Experientialist Philosophy

Philosophy In The Age
Of Cognitive Science

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Why Rethink Philosophy?

Living a human life is a philosophical endeavor. Most of our thoughts, decisions, and acts are based on philosophical assumptions so numerous we couldn't possibly list them all. We go around with a host of presuppositions and prejudices about what exists, what counts as knowledge, how minds work, how we should act, what kind of government is best, where religion and/or spirituality fit in our lives, what art is and where and whether it matters, when to believe scientific claims, and on and on. Such questions, which arise out of our daily concerns, form the subject matter of philosophy: metaphysics, epistemology, philosophy of mind, ethics, politics, philosophy of religion, aesthetics, philosophy of science, etc.

Whether we are aware of it or not, we all have implicit commitments on most of these matters; that is, we have what are called "folk theories." These folk theories are typically unconscious and we use them automatically and without effort to make sense of everyday life. Philosophical theories are elaborations of our everyday folk theories. The closer philosophical theories are to folk theories, the more "intuitive" they seem. The philosopher's traditional job has been to analyze the concepts in our folk theories, sharpen those concepts, and weave them together into consistent systems of thought that cover

the full gamut of fundamental questions.

Our culture is suffused with philosophy. Virtually all of the public discourse on our most fundamental concerns makes implicit use of philosophical concepts, assumptions, and forms of discourse. Because of this, our social institutions have been defined through philosophy. If we are to understand the hidden assumptions behind areas like law, politics, science, religion, and psychology, as well as all academic disciplines, we need to know how philosophy has affected them, and we need to understand what the conceptual structure of philosophy itself is.

We believe that there is a great deal that is new to be said about these issues, despite the fact that they have been discussed for more than two thousand years. What is new is cognitive science -- the empirical study of the mind. Discoveries in cognitive science lead to fundamentally new understandings of age-old questions, and allow us to ask new questions as well.

The discoveries that we will be focussing on are those that indicate that the mind is both fundamentally embodied and imaginative in character, rather than a form of disembodied pure rationality. These discoveries are especially important for philosophical issues because most philosophers have addressed the crucial questions of human existence with a view of reason that is incompatible with these discoveries. If these discoveries are taken seriously, then philosophy has got to be rethought from the bottom up. This book sets out an overview of what such a rethinking would involve.

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Some Philosophically Important Discoveries
In Cognitive Science

The discoveries that we have found to require a new conception of philosophy are:

Basic-level concepts

One way in which the conceptual system gets a bodily grounding is through a set of concepts which are defined by certain optimal level at which our bodies interact with the world. These concepts are cognitively basic in a number of ways: they are defined in terms of (i) motor programs for interacting with objects, (ii) gestalt perception, (iii) the capacity to form mental images. and (iv) memory structure. Basic-level concepts are learned earlier than either higher level ("superordinate") concepts or lower-level ("subordinate) concepts. (For details, see Lakoff (1989, pp.   ) and Mervis and Rosch ( ).)

Among the philosophically important things about basic-level concepts are:

(i) They cannot be characterized either purely objectively or subjectively, but can only be characterized interactively: That is, they are neither objective features of the world, nor purely subjective constructions of our minds.

(ii) They require reference to the body (motor programs, gestalt perception, etc.) for their characterization.

(iii) Classical philosophical categorization in terms of necessary and sufficient conditions cannot account for the existence of this phenomenon.

(iv) Since our bodies are the same across cultures, conceptual systems with basic-level concepts exist around the world. The existence of concepts of this type cannot be purely historically contingent, since they have a biological basis.

(v) They provide a structure to our basic experience, and hence experience itself is not just an unstructured morass.

—Image-schemas, and their neural foundations

Systems of spatial relations have been found to differ considerably among the languages of the world. However, they all appear to use a single set of "primitive" image-schemas, that is, schematic mental images. Examples of image-schemas include containers, paths, links, force dynamics, contact, balance, center-periphery, orientations (above-below;

front-back), etc. All of these are recurring structures of our bodily interactions in the world, both perceptual and motor. At present, they are are being modelled in terms of known types of neural structures in the brain (e.g., topographic maps, center-surround architectures, orientation tuning cells, etc.). Such modelling indicates that image-schematic concepts can be characterized neurally, and that their peculiar properties arise from the neural structures peculiar to our brains.

Image-schemas define spatial inference patterns. Conceptual metaphorical mappings appear to preserve image-schematic structure, and in so doing, they map spatial inference patterns onto abstract inference patterns. It appears that abstract reason thus arises from the interplay of metaphors and image-schemas.

Since image-schemas are not in the objective world, but arise from properties of our brains, they do not have a purely objective character. But since they determined in part by our biology and by the world as we experience it, they are not purely subjective either.

One of the most philosophically important consequences of what we have discovered about image-schemas is that they both characterize basic inference patterns and are characterized by the nature of our bodies and brains. The idea that inference patterns can have a bodily basis is utterly inconsistent with both objectivist views of transcendental pure reason as well as with deconstructivist views of reason as the arbitrary play of an unfettered imagination. Since the nature of reason is at the very core of all philosophy, this suggests that a radical rethinking of the most fundamental nature is required.

—Types of prototype structure in categories

Wittgenstein pointed out that certain concepts are structured in terms of family resemblances, have best examples, and are extendable from central to peripheral cases. Empirical research has verified these observations and gone far beyond them to spell out the precise details of category structure. There are many types of best examples, or "prototypes," each with a different cognitive function: typical cases, ideal cases, social stereotypes, well-known exemplars, end-points on scales, and central members of categories to which peripheral members are systematically related.

Again the familiar classical view of categorization in terms of necessary and sufficient conditions not only cannot account for any of this structure, but is incompatible with much of it. These aspects of category structure are obviously not objective features of the external world. Nor are they purely subjective projections, since they arise from the way we function

with objects in the world. On the basis of limited experience with members of a category, we must project imaginatively to perform a variety of rational operations involving the category.

Prototypes are imaginative structures internal to categories, which allow us to perform such a variety of rational functions -- reasoning by default and reasoning concerning essences, ideal types, salient examples, and endpoints on scales. They also permit the extension of categories from central to noncentral cases.

Such prototype phenomena therefore require a revision of the traditional philosophical notion of category as defined by a list of necessary and sufficient conditions. Prototype phenomena thus go beyond Wittgenstein's notion of family resemblances, as well beyond such notions as open-textured concepts and fuzzy categories, none of which have the internal structure to perform the variety of functions that prototypes perform.

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Conceptual metaphor

There is a vast system of thousands of mappings across conceptual domains that permit us to understand more abstract concepts in terms of more concerete concepts. These mappings preserve image-schemas, and therefore allow us to use the logic of physical space as the basis for abstract inference. They also permit abstrct inference by mapping knowledge about concrete domains onto abstract domains.

Most traditional philosophy saw itself as providing a set of basic, literal (nonmetaphorical) concepts for systematically describing the "objectively correct" nature of reality. The particulars of this extensive system of conceptual metaphor undermine the possibility of such a literalist program, by showing that our most fundamental concepts (such as causation, purpose, reason, will, duties and rights) are typically defined by multiple metaphors that are sometimes inconsistent with one another.

Philosophies themselves turn out to be extensive systems of metaphorical concepts largely chosen from our everyday metaphorical concepts and pieced together with everyday folk theories, so as to be consistent. The use of everyday metaphors and folk theories is what gives philosophies whatever intuitive character they have. Philosophies turn out, therefore, not to be products of "pure reason," but rather refinements of metaphors and folk theories.

The extensive details that have been discovered so far about systems of conceptual metaphors are not only inconsistent with objectivist philosophies, but are just as inconsistent with subjectivist views, such as

deconstruction. The reason is that conceptual metaphors are not arbitrary and merely historically contingent. They are grounded in our bodies, and in our everyday interactions in the physical and social world, and consequently many metaphors are either universal or widespread across cultures that are not historically related. This contradicts the deconstructionist view of pure arbitrariness and strict historical contingency.

—Frame semantics and folk theories

Recent empirical studies in lexical semantics hava shown that words do not map directly onto states of affairs in the world, but rather are defined by their roles in idealized models of situations, which are holistic structures called "frames." Words get their meanings by the roles that they play in frames. Semantic fields of words are a group of words defined with respect to different roles in a single frame (e.g., "buy," "sell," "goods," "price," are defined relative to a frame characterizing a commerical event in general). A single situation in the world can be framed in different, and often mutually contradictory ways. When frames have structure that extends over time, they are called "scenarios" or "scripts." And when they characterize how something works in the world, they are called "folk theories." Frames are imaginative not only in that they are idealized models but also because they are defined partly in terms of metaphor.

Much of traditional philosophy assumes an objectivist semantics, in which words words get their meaning only by designating things that exist objectively in the world. Frame semantics, and the study of semantic fields that supports it, directly contradicts this objectivist view of the nature of meaning, and thus presents a challenge to all philosophical views based on it.

This body of results, like most other bodies of results in cognitive science, is controversial. But if they are even roughly correct, they have striking implications for the answers that we give to the most fundamental philosophical questions -- and even for the nature of philosophical inquiry itself.

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Experience

What is most striking to us about these empirical results about the nature of conceptual structure and human reason is the role played by what we will call "experience" in the broadest sense: experience due to the innate structure of our bodies and brains; the experience of physical interactions in our environment; interpersonal experience; cultural experience; and so on.

Consider the following question:

What kinds of concepts are there and how do they differ from one another?

This is a basic question that must be answered adequately by anyone with an interest in what concepts are. This should include philosophers as well as cognitive scientists.

In classical philosophical theories the nature of particular concepts is determined wholly by what the concepts are about. The content of a concept is a list of the properties (the necessary and sufficient conditions) that an entity in the world must have to fall under that concept. Take the concept of a chair. It is about real chairs. On the classical view, the structure of the concept of a chair is determined by the real features of real chairs: The structure of the concept is a list of those features.

Because this view of concepts focuses only on what the concepts are about, it cannot answer the fundamental question of what kinds of concepts there are and how they differ from one another. The reason that the above discoveries are so striking is that they show that many of the properties of concepts are not a function of what the concepts are about, but rather of "experience" in our sense.

Let us return to the example of the concept of a chair. It is what is called a basic-level concept. Basic-level concepts have striking properties: they can be represented by mental images; membership can be determined by gestalt perception; we have motor programs for interacting with what they designate; they are the most information-rich of categories; and they are learned first, expressed by shorter words, enter a language earlier, etc. None of these properties can be found out merely by asking what the concept is about. One must know more, namely, one must know about the nature of our experience with what the concept designates.

Take, for example, a fundamental property of basic-level categories. They are the most inclusive categories where a mental image can stand for the entire catgeory. Thus, you can get a mental image of a chair, but you cannot

get a mental image of a general piece of furniture (not a chair, bed or table, but something neutral among them). Furniture is superordinate: it is more inclusive than the basic-level category chair. The fact that we can form mental images for categories of one level of generalization but not another does not follow purely from properties of chairs or of other objects in the world. It is a consequence of an innate capacity that we have for forming mental images on the basis of our interactions with objects.

To recapitulate, any account of concepts must answer the question posed above, namely,

What kinds of concepts are there and how do they differ from one another?

Basic-level concepts are a kind of concept. They have different properties from superordinate categories. The only way to characterize the difference between these kinds of concepts is not in terms of what they are about but in terms of "experience" in our sense.

This is not an isolated case. It is characteristic of all the kinds of conceptual structures we listed above. The properties of image-schemas, prototypes, conceptual metaphors, and frames require for their characterization an account of lived experience in the extremely broad sense that includes everything from innate capacities for interaction in our physical environment to our interpersonal and cultural experience.

"Experience" here is obviously not what classical empiricists meant by the term, namely, passively received sense data. Most of what we call "experience" is the product of innate structure, active perception, and interactive activity -- all of which were excluded by classical empiricists. What we are trying to capture by the term is the fullest sense of lived experience. Though we are basing our philosophical views on "empirical" evidence, we are very far from anything remotely resembling classical empiricism.

The requirement of answering the question of what kinds of concepts there are and how they differ places an empirical constraint on any philosophical theory. It is an extremely strong constraint. It not only rules out classical empiricism and all mirror-of-nature views of conceptual structure, but it also rules out idealist views -- views that attribute all conceptual structure to the organizing activity of the mind alone. This includes those postmodernist philosophies which regard concepts being in no way constrained by the nature of our experience.

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Experientialist Philosophy

Every area of philosophy is affected by assumptions about the nature of concepts. The empirical discoveries cited above give us a new view of what concepts are -- what kinds there are and what properties they have. What is new about this view of concepts is the role it gives to our bodily, interpersonal, and cultural experience as well as to certain key imaginative capacities -- the capacities to metaphorize, to frame situations, and to form prototypes.

The only adequate way to approach philosophical problems is therefore through the only empirically adequate way to do conceptual analysis, namely, by focussing on experience in this rich sense and on these imaginative capacities. What results is an experientialist philosophy.

Experientialist philosophy is about making sense of experience. It is neither about the search for absolute objective truth nor about deconstructing common beliefs to reveal the impossibility of absolute truth. Both of these opposing conceptions of philosophy must be rejected on empirical grounds, since neither can give an empirically adequate account of the nature of concepts. The empirical discoveries in cognitive science that we listed above undermine both the conception of philososphy as providing absolute truth and the opposite view that philosophy is dead because it can discover no absolute truth.

Philosophy is anything but dead. Philosophy is not about absolute truth; nor is it about debunking. It is about experience. Our lived experience is real and is the only access we have to our physical, social and cultural environment. And because our experience is structured -- by the structure of our bodies, brains, and interactions -- the structured aspect of our experience can be studied in detail by empirical methods. Cognitive science provides methodologies from various disciplines that allow us to discover a great deal about the nature of our lived experience, indeed, to discover enough to provide new, empirically-based insights into basic philosophical questions -- questions about self-identity, morality, meaning, etc.

The most fundamental insight of experientialism is a different view of what it is to be human. Man is fundamentally an imaginative animal. While it is true that reason separates us from other species, empirical research shows that human reason has both an animalistic and imaginative character: animalistic in that it is grounded in our bodily, animal nature; and imaginative in that it makes use of prototyping, schematizing, conceptualizing via metaphor, and the multiple framing of situations.

Not only is our understanding of humanness changed, but even more strikingly, our understanding of the term "metaphysics" changes drastically. Metaphysics is no longer absolute truth about the nature of being, nor is it an arbitrary imposition upon an infinitely malleable reality. It is rather a matter of the ontolgy we acsribe to our experience using our normal cognitive mechanisms. Part of this ontology is nonmetaphoric -- the part that arises from basic-level categories and image-schematic spatial relations. But much of it *is* metaphoric. Metaphor allows us to project the ontology of bodily and interpersonal experience onto abstract domains to form the ontology of abstract concepts. As we shall see, our most fundamental abstract concepts -- states, properties, causes, purposes, events, and actions -- are metaphorically constructed, as are fundamental ethical and political concepts like rights and duties. These are the concepts that define for us what there is -- our ontology -- what counts as an object, a category, an event, a purpose. Therefore most of our actual metaphysics is metaphorical in character. And if we want to understand our commitments as to what exists, we must know our systems of metaphorical thought in intimate detail.

Where does this matter? Let us begin with self-identity. As imaginative animals, we use our conceptual resources to make sense of our world and our experience. Through culture, this is done collectively. Our cultures provide us with ready-made imaginative resources -- conventional categories, prototypes, framings, and metaphors -- that permit us to place ourselves in our physical social and interpersonal environments -- in short, to define ourselves. The possibilities for self-delinition vary widely throughout the world, but they are not arbitrary or mere matters of historical accident. The reason is that our imaginative resources are constrained in very significant ways by our bodies and brains, and by our physical and interpersonal experience.

Concepts of self-definition are matters for empirical study. Actual studies are extremely fragmentary at present, but they are sufficient to show that we do not appear to have any single.unified concept of the self, but rather multi-dimensional and multi-faceted concepts that cohere only in part. As we shall see below, there are multiple conceptualizations of the internal self, the social self, the historical self, the psychoanalytic self, etc. Some of these are provided by a cultural inventory and some are constructured person-by-person on the basis of experience, e.g., early childhood experience. But the very nature of our conceptual systems appears to ever make it possible to have a single totally-unified concept of the self. And if there is a single thing that we 'really' are, we could never conceptualize it using the kinds of conceptual systems we have.

Questions of self-definition arise because we are confronted with conflicting and typically unconscious self-definitions that we use daily in

everything from making plans to making moral judgements to defining relationships with others. Because we are imaginative animals, we cannot escape the multiplicity of self-definitions and the problems that they pose for us. What we can do, positively, is identify the ones we have and see how they are related, what they hide and highlight about us, what difficulties they create, and what possibilities there are for change. Moreover, it is important to realize that any attempt to reduce us to any single self-definition is bound to fail, and to be unfaithful to our real complexities.

The kind of imaginative animals we are matters not just for questions of self-identity, but also for all of the areas of philosophical inquiry, including ethics, politics, art, religion, etc. Consider ethics.

The imaginative constructs of our conceptual systems enter into ethics at two levels. First, there is the level at which we understand situations in terms of framings, metaphors, prototypes, etc. Most situations in which ethical questions arise are capable of being framed in more than one way, often via alternative metaphors. Second, the very ethical concepts we use, such as justice, rights, duties, etc., are conceptualized metaphorically in more than one way. And conceptualizations at both levels are typically unconscious. An ethical choice is therefore not merely a choice among actions; it is a choice among conceptualizations at two levels plus a choice among actions. A very substantial proportion of the ethical issues in any given ethical choice, therefore, has to do with what is highlighted and hidden by the metaphors and frames that we use to define both situations and basic moral concepts.

A difficult ethical choice, therefore, is almost never a logical application of general, universal moral laws to a concrete situation. Difficult ethical decisions involve nitty-gritty choices among ways of conceptualizing situations and moral notions. This is not to deny the existence of moral principles. It is to observe that following a moral principle is an imaginative act. The real work of moral deliberation is a work of imagination -- conceptualizing the notions in the principle (like rights and duties) and conceptualizing the situation at hand, often through metaphor. What we are pointing to are the two steps of conceptualization, which are always necessary and typically unconscious. Whatever moral principles we have are usually so vague, abstract, and general that they must be made meaningful in these two ways if they are to be applied to concrete situations.

This is an empirical observation about the nature of moral reasoning. What we discover by studying our conceptual system and how it is applied in moral deliberation is that the two best known approaches to philosophical ethics -- moral absolutism and extreme moral relativism -- are both wrong.

Extreme moral relativism is wrong because our capacities to conceptualize situations and moral notions is not unconstrained, not the result of mere

historical contingency. While there is a broad range of possibilities, but they are constrained by many things that all people share: bodies and brains, basic physical functioning, patterns of interpersonal interaction, and common imaginative resources. In short, extreme moral relativism fails because our conceptual systems are grounded in common human experience.

Moral absolutism is wrong as well. It presupposes that there is (1) always a single correct way to conceptualize each situation; (2) a single correct way to conceptualize all moral notions; (3) universally valid moral laws that cover all situations; and (4) these are unique products of a universal human reason. The body of results given above contradict these claims. Conceptual systems simply do not work this way. Moral absolutism fails because reason is fundamentally imaginative.

Thus, the fact that we are imaginative animals requires a new ethical philosophy -- one that is neither fundamentalist nor nihilist. Experientialism provides such a philosophy. Its positive contributions lie in the realm of nitty-gritty moral deliberation, where it can provide insights into the details of how we conceptualize situations and moral notions, and how we use our imagination to flesh out moral principles.

What applies to ethics applies to politics in spades. Political understanding and political decision making make use of the same imaginative conceptual mechanisms that are general features of our conceptual systems. Virtually all of the metaphors and folk theories that underlie our moral tradition are carried directly over into political theory -- conceptions of autonomy, rights, duties, the social contract, law, well-being, harm, and even rationality. As in ethics, political discourse contains multiple metaphorical understandings of each of these.

Moreover, in politics, an extremely important cognitive phenomenon is at work: contested concepts. A given ideology (or political philosophy) is a collection of metaphors and folk theories that are taken as true. Different ideologies give rise to different conceptualizations of fundamental notions, like democracy or freedom or justice. These different conceptualizations are neither arbitrary, nor infinitely flexible. Instead, they flow from ideologies, which are seen as making sense because they use the metaphors and folk theories of our culture.

Much of the confusion in political discourse arises from a failure to recognize all the detailed ways in which contestable notions like democracy or freedom vary with ideology, and from a failure to precisely characterize the main ideologies active in our political culture. Cognitive science has provided us tools to do this job, that is, to show the variety of conceptualizations of, say, democracy and freedom, and how they vary with which metaphors and folk theories are taken to be true.

The point is that there is no such thing as the single objectively "correct" definition for these concepts, as many political theories suppose. But neither is it the case that these concepts can mean anything at all, since they are constrained by existing ideologies, that is, by metaphors and folk theories that have arisen through the collective experience of a culture.

The positive contribution of such an experientialist analysis is thus neither to debunk such notions as illusory ideals, nor to find the right answer, but rather to show precisely what is assumed, entailed, highlighted, and hidden by each version of a contested concept, and precisely how each version is tied to various ideologies. This matters because political ideologies and the concepts of democracy and freedom that flow from them define our realities, are the basis for policy decisions, and define how the media will report political events and what political discourse will be considered responsible.

It is a goal of experientialist philosophy to bring all these considerations into public political discourse; that is, to create forms of public political discourse that will allow us to publically discuss how metaphors and folk theories enter into political decision making, and what they hide.

Just as experientialism provides new views of humanness, metaphysics, self-identity, ethics, and politics, we will see below that it also sets forth different perspectives on art, religion, science, and language. All of these are cases where our views on philosophical issues are changed substantially on the basis of empirical findings about the embodied and imaginative character of our conceptual system.

One might think that philosophy would embrace new empirical results about human concepts and human reason that have important implications for traditional philosophical issues. But the opposite seems to be the case. Philosophy rather has tended to define itself in such a way that such empirical results are regarded as irrelevant. Let us consider why.

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Philosophy's Traditional Self-Definition

Western Philosophy was born in Ancient Greece out of a response to myths that sought to explain the mysteries of nature in terms of the often capricious acts of the gods. Greek philosophy came into being with the hypothesis that human reason might be able to gain insight into the workings of nature, discern an underlying order to nature, and thus gain some measure of control over external events. Philosophy thus assumed a distinction between Reason and all the workings of myth—metaphor, image, symbol, and narrative. Reason enabled us to gain an objective knowledge that was unavailable through mythic modes of thought. Myths, metaphors, images, and narratives were seen as obscuring the objective truth.

Now that we know that Reason normally uses metaphors, images, and narratives, we can see that Western philosophy—contrary to its claims—was built on a collection of folk theories and metaphors. A major folk theory was that every entity has an "essence"—that which makes it what it is (rather than some other kind of thing) and that determines how it will act. If you could comprehend something's essence, you could determine how it would behave. Since Reason could grasp the real essences of things, our thoughts and words were assumed to be capable of mirroring nature.

Reason itself was taken to be the essence of human beings, that which separated people from animals. Because Reason was the essence of humanness, it had to be present in all human beings. Hence the doctrine of universality of Reason.

This folk theory depended on a cluster of common metaphors, that Ideas are Objects, the faculty of Reason is a Person, Understanding is Grasping, and Knowing is Seeing Clearly. Reason's highest capacity was *theoria*, the ability to see the essences of things. And since Reason could look at itself, it could accurately determine its own nature.

Thus, Aristotle looked at rational arguments to try to discern the essence of reason itself. He saw that rational arguments could have different content, but the same form. Form, he maintained, was the essence of Reason, that which could remain constant across different instances of reasoning. Logic, the study of the form of rational arguments, has become an essential subject matter for philosophy, because it is taken to be the study of the essence of Reason. Logic was not seen as an *empirical* subject matter but as a case where Reason could have insight into its own nature. In the philosophical tradition as it developed, it was assumed that no empirical evidence about the nature of Reason could be relevant, for two reasons: first, since Reason could have insight

into its own nature, no empirical evidence was needed; second, empirical evidence, being content, was thought to have no bearing on form.

The result of this long-standing metaphorical folk theory was that philosophy came to regard itself as having privileged, direct access to the nature of Reason. Hence, philosophers came to see themselves as the ultimate arbiters of rational inquiry, those most capable of judging what is and is not rational in all forms of rational inquiry, whether philosophical or empirical.

There is another extremely important consequence of this folk theory: Since Reason can directly perceive its own essence, it follows that Reason can always be made an object of consciousness. That is, Reason must either be conscious, or be accessible to consciousness; it cannot have mechanisms that are inaccessible to consciousness. This fits the metaphor that Knowing is Seeing Clearly and the assumption that Reason can reflect on its own nature and have correct insight into it. If Reason, or any essential aspect of it, were unconscious, then one could not "see" it -its workings would be "hidden from view".

These two consequences of the folk theory of Reason create a "blind spot" for any philosophy that sees itself as the ultimate guardian of Reason. Such a philosophy will systematically overlook any empirical results about the nature of Reason and cognition that are inconsistent with its own views. Consider cognitive science, which empirically studies the nature of human reason. What can philosophy as arbiter say about such an endeavor?

First, since philosophy so defined takes itself as the ultimate authority on all rational inquiry, it can presume to evaluate, criticize, and judge cognitive science. Second, it would require that cognitive science come up with a philosophically approved notion of Reason, namely, that Reason is a matter of form not content, and that it is universal: in short, that Reason is logic. Third, it would limit cognitive science to the study of the architecture of cognition—how thought is processed and how it is instantiated in the brain.

The arrogance of philosophy-as-arbiter is its claim that it has sole right to the determination of what Reason is and what it can and cannot do. Its vanity is its assumption that it alone constitutes the highest activity of reason. Its frailty is its belief that somehow Reason can be transparent to itself—that philosophical training alone can tell us all that there is to know about reason and the nature of concepts.

Philosophy over the ages has repeatedly tried to carve out for itself an unencroachable place where it cannot be challenged by science. It has sought a transcendental vantage point where no empirical inquiry can trespass and from which it can criticize all other forms of rational inquiry.

Because of this, philosophy, in its role as arbiter, is blind to all empirical results from the cognitive sciences that are inconsistent with its views on reason and that challenge its position as arbiter of the entire intellectual world. In particular, philosophers in this tradition have ignored most, if not all, of the results from cognitive science that demonstrate the fundamental embodiment of mind—those results having to do with both the specific content of human conceptual systems and the way that Reason arises from the peculiarities of the body and bodily experience in the world. Since this book is about the fundamental embodiment of mind and its consequences, it should come as no surprise that philosophers in the arbiter tradition have ignored all the empirical results upon which our subsequent discussion will be based. Indeed, the various philosophical traditions each have developed specific justifications for dismissing empirical results that are incompatible with their fundamental assumptions.

The Dismissal-of-Cognition Assumption
in Traditional Approaches to Philosophy

The very idea that cognitive science could change our conception of philosophy will undoubtedly meet with the following immediate objections from representatives of various philosophical traditions:

The Rationalist Dismissal

Philosophical analysis is based on reason. Human beings have the capacity to reason correctly, but some may fail to do so. Philosophical training makes it possible to determine when we are reasoning correctly, and gives a way to analyze such products of the human mind as language, conceptual systems, and even reason itself. Empirical studies of the way people actually reason (as in cognitive science) are unnecessary since reason alone is sufficient to study the correct employment of reason. Therefore, the way people actually reason, with all their mistakes and limitations of memory and perception, is irrelevant to philosophical analysis which is based on correct reason, not the sloppy everyday reasoning that would inevitably be reflected in empirical studies.

The Phenomenological Dismissal

We have a capacity to notice and point out aspects of our lived experience, to reflect on them, categorize them, draw inferences about them, and to adequately characterize their structure without any contribution from empirical

science (e.g., cognitive science).

The Hermeneutical Dismissal

We have a universal interpretive capacity interpretive capacity which allows us, as reasoning beings, to analyze meaning and to provide understandings of texts, practices, and experience. A distinction is assumed between the natural and human sciences, which makes empirical methodology (as in cognitive science) irrelevant to the human sciences and hence irrelevant to the task of philosophical interpretation.

The Deconstructivist Dismissal

Deconstruction is a form of analysis which permits deconstructivist philosophers to analyze specific forms of language, discourse, and reasoning. It is assumed that no scientific enterprise could in principle override this form of analysis, since any particular empirically-based scientific enterprise (such as Cognitive Science) would be just one more subject matter to be deconstructed.

What these disparate traditions have in common is a dismissal of the relevance of empirical studies of the mind, since they each assume that there is a form of rational analysis which is correct and sufficient unto itself. They thus regard themselves as immune to any criticism emanating from sources outside their own privileged conception of reason, in particular from empirical investigation.

The Impossibility of Dialogue

Cognitive science includes all empirical study of human reason and human conceptual systems. It assumes that there is some fact of the matter about the nature of human reason and of human conceptual systems that can be studied empirically. Since philosophies make use of human cognitive capacities and human conceptual structure, philosophies are themselves subject to cognitive analysis via the methods of cognitive science. This includes all of the philosophical positions that dismiss the relevance of cognitive science to philosophical analysis.

Therefore, there is an essential contradiction between cognitive science and all of the Dismissal-of-Cognition traditions in philosophy. As a result, there is a deep impasse in rational discourse across these traditions. No philosopher could convince empirical researchers in cognitive science of the proposition:

> Nothing discovered in cognitive science could contradict or legiti-
> mately criticize a philosophical analysis of reason, meaning, con-
> cepts, or language.

Similarly, no cognitive scientist could convince a philosopher in any of the
Dismissal-of-Cognition traditions of the proposition:

> Empirical results about how people actually reason, form concepts
> and use language should be the basis for philosophical analysis and
> may override assumptions made without empirical support.

The reason why neither could ever convince the other is that the defining
assumptions behind their disciplines are contradictory. Neither could be con-
vinced without giving up the very conception of the enterprise they are
engaged in.

This impasse poses no problem whatever either for a practicing cognitive
scientist, who can dismiss philosophy as idle speculation, or for a philosopher
in these traditions, who will dismiss cognitive science as irrelevant to his con-
cerns.

But for someone who cares deeply both about philosophical issues and about
empirical results about the nature of mind, this impasse is serious and distress-
ing. Both cognitive science and philosophy have subject matters and these sub-
ject matters are interrelated. Philosophy is the field where foundational ques-
tions are taken up about many of the most important areas of human experi-
ence: Morality, Politics, Religion, Aesthetics, The Self, and the very nature of
Knowledge. Moreover, it is the field where the interrelations among these sub-
ject matters is investigated. If anything has become clear in the history of phi-
losophy, it is that the nature of Reason is central to an understanding of all
these domains and to the relationships among them.

Cognitive science has many new things to tell us about the nature of Reason. If
they are correct, then our understanding of morality, politics, religion, and all
the other areas of philosophy must change to fit the new conception of reason.
In short, philosophy is vital and it needs a thoroughgoing reevaluation in the
light of discoveries in the cognitive sciences.

We can see now why the impossibility of genuine dialogue between cognitive
science and dismissal-of-cognition philosophies is so troubling. Unless we
have such a dialogue, cognitive science cannot gain access to those genuine
insights philosophers have had into fundamental human issues. Similarly,
without such a discourse, philosophy cannot gain from the recent discoveries
about the nature of reason. And in the absence of such a discourse, the

empirically-informed reevaluation of philosophy that is so badly needed cannot take place.

For philosophy to persist with the dismissal-of-cognition assumption is to give itself license to be empirically irresponsible -- to ignore results about cognition that do not fit its assumptions. What contemporary philosophy needs is an extraordinary openness -- an openness to empirical results, even results that might undermine age-old assumptions about the very nature of philosophy itself.

Selective Dismissals:
Ignoring Inconvenient Results

Many philosophers do not dismiss cognitive science wholesale. Instead, they engage in subtler forms of dismissal—they ignore those results that are inconsistent with their a priori assumptions, and select only those results consistent with what they already believe.

Consider, for example, philosophers in the classical empiricist tradition. One might think the empirical bent of such philosophers might make them fully open to all empirical results about the mind. Such philsophers would, indeed, tend to be more open to empirical results -- but only to those results that conform to empiricist philosophy.

The Empiricist Dismissal

Via our senses we receive information about the external world. Concepts are learned on the basis of sense data, via principles of association. All of conceptual structure is acquired in this way; nothing else can possibly be part of conceptual structure. This rules out so-called "imaginative" concepts like metaphorical concepts. Although those prototypes which can be learned via statistical correlations or salient experiences are acceptable, the "imaginative" prototypes -- like essential prototypes, ideal prototypes, social stereotypes, and radial prototypes -- are not. All phenomena that are "imaginative" in this sense are to be dismissed as not being "empirical" in the required narrow sense, that is, as not arising from sense data and principles of association alone. The phenomena that have led to the postulation of such imaginative aspects of conceptual structure must be explained on some other basis, say, processing considerations or the pragmatics of language use.

Such a selective dismissal is characteristic of many research programs that have been adopted by philosophers interested in cognitive science. This book draws on results that we believe will require maximal changes in our conception of philosophy: results concerning basic-level concepts, conceptual metaphor, kinds of prototypes, framing phenomena, and image schemas. It is just these results that are, not surprisingly, ignored by those philosophers committed to traditional forms of philosophical analysis. For them cognitive science is a new incarnation of their old belief systems. We have in mind philosophers committed to the the following programs: Cognitive Science As Strong AI, Formal Semantics, Generative Linguistics, and Naturalized Epistemology.

For the most part these are extensions of very traditional philosophical views, and they make use of traditional tools of analytic philosophy -- truth-conditional semantics, formal logic, and formal syntax. The assumptions behind such research programs dictate what counts as cognitive science and therefore which results from cognitive science will be considered "relevant." For those philosophers engaged in these enterprises, cognitive science (whose results they see themselves as paying attention to) does not change the nature of philosophy in any way. Philosophy remains dominant and impregnable, since it is defining what counts as cognitive science -- not all empirical investigations into the nature of the mind and reason, but only those results consistent with prior philosophical commitments.

Something similar happens in the philosophy of cognitive science, which is an updated version of the old philosophy of mind. These philosophers from various traditions address traditional philosophical questions with traditional philosophical methods, but they do this with reference to selective results from the cognitive sciences. Once again, nothing is changed about the nature of philosophical analysis and the same conceptual tools are used. Again the same body of results is ignored -- those that might undermine the foundations of the philosophical enterprise itself.

These selective dismissals, not of the whole body of cognitive science, but only of those parts requiring change in philosophy, on the whole have the same effect of the wholesale dismissals. The reason is that, here too, it is traditional philosophy that is calling the shots, and thus keeping itself immune from discoveries about the mind that might make it question its own assumptions.

Selective dismissals close off dialogue just as effectively as wholesale dismissals do. Philosophers engaging in either kind of dismissal are closed off -- their assumptions are hermetically sealed from any part of the cognitive sciences that might challenge them.

For those who want the most empirically responsible treatment of the great issues of human existence that philosophy can give them, selective dismissal is just as disastrous as wholesale dismissal. It distorts cognitive science and philosophy both. Selective dismissal distorts cognitive science in that it implies that nothing in the cognitive sciences could ever tell us anything new and essential about reason or conceptual structure that was not independently discoverable via philosophical analysis. Selective Dismissal distorts philosophy, since it limits philosophical discussion of the great human issues to knowledge about the mind and to conceptual tools that were available before the advent of cognitive science.

The Need for Open Dialogue

If any field of study should engage in outright or selective dismissal, it is philosophy. For the most part, philosophy has closed itself off, and it is time for it to open itself up.

The openness we seek is a willingness in the philosophical community to take seriously the full range of empirical results about the nature of reason and conceptual structure. It is moreover a willingness to trace out the consequences of these results wherever they may lead. And it is a willingness to rethink the philosophical tradition -- in its entirety if necessary.

We also seek an openness by philosophy to lay itself bare to the techniques of analysis that come out of cognitive science, so that it can better understand its own conceptual structure.

But the problem does not lie only with the arrogance and stodginess of traditional philosophy. Cognitive Science has a problem that is just as great -- narrowness. It has defined its concerns in such a restricted manner so as to ignore the most profound implications of its results, namely, its implications for areas such as morality, politics, religion, aesthetics, and epistemology. Cognitive Science needs a corresponding openness -- an openness to all those vital human concerns traditionally studied by philosophers.

The Cognitive Science of Philosophy

Philosophical theories are elaborate conceptual constructions that make use of our everyday concepts. As we observed at the outset, those philosophical theories that seem "intuitive" make use of common everyday metaphors and folk theories. Because of this, it is possible to use the analytic tools developed in cognitive science to take philosophy as a subject matter and to study it systematically and scientifically.

Such an endeavor is not only possible; it is vital. Philosophy plays such an important role in our culture that it is the greatest importance to reveal the metaphors and folk theories that comprise particular philosophies, so that we can see what they highlight and hide, and so that we can see exactly where their appeal comes from. It is also important as a means of showing that philosophical theories cannot get at absolute truth, and that we should not accept age-old philosophical doctrines as having been "proven."

Not only do we need to know more about the philosophical theories that guide our lives, but in addition philosophy needs to know itself a lot better. The philosophical strategy of dismissing uncomfortable empirical results has led to a situation where there is a form of self-reflection that philosophy will not tolerate. The cognitive science of philosophy is a remedy for all that.

An empirically-based conceptual analysis of all Western philosophy is, of course, a job of Herculean proportions -- a job of many lifetimes. What we will undertake in this book is a few case studies to show what can be done and why the undertaking is interesting.

Our case studies will include Enlightenment epistemology, ethics, political theory, and aesthetics. We have chosen these because of they are central to so much of the philosophy that has come since then -- partly because of what philosophy has inherited from those traditions, and partly because of the amount of contemporary philosophy that is a reaction to those views.

Other Rationales

Though the cognitive science of philosophy is an important endeavor in its own right, we are including our case studies for other reasons as well. Our major goal is to outline a new experientialist philosophy that accords with empirical results in cognitive science. But many readers will only be willing to entertain new philosophical views if they see that previous philosophical views are not matters of absolute truth. Thus, the cognitive science of philosophy will allow those who are interested in philosophy to see philosophical theories for what they are -- elaborate, self-consistent constructions of common metaphors and folk theories -- to evaluate them as such, and, hopefully, to become open to alternatives that have more of an empirical basis.

But the most important reason to do the cognitive science of philosophy is that philosophy is concerned with the deepest and most vital of human concerns. Because philosophical theories largely use our ordinary everyday metaphors and folk theories, taking philosophy as a serious subject matter for analysis means taking those concerns seriously within the confines of cognitive science. Part of what the cognitive science of philosophy must do is to analyze our ordinary everyday folk theories and metaphors for the subject matter that

philosophers write about, and we cannot but be better off for turning the spotlight of cognitive science on

Metaphors for Identity

The Internal Selves

Faculty Psychology
Freudian Faculty Psychology
The Psychoanalytic Self: The child is father of the man
Experiential ego vs Material ego.
The Developmental Self
The Inmost Self

The Role-Determined Selves

The Family Self
The Working Self
The Interpersonal Self
The Autobiographical Self
The Public Self
The Legal Self
The Economic Self
The Political Self

The Philosophical Selves

The Material self
The Mental self (The transcendental ego)
The Autonomous Rational Self
The Biological Self

The Religious Self

The Soul