replacement. For Churchland, the argument from conceivability is not enough, although it makes the argument possible. Complete replacement rests on physical possibilities as well. The two must be distinguished. I take it that Quine's point about revisability is construed as broad

logical possibility, or as we have deemed it here conceivability. It is conceivable that the following statements could be true:

1. 'There are unicorns.'

Or

2. 'This morning Superman was taking the train downtown.'

But the following statements are conceivable as well:

3. 'I once jumped from the top of the Eiffel tower and landed on my feet.'

Or

4. 'My grandfather once walked from Chicago to Mexico City in one day.'

Those statements are such that they are conceivably true, there is nothing logically, preventing them from being true.

In speaking of complete reconceptualization, one can rely on this broad conceivability only in cases where one is not concerned with actual truths. And Churchland emphasizes that his interest do not lie with *a priori* arguments, rather he wishes his view to be reliant and continuous with empirical claim about the brain. For Churchland's theory to be a viable alternative to other explanations about the mind, it should rely also on natural or causal possibilities. Those claims are limited by what natural science tells us is possible. On those criteria, the previous statements come out to be false. It is obvious that no human being could have walked the distance that was claimed in 4. The falsehood of claims 1-3 is similarly obvious, in terms of natural possibilities. Claims such as:

5. 'Brain states are introspectable directly.'

Or

6. 'One can introspect a triplet activation vector in one's visual cortex.'

cannot rest on conceivability alone, they assume natural possibilities.

Although it is true that Churchland aims to present claims like 5 and 6 as statements that have empirical backing, the backing that is obtained presupposes the physical possibilities of statements 5 and 6. In other words, it is not enough to propose a conceptual framework that would solve the problems of reduction and folk psychology if it is not obvious how one could adopt the conceptual framework proposed. The framework suggested as replacement for sensations does not prove that the adoption of statements 5 and 6 is possible; rather it requires the truth of those claims. Statements 5 and 6 need independent backing that shows that they are physically possible.

Obviously, what is needed in order for a conceptual framework to be endorsed could vary. For example, the truth of statements 5 and 6 can vary in accordance with what is meant by 'introspection.' Thus, if one wishes to say that it is just a matter of using a different word, like in: "You say mind, I say activation vector triplet," the issue becomes trivial. It cannot be only about the words, because the change in vocabulary would be just that. Something about the entities in question should be altered in addition to the names used. Change in conceptual framework should lead to actual change in experience. Alternatively, the change in locution is strikingly superfluous.

Alternatively, if conceptual change requires more than only name change, the issue becomes whether the conceptual framework that is proposed as the replacement for reporting sensations is such that it can be adopted. The

question of whether or not it can be adopted remains even if one assumes the identity between entities, such as brain states and visual sensations. In the chapter three, where plasticity was discussed, I claimed that although brain states and sensations might be one and the same, one could see that there could be difference in phenomenal character when one is introspecting a brain state as such as opposed to introspecting sensations. If such a difference exists, the proposed identification would not work, assuming Leibniz's law--the two entities would have distinct phenomenal properties. In that case, one would have to pick between the two entities.

In order to decide if the conceptual change from sensations to brain states results in changed experience, a determination should be made about the contribution of conceptual change to phenomenal character or experience more broadly. If one knows that something is true about a particular entity, it does not seem obvious that it must immediately contribute to the way that entity is experienced. In a hypothetical case where I learn of the identity between a particular mental state, let us say my experience of red, and a brain state, the added knowledge might not change my experience of that state. I might just keep on seeing red the same way I did before, while being able to cite that my experience of red is a brain states. Thus, it is not that I experience the state differently, I just know more about the state experienced.

In speaking of introspecting a state as a brain state, the change in parlance does not necessitate a change in experience. One could also learn to report brain states in the following way. Every time one experiences a particular

sensation, one takes the extra step of associating it with the corresponding brain state until the connection becomes automatic. The response would become automatic once the inferential step is no longer explicitly made. At that point the reconceptualization would be complete. Still, if the conceptual change has not affected experience, the scenario strikes me as a more elaborate change in nomenclature. In general, the issue of whether all conceptual change contributes to a change in perception seems difficult to determine. To engage in some intuition mongering, there are cases where added knowledge can result in changed experience.

For example, if I discover, after years of friendship, that my best female friend is actually a male, it seems that the discovery would significantly change the way I see my friend. The change is somehow striking and I would be more compelled to say that I now see my friend as a male where that would assume some change in experience. A large number of previously unrecorded behavior might be highlighted and now be seen as an expression of my friend being a male. A large appetite or a really low voice would now be seen not as particularities of my friend, but as an expression of maleness.

In an alternative scenario, imagine I find out that my friend won a contest for making the best sour cherry strudel in the greater Belgrade region. In addition, let us suppose that my friend is a good cook and that there is nothing really out of the ordinary about her cooking or entering cooking challenges. In that case, my knowledge that she has won that contest does not seem to be of the type that would alter my overall experience. I would know that my best friend

is the winner of that particular contest, but that knowledge would not make a difference to my experience.

I might even decide to do away with her name and start calling her “the sour cherry strudel contest winner,” and every time I think of her I might make an effort to suppress my tendency to recall her name and use the substitute description. Thus, I have reconceptualized from individuating my friend as Ivana to “the sour cherry strudel contest winner.” Despite the reconceptualization, it seems to me that all that has changed about my friend is the name I use to refer to her, but nothing about how I experience her has changed.

It is important then to determine which aspects of conceptual change contribute to changed experience. In the first example, one could argue, the perceptual change resulted from change in categories; my friend I thought was a female, but now I know is a male. But my male friend and my female friend Ivana are still one and the same person. Applying this to mental states, the change away from introspecting mental state to brain states requires a change in category, which should result in changed experience. However, if they are identical then there should be no difference in the phenomenal feels. If the change is tangential like in the second example, elimination would be just a change in names.

To conclude, the change from speaking of sensations to speaking of brain states could be construed similarly as just a changing of names. If that is the case, it does not merit being a point of contention. As it was stated earlier, it seems like a difficult issue to settle when it comes to deciding which one of

conceptual changes contributed to the character of the experience. Unbound plasticity can be construed as requiring only the change in name, or it could entail real perceptual change. For the first option, the reconceptualization does not seem motivated. If one opts for the second option, there are difficult issues concerning how to settle the issue if change in phenomenal character has occurred. In cases where reconceptualization affects perception, like introspecting brain states as such as opposed to introspecting sensations as such, problems arise with reduction. In cases where the change would not affect perception, the change would be once more just a change in names.

One way to resolve this problem is just to claim that the states that are reducing mental states are not such that they can be introspected directly. There is nothing it is like to be in a brain state as such, but there is something it is like to be in sensational state and the two are one and the same. For Churchland this could work only in so much as his argument proposes reduction without reconceptualization. In all other cases, where conceptual change would require introspection of states that cannot be accessed that way, it would limit eliminativism by limiting unbound plasticity.

To illustrate, let us assume that a framework individuates as an internal state among others the number of blood cells in a person's body. The adoption of this framework would then require the introspection of the count of white blood cells in such a way that there would be something it is like to experience that particular state, and that the experience of that state would be different than the side effects of having a change in the number of white cells such as dizziness or

fatigue. In that case, one could make something of the notion of experiencing the white blood cells count directly, because there would be a distinction between the experience of the “count” as such and the experience of the side effects of the same. And one could not say that the experience of the new internal state is just the automated response to the side effects of that state.

The proposed framework would require the direct individuation of the white blood cells count. If such an individuation was not possible, the framework would not be such that it could be adopted. To venture a guess, the count of white blood cells cannot be introspected directly, in the way described. A state of that type is not such that it could have a phenomenal property independently of its symptoms.¹¹² There is nothing it is like to have a particular white blood cell count, if direct introspection is required. Thus, the framework cannot be adopted.

In this way the original framework sets the limits for future frameworks because it restricts the pool of adoptable frameworks to only those that propose inner states that are introspectible. Similarly, the proposed framework of neuroscience is not such that it can be adopted if it requires the direct introspection of states that cannot be accessed that way. And it is only to venture a guess but statements 5 and 6 seem less like introspectible states and more like states of the body such as the white blood cell count.

Churchland, I think, should welcome the restrictions on our perception and introspection, since the only other alternative is that each new thing learned

¹¹² This is not to say that there aren't other ways of experiencing white blood cells. One could perceive them with the help of instruments, but the conceptual framework under review here proposes them as introspectible internal states.

about an entity could change its phenomenal properties. This would be an unwelcome result when it comes to the identification of entities, because no introspectible entity would have the same phenomenal properties as the entity reducing it. If introspecting a brain state entails an entirely different set of phenomenal properties than introspecting mental states, reduction would always be prevented.

One should recall that in order for eliminativism to work it must be accepted that commonsense psychology is a false theory, but that evaluation was comparative to the success of scientific theories. Those scientific theories were claimed to be better in most ways than folk psychology, especially when it came to the explanation of brain function. The high quality of neuroscience in the explanation of inner states was such only because it paid no heed to the categories of commonsense. In other words, it did not matter that neuroscience was not yet able to explain the psychological phenomena designated by folk psychology, or the phenomena that are commonly considered to be within the realm of psychology. Partly, this disregard for the categories of commonsense was justified, because there were no good arguments defending the primacy of commonsense, however part of the eliminativists' disregard for commonsense stems from the notion that the collapse between theory and observation is complete. This is why Churchland sometimes attempts to escape even the physical boundaries of our perceptual apparatus by suggesting that technological enhancements to our vision can enable us to perceive the particles that physics uses for the explanation of physical objects. Further still, we are sometimes

asked to think beyond the human experience.¹¹³ In this way, it is easy to see how the idea that there are no limitations in perception can lead to the acceptance of a view that sidesteps any observational basis.

To call on Sellars again, although one does begin science from the platform provided by the manifest image, the images that are constitutive of this base can ultimately be rejected. But, the eliminativist idea of how neuroscience should progress is different. It seems to begin outside the manifest image altogether. And that is an entirely different enterprise, which does not aim to evaluate commonsense and then reject it, but to ignore it. But, if one is set to ignore commonsense, then one has no grounds to evaluate it. Although, the argument that one could in principle reject the world of appearances that is presented to us in the manifest image shows a way for monumental shifts, it does not presuppose those shifts in order to elevate the quality of scientific theories.

Another aspect of the argument for the elimination of commonsense psychology, which was tackled in chapter three and also in chapter four, is the difficulty of drawing a distinction between false theories and radically false theories. In order to propose an argument that could solidify the complete disregard of commonsense, one would need to be able to show that the theory is radically false. The eliminativists do not succeed in doing that for reasons that I have exposed earlier. In addition, if it is agreed that the distinction between commonsense psychology and scientific psychology is not clear, or does not

¹¹³ Churchland, P.M. Scientific Realism and the Plasticity of Mind. Cambridge, U.K.:Cambridge University Press, 1979, pp 2-41.

exist, then it should countenanced that the boundaries of commonsense psychology are not steady. Further still, commonsense psychology changes because scientific aspects get added into the framework. To claim that a theory is radically false, one must be able to evaluate where commonsense ends and science begins.

It was argued that the shifty nature of common sense indicates that one need not pay that much attention to the categories of commonsense. I insist still that the categories of commonsense could be ignored, and that the current FP cannot impose limits on scientific psychology to the explanation of folk psychology. But arguing that one could ignore commonsense is not the same as claiming that it should be ignored, which I take to be Churchland's argument. The latter imperative can only be based on the argument that FP is radically false, which I aimed to show is not a claim that can be substantiated.

The conceivability of complete replacement of commonsense is tempting, if one blames it for the problems in philosophy of mind. However, the second chapter of this dissertation should have proven that such a replacement is not a requirement for a successful science of mental states. And if one takes literally the equalization of commonsense with all other theories it is clear that one could propose a theory that is not grounded in folk psychology. But, the attempt in this chapter was to present the possibility that there are parts of commonsense that are entrenched. The original framework can be favored because it makes the leap between conceptual and nonconceptual. But, the original framework does set some boundaries for observations and consequently on theories that

use it as a basis. One of those boundaries we said were not particular properties attributed to an object, but the property of being an object as such. Thus, the original framework sets the standard for all perceptual experiences in that way. The theoretical shifts affect the other properties that are attributed to objects. In that way even if one abandons the current observational frameworks, the framework that is the replacement would still have to feature objects. Even if the framework of middle sized objects is replaced all its successors would still be bound to individuating in terms of objects, and in the case of current physics, bound to individuating tiny particles.

If one wishes to join me in calling this original framework commonsense, then common sense fixes the boundaries of theories in a way that all observational frameworks must individuate objects. Seeing objects is commonsense because it is not replaceable. Commonsense property of mental states, as set by the original framework, is phenomenal character. Thus, all inner states are such that they have phenomenal properties. A theory proposed as a replacement of folk psychology would have to propose inner states that have phenomenal properties. Because of that and explanation of inner states would have to be reductive.

The original framework also fixes the limits for what can be considered an instance of individuation and consequently what can become a true observational statement. It was stated that reconceptualization would make sense only if the shift in concepts would result in changed experience. A future psychological framework would be limited to proposing states that are introspectible in a way

that assumes that there is a phenomenal property to be experienced and that that property is not the same as that of the states that is being replaced.

Finally, the limits that are proposed here as commonsense refer only to the adoptability of theories. I maintained throughout that what restricts adoptability is not truth but the physical possibilities of adoption of frameworks. Conceivably, there could be a schism between theories that are true and theories that can be adopted. In other words, all that was argued here does not limit physics, but limits the inclusion of theories into observational frameworks. The issues that are left over are connected to the evaluation of the notion of truth independent of which frameworks are adoptable. Those concerns are outside of the scope of this project and will be left for others to examine.

Bibliography:

- Armstrong, D.M. "The Nature of Mind" Inaugural lecture of the Challis professor of Philosophy at the University of Sidney reprinted in Borst, C.V. (Ed.) (1970)
- Baillergeon, R. "Object Permanence in 31/2 and 41/2-Months-Old Infants". Developmental Psychology, Vol. 23, No. 5, 1987: 655-664
- Balota, D.A. (1983). "Automatic Semantic Activation and Episodic Memory." Journal of Verbal Learning and Verbal Behavior 22:88-104.
- Bechtel, W. Connectionism and the Future of Folk Psychology in Christiansen, S. and Turner, D. (ed.),1993.
- Bermudez, Jose Luis "Arguing for Eliminativism" in Paul Churchland, ed. Brian L. Keeley, Cambridge University Press, 2006.
- Bernstein, R. "The Challenge of Scientific Materialism." Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971.
- Broad, C. D. The Mind and its Place in Nature. London: Routledge & Kegan, 1925.
- Carruthers, P. Language, Thought and Consciousness Cambridge: Cambridge University Press, 1996.
- Christiansen, S. and Turner, D.,ed. Folk Psychology and the Philosophy of Mind. London: Lawrence Erlbaum, 1993.

- Churchland, P.M. Scientific Realism and the Plasticity of Mind. Cambridge, U.K.:Cambridge University Press, 1979.
- Churchland, P.M. "Eliminative Materialism and the Propositional Attitudes," Journal of Philosophy, 1981, 78, 67-90.
- Churchland, P.M. A Neurocomputational Perspective: The Nature of Mind and the Structure of Science. MIT Press, 1989.
- Churchland, P.M. "Activation Vectors vs Propositional Attitudes: How the Brain represents Reality" in Philosophy and Phenomenological Research, 1992, 62, 199-204.
- Churchland, P.M. The Engine of Reason, The Seat of the Soul. Cambridge, Mass: Bradford books, 1995.
- Churchland, P.M. (1998) "Replies" in Philosophy and Phenomenological Research Vol. LVIII No.4, (December 1998).
- Churchland, Paul "Chimerical colors: some phenomenological predictions from cognitive neuroscience," Philosophical psychology, Volume: Vol. 18, Oct 2005.
- Churchland, P.M. and Churchland. P.S. On the Contrary. Cambridge, Mass: MIT press, 1998.
- Churchland, Patricia S. Neurophilosophy. Cambridge, Mass: MIT press, 1986.
- Cornaman, J. "On the Elimination of 'Sensations' and Sensations." Review of Metaphysics XXII, 1968a.
- Cornman, J. "Mental Terms, Theoretical Terms, and Materialism. " Philosophy of Science Vol. 35, 1968b.

- Dagenbach, D., T.H. Carr, and A. Wihelmsen, (1989). Task-induced "Strategies and Near-threshold Priming: Conscious Influence on Unconscious Perception." Journal of Memory and Language 28:412-443.
- Dahlbom, B, ed. Dennett and his Critics. Cambridge, Mass: Basil Blackwell, 1993.
- Dennett, D. "Quining Qualia." Consciousness in Contemporary Science. Edited by Marcel, A and Bisiach, E. New York: Oxford University Press.
- Dennett, Daniel. "Two Contrasts: Folk Craft Versus Folk Science, and Belief Versus Opinion." The Future of Folk Psychology. Edited by Greenwood, J. New York: Cambridge University Press, 1991.
- Dennett, Daniel. Brainstorms. Cambridge, Mass.: Bradford Books, 1978.
- Dennett, Daniel. The Intentional Stance. Cambridge, Mass.: Bradford Books, 1987.
- Dennett, Daniel. "Real Patterns." Journal of Philosophy, LXXXVIII, (January 1991a), 27-51.
- Dennett, Daniel. Consciousness Explained. Boston: Little, Brown, 1991b.
- Fantz, L. Robert "The Origin of Form Perception" Scientific American, Vol.204, 1961:36-42.
- Feyerabend, Paul. "Explanation Reduction and Empiricism." Minnesota studies in the Philosophy of Science. Edited by Feigl and Maxwell, Vol. 3. Minneapolis: University of Minnesota Press, 1962.

- Feyerabend, Paul. "Mental Events and the Brain." Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971.
- Feyerabend, Paul. "Materialism and the Mind Body/Problem." The Review of Metaphysics, XVII, 1963b.
- Flavell, J.H. Cognitive Development, third edition, Englewood Cliffs, NJ: Prentice Hall, 1993, p. 33-34.
- Fodor, Jerry. The Language of Thought. Cambridge, Mass.: Harvard University Press, 1975.
- Fodor, Jerry. "Observation Reconsidered." Philosophy of Science, 51, 1984:23-43.
- Fodor, Jerry. Psychosemantics. Cambridge, Mass.: Bradford books, 1987.
- Fodor, Jerry. The Elm and the Expert. Cambridge, Mass.: Bradford books, 1994.
- Fodor, Jerry. "A Theory of the Child's Theory of Mind". Cognition 44, 1992: 283-96.
- Fodor, J. and Pylyshyn, Z. "Connectionism and Cognitive Architecture: A Critical Analysis." Cognition, 28, 1984: 3-71.
- Fowler, C.A. et al. (1981). "Lexical Access With and Without Awareness." Journal of Experimental Psychology 110:341:362.
- Greenwood, J. The Future of Folk Psychology. Cambridge: Cambridge University Press, 1991.
- Groeger, J.A. (1984). "Evidence of Unconscious Semantic Processing from a Forced-error Situation." British Journal of Psychology 75:305-314.

- Groeger, J.A. (1988). "Qualitatively Different Effects of Undetected and Unidentified Auditory Primes." Quarterly Journal of Experimental Psychology 40A:323-339.
- Khun, Thomas. The Structure of Scientific Revolution. Chicago: University of Chicago Press, 1970.
- Kolb, B. and Wishaw, I.Q. The Fundamentals of Human Neuropsychology New York: W.H. Freeman and Company, p. 254.
- Laudan, L. Progress and it's Problems. California: University of California Press, 1977.
- Laudan, L. "A Confutation of Convergent Realism." Philosophy of Science, 48, 1981, 19-49.
- Lahav, R. "The Amazing Predictive Power of Folk Psychology." Australasian Journal of Philosophy, 70, 1992: 99-105.
- Lewis, D. "Psychological and Theoretical Identifications." Australasian Journal of Philosophy, 50 (3), 1972: 207-15.
- Lycan, W, and Pappas, G. "What is Eliminative Materialism." Australasian Journal of Philosophy, Vol. 50(2), 1972 .
- Marcel, Anthony J. (1983). "Conscious and Unconscious Perception:Experiments on Visual Masking and Word Recognition," Cognitive Psychology 15: 197-237.
- McCauley, R. N. "Intertheoretic Relations and the Future of Psychology in Philosophy of Science." Philosophy of Science vol. 53, 1986: 179-99.

- McCauley, C.C. et al (1980). "Early Extraction of Meaning from Pictures and its Relation to Conscious Identification." Journal of Experimental Psychology: Human Perceptual Performance 23:168-180.
- McCauley, R. N. "The Role of Cognitive Explanations in Psychology." Behavior and Philosophy, vol 15,1987: 27-40.
- McCauley, R. N. "Epistemology in an Age of Cognitive Science." Philosophical Psychology 1, 1988: 143-152.
- McCauley, R. ed. The Churchlands and their Critics. Oxford, UK: Basil Blackwell, 1996.
- Merikle, P. & Daneman, M. (2000). "Conscious vs. Unconscious Perception." In (M. Gazzaniga, ed) The New Cognitive Neurosciences: 2nd Edition, MIT Press.
- Nagel, Ernst. The Structure of Science. New York: Harcourt, Brace, and World, 1961.
- Nagel, Thomas, "What Is It Like to Be a Bat?" The Philosophical Review, Vol.83, No.4, October, 1974:435-450.
- Nisbett, R. & Wilson, T. "Telling More than We Know: Verbal Reports on Mental Processes." Psychological Review, 84, 1977: 231-59.
- Place, U.T. "Is Consciousness a Brain Process?" The British Journal of Psychology, XLVII (1956).
- Popper, K and Eccles, J. The Self and Its Brain, New York: Routledge, 1977, chapter 3, pp. 51-98.

- Putnam, Hilary. Mind, Language, and Reality. Cambridge, MA: Cambridge University Press, 1975.
- Putnam, Hilary. The Many Faces of Realism LaSalle, Illinois: Open Court, 1987.
- Putnam, Hilary. Representation and Reality. Cambridge, Mass: Bradford Books, 1988.
- Putnam, Hilary. "Truth, Activation Vectors, and Possession Conditions for Concepts." Philosophy and Phenomenological Research 62, 1992: 211-227.
- Quine, W. V. O. "On Mental Entities." The Ways of Paradox. Random House, 1966.
- Quine, W.V.O. "Two Dogmas of Empiricism" From A Logical Point of View. New York: Harper and Row, 1961.
- Quine, W.V.O. Word and Object. Cambridge, MA: MIT Press, 1960.
- Quine, W.V.O. "Epistemology Naturalized." Ontological Relativity and Other Essays. New York: Columbia University Press, 1969.
- Ramsey, W. "Where does the Self-Refutation Objection take Us?" Inquiry, 1990: 453-465
- Rorty, Richard. "Mind-body Identity, Privacy and Categories." Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971.

- Rorty, Richard (1970) "In Defense of Eliminative Materialism" Materialism and the Mind-body Problem. Edited by Rosenthal David. Englewood Cliffs, N.J: Prentice-Hall, 1971.
- Rorty, Richard. Philosophy and the Mirror of Nature. Princeton University Press, 1979.
- Rosenthal, David. Materialism and the Mind-body Problem. Englewood Cliffs, N.J. Prentice-Hall, 1971.
- Rosenthal, David M., "Mentality and Neutrality" *The Journal of Philosophy*, Vol. 73, No.13, (July, 1976): 386-415.
- Rosenthal, David. "Philosophy and its History." The Institution of Philosophy. Edited by Avner Cohen and Marcelo Dascal, Peru, Illinois: Open Court.
- Rosenthal, David M., "Keeping Matter in Mind" Midwest Studies in Philosophy, V (1980), pp. 295-322.
- Rosenthal David. The Nature of Mind. New York: Oxford University Press, 1991.
- Savitt, S. "Rorty's Disappearance Theory." Philosophical Studies, 28, 1974:433-36.
- Searle John R., The Rediscovery of the Mind, Cambridge, Massachusetts: MIT Press.
- Schaffner, Keneth. "Approaches to Reduction." Philosophy of Science, 34, 1967: 137-47.
- Sellars Wilfrid. "Empiricism and the Philosophy of Mind." Science, Perception and Reality. Atascadero, California: Ridgeview Publishing, 1991.

- Sellars Wilfrid. "Philosophy and The Scientific Image of Man" Science, Perception and Reality. Atascadero, California: Ridgeview Publishing, 1991.
- Sellars Wilfrid. "Scientific Realism or Irenic Instrumentalism." Philosophical : Metaphysics and Epistemology. Atascadero, California: Ridgeview Publishing, 1977.
- Spelke, E. S. Perceptual knowledge of objects in infancy. In J. Mehler, E.C.F. Wiker & M. Garrett (Eds.), *Perspective on mental representation*. Hillsade, NJ: Erlbaum, 1982.
- Spelke, E. S. Perception of unity, persistence and identity: Thoughts on infants conceptions of objects. In J Mehler and R. Fox (eds.), *Neonate Cognition*, Hillsade, NJ: Erlbaum, 1985.
- Stich, Stephen. From Folk Psychology to Cognitive Science: the Case Against Belief. Cambridge, Mass.: Bradford books, 1983.
- Stich, Stephen. Deconstructing the Mind. Oxford UK: Oxford University Press, 1996.
- Stich, S. & Ravenscroft, I. "What is Folk Psychology?" Cognition 50, 1994: 447-68.
- Wellman, H. The Child's Theory of Mind. Cambridge, MA: MIT Press, 1990.