REASON: AN EXISTENTIAL REFLECTION
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By

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Abstract

In this work I want to assess the role of reason in human existence. I think, the best way to explore what it is possible for philosophers to do requires an assessment of "reason". This question is central today with the failure of foundationalist epistemology, which I seek to replace with an existential epistemology. The work falls into three sections, where the final section is a synopsis of the first two sections in relation to my original question. The first section is dedicated to examining the views of Hilary Putnam, and the second section is dedicated to an historical exploration of the concept "reason".

In the first section, on Putnam, I elucidate the problems he sees with metaphysical realism (e.g. conceptual relativity, and scientific imperialism). In order to avoid idealism, pace the failure of metaphysical realism and foundationalist epistemology, Putnam proposes a new theory of knowledge, internal realism. Here, Putnam, while recognizing that all knowledge rests on human interests, values, and hence, a given perspective, argues that how we choose to see the world, our values, is further grounded in our conception of human flourishing the good. Our conception of the good, in turn, is grounded in a presupposed conception of human nature, such that there are parameters which define, stipulate, that some interests, values, are better than others. In short, although there is admitted to be no one canon of rationality, method, or algorithm which yields "knowledge", Putnam thinks truth, what is rationally acceptable, is rooted in what it means to be a human being (under ideal epistemic conditions). Putnam concludes, then, that (1) we can have truth from a human point of view that pays heed to our experience in the world, and (2) that we should affirm a plurality of methods which yield a pluralistic knowledge (psychological, sociological, ethical, chemical, and so forth.) I utilize both Gadamer and Aquinas to further exemplify Putnam's call for a plurality of methods, different conceptions of rational acceptability, for different areas of inquiry.

In my second section I set about to characterize "reason". The ancient and pre-modern conceptions of reason has little to do with our modern, instrumental conception, since, it contains a strong intuitive/experiential notion, such that truth, the divine, could just be grasped by what was taken to be divine in Man, reason. The modern and pre-modern conception of reason is shown to be an technological or procedural rationality. With the loss of the experiential element, instrumental reason legitimates different bodies of knowledge, yet is unable to assess one body of knowledge as superior to another. Instrumental reason, concurrently, I argue, gives birth to the intractable problems of
foundationalist epistemology, whose failure facilitates relativism/idealism. I show there has been a resistance to instrumental reason by certain thinkers, like myself, who hold that instrumental reason can never capture truth, something always escapes (e.g. Heidegger, Jaspers, Zamyatin, Bergson, and Tolstoy).

I have two conclusions. First, instrumental reason was born when the experiential/intuitive aspect of reason was severed. Further, the adoption of an instrumental conception of reason subverted the enlightenment project, by leading to scepticism, via foundationalist epistemology. Secondly, I view philosophical theories as mere symbols which always indicate something beyond themselves, by pointing to truth, the divine or sacred ground.
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The original dedication for this text was for my friends, yet, due to an unfortunate death, in the year of 1995, I also dedicate the text to Jerry Garcia.

The greatest souls are capable of the greatest vices as well as the greatest virtues. 

- René Descartes
  
  *Discourse on Method* p.1
That nature exists, it would be absurd to try to prove; for it is obvious that there are many things of this kind, and to prove what is obvious by what is not is the mark of a man who is unable to distinguish what is self-evident from what is not.

...the question whether we are now asleep or awake. And all such questions have the same meaning. These people demand a reason for everything; for they seek a starting-point, and they seek to get this by demonstration, while it is obvious from their actions that they have no conviction. But their mistake is what we have stated it to be; they seek a reason for things for which no reason can be given; for the starting-point of demonstration is not demonstration.

- Aristotle

*Metaphysics* 1011a5

*Physics* 193a5

I must not saw off the branch on which I am sitting.

- Wittgenstein

*Philosophical Investigations* #55
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Preface

The word "text" comes from the latin, textre, meaning "to weave". In creating this text I shall endeavour to weave together different ideas, many of which have occupied my thoughts for some time. Although each thread is itself separate, it will be by combining them that a tapestry will be created that shall be whole unto itself.

(0.1) The Motivation. This text is a response to the enigma of modern philosophy. Modern philosophy is an enigma because it asks us to do something we cannot do. I want to ask a few intimately related questions. What is the correct attitude towards philosophy? What is it possible for us to do in philosophy? What are we doing? It is my contention that the best way to consider what it is possible to know, requires an assessment of "reason".

The debate between what is possible for philosophers, those who construct theories of the world, is not a new question. Let me consider a personal example. When I was asked to study Leibniz, my reaction was one that can only cause me laughter today. That is, I thought that it was absurd that I was going to spend my time studying the monadology. My attitude was very simple: there are no such things as monads, thus, should I not be studying atoms? Why waste my time learning about one man's fantasies? Yet, upon reflection, the monadology presents a beautiful theory that verges on the mystical:

Each portion of matter may be conceived of as a garden
Leibniz's theory is mystical in the way the old idea of seeing the world in a grain of sand is, since each monad reflects the entire universe. The *Monadology* presents a beautiful theory of the world. One thing that makes this work impressive is the order of the theory. For Leibniz, reason is what allowed us ultimate knowledge, and this fact, of our reason, distinguishes us from animals. Reason allows us, as a vehicle, to grasp the truth of the world.

What was it that offended Voltaire so much with theories like those of Leibniz? Well, to begin with, Leibniz's vision offended our experience in the world. That is, our experience in the world, at times, shows the world to be a world of imperfection, suffering, and absurdity. What is the point that we are to draw from the dialogue between Voltaire and Leibniz? On one hand we have a rationalist, mathematician, logician, who proposes a metaphysical theory, on the other hand, we have a resistance to the theory. It is not that Voltaire is merely a pessimist, for he sees the same beauty that Leibniz does, yet, he sees it with imperfection, which he does not want to gloss over as the best of all possible worlds. In short, there is seen to be a tension between our ideas/theories and the world.

(0.2) Dostoevsky. The tension between ideas and experience is exemplified in Dostoevsky's short story, *The Dream of a
Ridiculous Man.

(i) Ideas. The dream of the ridiculous man is that of the world of ideas. In ideas we see the world of Leibniz, a world of order, harmony, the best of all possible worlds. Consider some of the aspects of this dream, this idea:

It was an earth unstained by the Fall, inhabited by people who had not sinned and who lived in the same paradise as that in which, according to the legends of mankind, our first parents lived before they sinned.

And what was it like in this world?

They desired nothing. They were at peace with themselves. They did not strive to gain knowledge of life as we strive to understand it because their lives were full...they communed with the stars and heavens, not only in thought, but in some actual living way...They were playful and high-spirited like children...they had not places of worship, but they had a certain awareness of a constant, uninterpreted, and living union with the Universe at large.

In this world, as conceived by the dreamer, the people can communicate with trees, which welcomed them when they came. In other words, they belonged in the world, and the world loved them, as they loved each other.

(ii) The Fall. The experience of our (anti-) hero is juxtaposed to the thoughts that flow so freely from his head. On reflecting on the dream, he remarks:

all that joy and glory had been perceived by me while I was still on our earth as a nostalgic yearning, bordering at times on unendurably poignant sorrow; that I had a presentiment of them all and of my soul; that often on our earth I could not look at the setting sun without tears...

There is a conflict between ideas the he dreams, and what he sees around him. The vision of his dream, of the idea, causes
him great sorrow because it emphasizes his own reality, as a human being. When our hero awakes from his dream, it is linked, metaphorically, to the Fall from paradise. That is, his world of ideas is seen as a fall from paradise, for now he is not in the best of all possible worlds. Consider what he sees when he looks at his world:

The voluptuousness was soon born, voluptuousness begot jealousy, and jealousy — cruelty...they came to know shame, and they made shame into a virtue...They began torturing animals, and the animals ran away from them into the forests and became their enemies...they began talking different languages. They came to know sorrow, and they loved sorrow. They thirsted for suffering, and they said that Truth could only be attained through suffering. It was then that science made its appearance among them. When they became wicked...When they became guilty of crimes they invented justice and drew up whole codes of law, and to ensure the carrying out of their laws they erected the guillotine.7

Even though they had lost their faith in the best of all possible worlds, of happiness, of innocence, we are told they still longed for these things:

But we have science and with its aid we shall again discover truth, though we shall accept it only when we perceive it with our reason. Knowledge is higher than feeling, and the consciousness of life is higher than life. Science will give us wisdom. Wisdom will reveal to us the laws. And the knowledge of the laws of happiness is higher than happiness.6

We see that even the longing for what has been lost, manifests itself in a pathological manner under the banner of science. For here, knowledge, information, replaces wisdom. Knowledge is seen as life stultifying insofar it requires an objectification of the world. Thus, the quotation says "knowledge of the laws of happiness is taken to be higher than
happiness". Even knowledge of the world becomes, or reinforces, our alienation from the world. In short, Dostoevsky, in his own fashion, paints a picture of the fall. Of course, we need not take the fall literally, as a historical event, it may be merely a human event, what we call, euphemistically, "growing up". Although there is this fall there remains a residue of truth in what has been left behind. Although we put down Leibniz and pick up Voltaire, we do not replace one with the other, but raise our depth of understanding with the one to the other.

(iii) The Atonement. Our hero, in the end of this story, however, affirms the world, with its blemishes. To this affirmation, he makes a few crucial statements, the last being the final words of the story:

And yet all follow the same path, at least all strive to achieve the same thing, from the philosopher to the lowest criminal, only by different roads... I have beheld the Truth. I have beheld it and I know that people can be happy and beautiful without losing their ability to live on earth."

And, lastly,

The main thing is to love your neighbour as yourself - that is the main thing, and that is everything, for nothing else matters.......I shall go on!"10

The first quotation affirms, for our hero, the fact that the ideas that he witnessed in his dream need not suggest that we either have the world of our pure ideas or our bitter reality to choose between, for he can affirm the world, the beauty of the world, and our souls, with all their impurities. As already stated, the dream is not so much a lie, a falsity, but
a vision that lies deep in our guts. The goal, for our hero, is to reconcile the dream with reality. In the second quotation, there is an affirmation of the existential prerogative that we may not know about metaphysics, but we do know about our lives here on earth, and what is important thereof. Here, turning away from the dream, from perfection, there is the final reckoning, where the notional world is shed so as to give way to our world. Again, however, we need not see this as a pure replacement, since one is transformed in the process. Finally, our hero proclaims: "I shall go on", which is a pure affirmation, acceptance, of life, of human existence, of the human condition.

(iv) The Point. The struggle between ideas and the world, heaven and earth, is the substance of the dialogue between Leibniz and Voltaire, as well as the dream of a ridiculous man. In each case we see the clarity of ideas, theories, and so on, conflict with our experience. I have now hit upon one of the themes I want to pursue: the idea of imperfection. A philosophical theory can never fully capture its object; something always escapes. In opposition to viewing theories as either offering a correspondence or idealistically, I view philosophical theories as symbols.

It was hoped that philosophical theories would be able to reach the status of truth. For a theory to be considered true requires a justification. Although we can justify certain theories, there comes a point where our justifications run
out. Some have reacted to the failure of foundationalist epistemology by turning to, what Putnam characterizes (albeit broadly) as, nihilism, relativism, and deconstruction. In fact, one reason that I spend a considerable time on Putnam is that he represents all normal people. That is, he does not want to end up in scepticism. Nobody wants to be a sceptic, but it is where some people end up. In this light, scepticism is the result of a failure. I want to suggest an attitude to philosophy that will not leave us in the quandary of scepticism. In order to avoid scepticism, we have, like Putnam, to be realistic about what we can achieve. We need to adopt the correct attitude towards philosophy. Again, I contend, the best way to avoid scepticism which seems to fall out of the failure to find the ground, or foundation for knowledge, is to carry out an investigation into rationality.

In fact, another motivation for this project is that the philosophical community has turned its attention to post-modernism, for its proponents offer a critique of the intractable problem modern epistemology set for itself: ultimate justification, first principles, and so forth. Yet, existentialism, I believe, also realized many of the problems with modern philosophy, yet, many of its adherents did not offer a sustained critique of the tradition, and rather opted to get on with their own projects. Camus is a good example of this move, when with complete disregard for questions surrounding reference, induction, and so on, he declares, the
most important philosophical question is suicide. For me, existentialism was an epistemological move in the history of philosophy.

This text, in fact, I characterize as a work in existential epistemology. Thus, I hope that the text will lay the epistemological foundation for my work, so that I can spend less time dealing with epistemology, the theory of knowledge, and more time with knowledge, making knowledge claims.

(0.4) Reason. Finally, in agreement with Putnam, I believe that the question of reason is one of the most important philosophical issues of the day. It is by an investigation of rationality, what it has been conceived to be, that we can gain insight into the cause for the rise of foundationalist epistemology, the enlightenment project par excellence. A lot hangs on the way we define rationality, and much is revealed about the framework of our thought by its conception. In fact, I will argue, it was with the adoption of a certain conception of rationality that epistemological scepticism flourished at the expense of metaphysics. To reaffirm the primacy of metaphysics will require a understanding of modern rationality, and a response to at least one of the problems of metaphysics, as understood by Putnam.

I would like to emphasize one thing before I end; that is, I do not think philosophy is a game where we simply choose from a list of options. Rather, in congruence with
existential epistemology, we cannot readily accept a theory of rationality that by itself or implication offends our experience in the world, for this is the ground of our being. That is, philosophical choices are not trivial choices, but carry weight insofar as they are a reflection of our being-in-the-world, what we think.
Part 1

Putnam
Hilary Putnam proposes a solution to the problem of knowledge, which he calls internal realism. But, before we jump to the theory, we need to understand the problem, as Putnam characterizes it. Although the later Putnam no longer believe there are problems in philosophy, only issues, since problems suggest solutions, we have to start by seeing (as Putnam did) a problem. The problem of knowledge can be called epistemology, for, even though epistemology indicates a theory of knowledge, at least in the modern world, a theory of knowledge is many times scepticism about knowledge. Putnam defines what he takes epistemology to be in his doctoral dissertation of (about) 1952, written under the supervision of Hans Reichenbach. Putnam wrote:

The problem of justifying induction is one form of the central problem in the theory of Knowledge. This is often to be expressed by the question 'How is knowledge possible'. The sceptic insists that a prior question has been overlooked in the tacit assumption that we do in fact possess knowledge. Thus epistemological controversy begins, from Greek times, with the question: 'Have we any knowledge at all'.
We have a very simple, yet correct, understanding of what epistemology is. As Putnam has asked, how is it that we have knowledge? In other words, how do we really know that X is true?

Putnam examines what he takes to be the different options that are available to us, in regard to our relation to knowledge. These options are not new and were the same ones that a wide variety of thinkers have struggled with from Aristotle to Husserl. At any rate, Putnam sees three options (metaphysical realism, idealism, and internal realism). We shall be interested in elucidating Putnam's rejection of the first option here. The rejection will hinge on many different facets, such as conceptual relativity, ethics, reference, and subjectivity. We shall deal with the challenge of conceptual relativity here.

(1.1) Metaphysical Realism. The first attitude we can adopt towards knowledge can be called metaphysical realism. The metaphysical realist holds that there is only one correct description of the world that is mind independent. For the metaphysical realist, there is a way that the world is; there is a fact of the matter. If there is a fact of the matter, this means that we could be wrong about that fact. Thus, truth, for the metaphysical realist, is mind independent because what is the case is so if we acknowledge it or not. For example, a metaphysical realist about trees will hold that they are there independently of our ability to recognize that they are there. One could say, they are really there. Putnam
will oscillate between calling this first attitude, metaphysical realism and scientific realism. He notes, however, that he only discusses materialism, scientific realism, because it happens to be the metaphysics that today has the most "clout". One should never lose sight of the fact that it is metaphysical realism which is the main object of Putnam’s attack. That is, for most modern persons, metaphysical realism amounts to scientific realism. Scientific realism merely indicates that one believes that science (particularly physics) has the one correct description of the way the world really is. Putnam writes of metaphysical realism:

On this perspective, the world consists of some fixed totality of mind independent objects. There is exactly one true and complete description of 'the way the world is'. Truth involves some sort of correspondence relation between words or thought-signs and external things and sets of things. I shall call this perspective the externalist perspective, because its favourite point of view is God's Eye point of view."

There are three basic features to metaphysical realism: (1) Truth is mind independent, (2) there is only one correct description of the world, and (3) a correspondence theory of truth. Having gone over the first criterion of mind independence, let us turn our attention, briefly, to the latter two. To say that there is only one correct description of the world eliminates the possibility that there could be several correct descriptions of the world. For a metaphysical realist, however, it is unacceptable to have competing theories, for, one of them must be correct. Finally, there
is a correspondence theory of truth held by metaphysical realists. This means that they assume the theory in question corresponds to what is really there, in other words, what makes the theory true is that it is actually the case. Prima facie, perhaps, one would think that metaphysical realism is the obviously correct attitude towards knowledge. Although I do not want to suggest that it is not, it has to be recognized that it does have serious difficulties when scrutinized; and, this is exactly what Putnam does.

Just to orient ourselves we will simply list the two other options for knowledge, for Putnam. The last option, which can be seen as the polar opposite of metaphysical realism is idealism or relativism (which Putnam lumps together). As one would imagine, the idealist/relativist holds that knowledge is not mind independent, rather relative to the mind, or group of minds in question, and does not accept a correspondence theory of truth. The idea that knowledge is a collective or intersubjective representation would be an example of idealist or relativist position, for Putnam. With idealism, the foundations of knowledge rest a subject or group of subjects, whereas metaphysical realism requires knowledge to have an objective foundation. In other words, the method we use to justify knowledge claims also require a justification. Without itemizing Putnam's intentions, we can say that he wants to walk the fine line between realism and idealism. This middle position is the
second option, which Putnam calls internal realism. Basically, we can say that Putnam wanted, when propounding this middle way, to be as much of a realist as possible, maintain the realist spirit, while revoking all that was untenable about metaphysical realism.

Now, we shall turn to the reasons that Putnam enumerates for the unacceptable of metaphysical realism. We should keep in mind, however, just as metaphysical realism will fail on the various issues to be raised, internal realism will purport to be the remedy for each one of these problems. Against the tradition, initiated under the banner of analytic philosophy, Putnam shows that it is no longer feasible to compartmentalize issues and deal with them in isolation; thus, one's position in metaphysics will have a bearing on one's position in ethics, value theory, aesthetics, and so on. Thus, like philosophy prior to the modern world, Putnam begins the track back to the wisdom of the ancients.

(1.2) Conceptual Relativity. The first blow, and perhaps the most damaging, to metaphysical realism is found in the notion of conceptual relativity. Conceptual relativity operates on numerous levels, yet, it has one moral. Namely, it only makes sense, says Putnam, to ask what the world is like from a perspective, from within a certain theory. A description of the world is never mind-independent; to use a fashionable phrase, there is no view from no perspective, no-where, no God's eye view. The metaphysical realist expects us to have a
theory that is "corresponding to the world as it is in itself"\(^6\), according to Putnam.

If we cannot see what the world is like in-itself, then it follows, we see the world from a perspective. To see it from a certain epistemic point of view may suggest that we can see the world from different epistemic points of view. The question quickly arises, what is the correct way to see the world? How is the world really? To some extent, Putnam concedes, we make the world, by employing conceptual schemes. Yet, Putnam is careful about what to draw from this conclusion. Namely, he says that even though we employ conceptual schemes, this does not mean any way of seeing the world is as good as any other. He writes:

> Even our description of our own sensations, so dear as a starting point for knowledge to generations of epistemologists, is heavily affected (as are the sensations themselves for that matter) by a host of conceptual choices. The very inputs upon which our knowledge is based are conceptually contaminated; but contaminated inputs are better than none.\(^7\)

The project of justifying knowledge claims based upon atoms of sense data falls down because it assumes that the data is a "given", free from subjective contamination. Yet, as Putnam points out, even our very perceptions of the world are, in fact, inseparable from our prejudices, be they cultural, social, class, personal or so on. Putnam's approach will be to show that metaphysical realism is untenable, yet still argue that some ways of seeing the world are better than others. The realist spirit that drives Putnam's intuitions can be captured
in a simple example, although it is yet to be seen how much weight pragmatic justification holds upon scrutiny. When a realist believes some knowledge claims to be better than others, it is because the claim that "the ice is safe to walk on when it is only an inch thick" is a bad knowledge claim because one will fall in and drown if this claim were held. The point of this obviously simply minded example is to point out a psychological fact, if we can call it that, about realists. That is, not only do realists hold that there is a correct description of the world, but they think it is better to have correct views about the world than mistaken views. Yet, the entire dialectic between correct and mistaken, true and false, assumes a truth or fact of the matter, and it is this belief that idealism contests.

Putnam locates his rejection of metaphysical realism in the tradition of Kant, although Putnam maintains an arsenal of reasons for his rejection of metaphysical realism that do not belong to Kant. In fact, Putnam fancies Kant an internal realist. First, like Kant, he rules out the possibility of apprehending the noumenal world of things-in-themselves, because this would require escaping our conceptual locality. Secondly, truth is seen as a judgement based on empirical evidence that does not assume a correspondence theory of truth. Here, the traditional theory of truth as correspondence between the apprehender's, mind's representation is said to correspond to the object. Putnam sees Kant as pointing out
that truth is mind independent, in the way of being beyond thought, and thus beyond our grasp. Finally, our conceptual scheme is taken to be the locus of our knowledge, and this is a point Putnam will emphasize under the auspices of "human knowledge". In other words, Putnam will attempt to maintain some universality to human beings such that we can still take knowledge to be trans-cultural. What is true, is so for all human beings.

Putnam is willing to concede the implications that go with the rejection of metaphysical realism. Since we cannot gain access to a noumenal world, for Putnam, we have to admit that incompatible theories may be true. He writes:

To an internalist this is not objectionable: why should there not sometimes be equally coherent but incompatible conceptual schemes which fit our experiential beliefs equally well? If truth is not (unique) correspondence then the possibility of a certain pluralism is opened up. But the motive of the metaphysical realist is to save the notion of the God's Eye Point of View, i.e. the One True Theory.

Because we cannot gain access to the truth of the metaphysical realist, we are destined to be presented with different theories, and to have to choose amongst them.

Conceptual relativity manifests itself in a plethora of guises, and we need to examine each of them to fully appreciate the problems that conceptual relativity poses for metaphysical realism. The most general contention of conceptual relativity is that we see things from a given perspective, conceptual scheme. It is different to look at the world as a human being and a mite. Our picture of the world is
dependent upon our interests, what questions we decide to ask. The moral of the contention that knowledge is dependent upon our interests, our preferences, also holds an argument against reductionism. Putnam cites an example: a square peg will not go in a round whole. The question is, why will not a square peg fit into the round whole? Since the question is being asked on a phenomenal level, the answer must be given on the phenomenal level. That is, the appropriate answer is that the square peg is larger than the round whole and, consequently, will not fit in. To refer to elementary particles or quantum mechanics will not help answer our question (although it may explain why the board is rigid). In this case we ask a certain question, and the appropriateness of the answer is clearly dependent on our interests, what we want to know.

Citing another example, Putnam considers Marx's analysis of institutions of exchange, production for profit, and wage labour. Again, it is irrelevant to try to talk of elementary particles, to explain questions that exist at the sociological level. If we want to explain certain forms of social organization, we can do this without reference to theoretical physics. Even if we consider the example of ecology, we witness knowledge claims whose explanations cannot be reduced to, explained by, physio-chemical biology. Rather, ecological systems can be explained at the ecological level, that is, with reference to the system in toto, not the parts that make them up.
Another way in which Putnam exemplifies, makes us confront, conceptual relativity is to pose a question. What if, says Putnam, we ask how many objects are in room X? One person may count only a few objects, lamps, tables, bodies, and so on. Another person, may count far more objects by counting light bulbs, table legs, peoples' noses and ears and so on. Yet another person may be interested in counting how many elementary, constitutional, particles are in the room, as to count billions of objects in the room. Each person operates, in our example, with a different conception of what counts as an object. What we take to be an object, however, is dependent on our interests, which may operate at the phenomenal, classical, or quantum level. The internal, or pragmatic realism of Putnam does not give ontological priority to any one level. Thus, knowledge, at each level is legitimate, although it is, nonetheless, dependent on a conceptual scheme, our interests, being thoroughly mind-dependent. Putnam considers two further examples to solidify the fact of conceptual relativity. First, if we were to ask "why does that tree grow?", one could say (1) because of the sun, (2) Joe planted it (3)God. Each answer to the one question, shows that the answer depends on what the question means, what we are interested in knowing, as a botanist, a layman, or a philosopher. In the same vein, if we ask "why does X rob banks?", we find the same conclusion. If the question was asked by a fellow convict, the person may
respond, "that is where the money is", yet, if a preacher asked the question, the meaning is different. Here, "why do you rob banks?" is a moral question. At any rate, in each case we see that the answers we get reflect our interests, what we want to know. Let us understand the point of these examples in relation to metaphysical realism.

Putnam thinks, if metaphysical realism was correct, there would be one true description of the world; under the auspices of physics we may posit a scientific realism where science offers the correct description of the world. Yet, as already pointed out by our examples, we cannot explain things at the phenomenal, sociological, biological, historical level and so on, by reducing these questions to more fundamental questions of theoretical physics. What questions we ask reflect our interests. We may be interested in why a square peg will not fit into a round hole, or we may be interested in questions of social phenomenon. In each case, however, we have to provide an answer appropriate to the question. We cannot claim that there is one correct description of the world, unless we privilege our interests regarding metaphysics, and declare all other levels illusory. Some, of course, like Sellars, will take this course, declaring there are really no such things as square pegs and round holes, only time-slices of elementary particles. Putnam, however, does not wish to privilege one brand of questions, and hence, he does not want to privilege one type of knowledge as legitimate. Putnam
gives no ontological priority to any one level.

We can only see the world from some perspective or another. What perspective we choose is dependent upon our interests, as already explicated. Yet, even from within a perspective, we presuppose certain concepts that are already theory laden. We are inextricably bound up in conceptual schemes. Each scheme allows us to see the world in a different way, and no one scheme is ontologically superior to another in that each is dependent on our interests, what we want to know. The fact of conceptual relativity tends towards idealism in that it not only denies mind-independent knowledge, but leads one to conclude that knowledge is dependent upon our minds, our interests. Without travelling too far into the murky waters of philosophy of science, we have to admit that even at a certain level of explanation, theory acceptability is based on many factors which themselves can be described as interest relative. To say that criterion X is interest relative, for instance, is to admit there is no ultimate justification for accepting a value such as X, simplicity, for example, in choosing one theory rather than another. The bottom line is that theories are not chosen because they are true, correspond to what is really there, but because they are, at this time, accepted to be the most plausible explanation for a phenomenon investigated by a group of practitioners labouring under a research program. By abandoning scientific realism, that would privilege, give ontological priority to, one theory,
concepts no longer denote objects but become intra-theoretic constructs. This means that we do not ask if a quark, phlogiston, or an electron are real, for, they are concepts that only make sense within a theory that is acceptable (on a certain theory of rational acceptability.) These concepts are real within a parameter of inquiry, for Putnam. So, a lung is real for a doctor, an atom for a physicist, a table for a layman, and so forth. None of these things are real, in the way of metaphysically real, but, they are real from a perspective. Although, of course, scientific realism is going to ask us to favour, privilege, its knowledge claims: e.g. there is no lungs, or tables, only atoms.

Putnam does not think, in fact, we can adopt one theory of theory appraisal, for each different discipline may have a different can on for what counts as a good theory. Putnam calls for more local and less global philosophizing. In other words, he ask us to move away from attempting to develop universally applicable criterion for theory acceptability. Local philosophizing marks the need, according to Putnam, to look at each theory on its own. It is clear that no one theory of theory appraisal will make our acceptance of varied theories, like Darwinism, relativity, or Newtonian mechanics, seem reasonable. One theory is valued, primarily, for predictive power regarding the future, while another (Darwinism) is valued for explanatory power of what we find before us today.
Metaphysical realism is less an empirical theory, like Newtonian mechanics, than a model of the relation between theory and the world. On the metaphysical realist account, what is true may be true independent of verification, coherence, and so forth. In short, what is true may be so if we can, or cannot, recognize it to be so. This is what we mean when we say that truth is mind-independent for the metaphysical realist. Yet, as Putnam has amply pointed out, without going as far as to call metaphysical realism meaningless or semantically vacuous, we are urged to recognize the many ways in which knowledge claims are conceptually relative, dependent upon our interests, which pervades all aspects and stages of knowledge acquisition. So, even though Putnam wants to be a realist, he wants to be a sophisticated realist. He wants to recognize the naivete of metaphysical realism that posits a correct description of the world from no-where, which claims to be purely objective, without himself falling, completely, into idealism.

(1.3) The Moral. Given that, for Putnam, knowledge is only possible from a given perspective, there is not absolute knowledge. That is to say, there is no one true description of the world, because knowledge operates on different levels, which are not reducible to one we can ontologically privilege. Since epistemology cannot merely elucidate the methodology that yields truth, because "truth", as understood by metaphysical realists, is seen to be implausible, epistemology
becomes descriptive of different methodologies. Philosophy is (in part) a description, or reflection on our institutions. What Putnam means by this contention is that we describe, in our epistemology, the practices that contribute to the success of our inquiry, our knowledge. An inquiry is successful if it yields knowledge as stipulated by a conception of rational acceptability, which an epistemology makes explicit. Putnam takes our reflective position to be humble in that it recognizes that we cannot readily break out of the episteme of our time. Just as, for instance, theology described the scripture to systemize it, philosophy of science is the theology of science. Philosophy of science, as an ad hoc epistemology, sets out to justify, describe, the success of scientific inquiry, which we already happen to take to be true. Putnam says: "My basic standpoint, remember, is that philosophy is (in part) normative description of our institutions; theory of knowledge seeks to explain and describe our practice that contributes to the success of inquiry." As a normative description, we notice that knowledge claims presuppose certain interests, which define the level at which we inquire. Even at a given level (classical, quantum, social, etc.) we employ concepts that are theoretically partisan; in short, we can say, we find conceptual relativity pervasive in every aspect of knowledge acquisition. Even at a certain level of questioning, within these parameters, we cannot be metaphysical realists. For
metaphysical realism the fact of conceptual relativity is devastating, because conceptual relativity defines knowledge as mind dependent, mind-relative, in complete conflict with metaphysical realism, which demands objectivity, what the world is like in-itself. Objectivity, as understood by metaphysical realism, becomes a myth, which is under threat of being displaced by idealism/relativism. (Of course, Putnam is at pains to avoid this conclusion, scepticism.) As already mentioned, it will be the task of Putnam's internal realism to avoid both metaphysical realism and idealism/scepticism.
Scientific Imperialism

The greatest blow to metaphysical realism is the problem of conceptual relativity. Yet, there are a host of other problems that plague metaphysical realism. Whereas conceptual relativity gave us strong reasons to think there is something wrong with the fundamental tenets of metaphysical realism in its commitment to objectivity, many of the other problems with metaphysical realism can, perhaps, be described as a discontent. Put differently, the challenges to metaphysical realism that we will consider here will draw out some of the implications of metaphysical realism. Now, there is nothing wrong with these implications themselves, but, as it happens, there are conclusions we find it hard to accept, since they thwart our sensibilities as intelligent men and women. The doctrine of metaphysical realism that Putnam deals with, primarily, is scientific realism, and it is here
that we examine Putnam's discontent with scientific realism (a doctrine he, himself, was committed to as a young man). Here, we will deal with the challenges of ethics, the fact/value dichotomy, reference and subjectivity to scientific realism.

(2.1) Scientific Realism. Putnam points out that the reason he deals with scientific realism, which is a brand of metaphysical realism, is because it happens to be the metaphysics that has the most "clout". He sees the need, thus, for a critique of scientific realism, seeing that it exerts the most restraints on what it is possible to think of rationally. Putnam writes:

Since scientism is, in my opinion, one of the most dangerous contemporary intellectual tendencies, a critique of its most contemporary form is a duty for a philosopher who views his enterprise as more than a purely technical discipline.

It was Heidegger who, perhaps most clearly, rose to the call, and it shall be no surprise that it is with him that we can re-assess modern rationality. At any rate, Putnam, also, has hard words for those who have given way to the sway of science as the remedy for philosophical problems. He says: "I cannot follow 'physicalists' (for example, Harty Field) who would agree that 'intentional' or semantical properties, for example, reference) can be reduced to physical ones. A fortiori, I cannot agree that all properties are physical. If scientific realism is scientific imperialism - physicalism, materialism - I am not a scientific realist."
Putnam wants to indicate here that science can be termed "imperialistic" insofar as it attempts to eclipse all disciplines, all domains of inquiry, under "science", for this would lead to a reductionism, and what could not be reduced to science would become fancy, myth, superstition, and so on.

Putnam notes that in Mill's positivism all knowledge was collapsed under the paradigm of the hard sciences. Putnam cites Mill as saying: "The backward state of the moral sciences can only be remedied by applying to them the methods of physical science, duly extended and generalized." For Mill, then, there was something "backward" about the "moral sciences"; is it not a scandal that physicists make progress but ethics remains no further ahead than the ancients? The solution, for Mill, was to take the methodology, that has yielded so much success to the positive sciences, and apply it to other domains of inquiry. Putnam is quick to point the folly of such thinking, seeing that different domains of inquiry call for different methodologies, and conceptions of what counts as rationally acceptable knowledge.

To sketch out the logic of science, for positivists, we begin with the assumption that there is knowledge that does not achieve the certitude of analytic truths, tautologies and so forth. From this point, we take, via induction, propositions that have a high enough probability to be laws. Putnam notes that the positivists were trying to escape, themselves, the problems of traditional metaphysics. To
misrepresent, however, the methodologies congenial to different disciplines, and accept one method, was a mistake. In fact, Putnam goes as far as to say that some types of knowledge depend on empathy, which is a radically different criterion of rational acceptability from any used by the sciences:

Now, what I want to suggest is that empathy may give less than Knowledge (with a capital K), but it gives more than mere logical or possible probability. It give plausibility - it is the source of prior probability in many judgments about people. To revive Platonic terminology, it may not provide 'knowledge', but it does provide 'right opinion' - and I am arguing that knowledge depends on a good deal of right opinion.

To fully understand Putnam's point, we need to familiarize ourselves with the spirit of internal realism, and I shall put this off for the time being. Much knowledge depends less on a rigorous methodology than intelligence, empathy, and what the ancient called wisdom. Yet, under the sway of science, knowledge became synonymous with science. Putnam is not against the scientific method, or its canons of verification and justification, but he wants to recognize where it is appropriate, and where it is not. Thus, we can say, Putnam wants a pluralism of methodologies that reflect a plurality of knowledge, such as ethical knowledge, aesthetic knowledge, biological knowledge, physical knowledge, and so forth. He writes:

I do not know what glories social science may attain in the future (although I see no reason to doubt the intelligence, imagination, and sensitivity will produce
masterpieces in the future in this area as they have in others). But I do know that 'scientizing' the social sciences (a barbarous term I have invented to fit a barbarous idea) is a confusion and a source of confusion. 7

As Putnam says, all domains of inquiry will produce their masterpieces, be it the Monadology, in metaphysics, or Marx's Capital, in sociology, but, the idea that these domains of inquiry can produce true knowledge, where "true" is defined by science is an illusion. The fact that we have different types of knowledge and different methods is not a failure for Putnam:

If we are doomed to have neither a computer's eye view nor a God's eye view of ourselves and each other, is that such a terrible fate? We are men and women; and men and women we may be lucky enough to remain. Let us try to preserve our humanity by, among other things, taking a humane view of ourselves and our self-knowledge. 8

Explicating, again, what is meant by "a human view" will require a deferral to internal realism. Putnam does not, at any rate, accept scientific realism because it requires that we only accept one brand of knowledge; Putnam is unwilling to accept this implication of scientific realism, which he characterizes as "imperialistic" and "barbarous". Putnam makes the off-hand remark that science as philosophy is metaphysics without ethics, which is blind. 9 As human beings, we cannot allow our episteme to be defined solely by the hard sciences. Some of the most important knowledge, and wisdom, we have as human beings, has little to do with the discovery of a new element for the periodic table.

To be more precise, one main problem of scientific
realism, is that ethics becomes non-sense, which we shall see when we examine the fact/value distinction. In "Literature, Science, and Reflection"\textsuperscript{10}, Putnam wants to discuss the relation of literary and scientific ways of thinking to what may properly be called human understanding. In other words, he wants to discuss different approaches to knowledge that contribute to the broader concept of human understanding. Considering ethics, for example, Putnam recognizes that the question, "how should I live?", does not give way to a scientific answer, in the technical sense of the term. "Yet the fact that one cannot reduce living well to a science does not mean that reflecting on how to live well is not a rational enterprise, or that there cannot be any objective knowledge about it."\textsuperscript{11} Therefore, there must be different standards of rational acceptability, objectivity, for different domains of inquiry. In contrast to Mill, what works for physics, may not, will not, work in ethics, for instance.

In considering the depth of Dostoevsky, Putnam notes that one would think that we learn something about life, man, the human predicament, in reading him, or Tolstoy, or Hugo, and so on. "They conflict with science in the sense of representing a rival kind of knowledge, and thereby contest the claim of science to monopolize reliable knowledge. But it is a rival kind of knowledge, and hence inaccessible to scientific testing."\textsuperscript{12} According to Putnam, it was analytic philosophy that lived under the yoke of scientific realism, that stood in
Many modern philosophers thought only science could give us the one, true, correct description of the world. Philosophy became reduced to the philosophy of science; philosophers became handmaidens of science, janitors in the halls of science. In fact, some held that science would simply replace philosophy. What is clear for Putnam is that scientific realism asks us to reduce, or prohibit, many domains of inquiry, like ethics, and Putnam calls upon us to see the untenability of a such a thesis.

(2.2) Fact/Value. One way in which scientific realism liquidates other domains of inquiry was shown by value theorists, assuming the fact/value distinction. Namely, emotivism concluded that values are merely preferences. Thus, to say X is good, means "I like X", and perhaps, "I want you to like X too". The emotivist analysis became common sense; we have facts on the one hand, and values on the other. Facts are true, recognition transcendent, objective, whereas, values are dependent on subjects, and hence contingent, and perspectival. The fact/value distinction which was first proposed by Weber, is something Putnam goes to some lengths to deconstruct. In showing that the fact/value distinction is untenable, Putnam deals yet another blow to scientific realism, for it presumes facts that allow a demarcation from values. From what has been said about conceptual relativity we have already anticipated the conclusion that there is no such thing as facts in the metaphysical realist sense that
assumes objectivity, for Putnam.

Traditionally, however, we have come to hold a fact/value distinction, says Putnam. On the one hand we have facts, (the pot weights X), on the other hand we have values (the pot is a good pot). The problem with this type of analysis is that facts are not neutral, value free. Science, itself, does adhere to values in that it assumes a conception of rational acceptability which sets the criteria for truth. So, just as we have a criterion for what counts as a good pot, we have a criterion for what counts as true. Yet, the criterion of what is rationally acceptable is a choice which reflects our interests, what we decide to value. In each case we have a method that will allow us to judge the truth or falsity of a truth candidate. And, no values have a reducible priority, such that we can favour one set of interests. As with the moral of conceptual relativity, if we are interested in a medical question we may value biological explanation over a physicist's theory. Moreover, even at a given ontological level, we choose one theory over another, perhaps because it has the virtue, value, of simplicity, for instance. Putnam remarks:

to suppose that `coherent' and `simple' name neutral properties - properties toward which people may have a `pro-attitude', but there is no objective rightness in doing so - runs into difficulties at once. Like the paradigm value terms (such as `courageous', `kind', `honest', or `good' ),`coherent' and `simple' are used as terms of praise. Indeed, they are action guiding terms: to describe a theory as `coherent, simple, explanatory' is, in the right setting, to say that acceptance of the theory is justified..."
The choice of what theory we accept as true is a matter of a certain criterion, which, per se, is evaluative. That is to say, the criterion of rational acceptability is based on a subject's choices. Therefore, the criterion is not objective, where this requires mind-independence. We cannot say that the criterion is correct as metaphysical realists would. Putnam is very clear on this point:

Justice, coherence, simplicity, reference, truth, and so on, all exhibit the same problems that goodness and kindness do, from an epistemological point of view. None of them is reducible to physical notions; none of them is governed by syntactically precise rules...I claim, in short, that without values we would not have a world. Instrumentalism, although it denies it, is itself a value system, albeit a sick one.¹⁵

In this quotation, not only does Putnam reinforce the interrelatedness of all issues, but notes that there is not one domain of knowledge which is more secure than any other. What was once taken to be the facts of science, also show themselves to be value laden. Interests entail values, and without an interest, a perspective, we would not have a world, because, there is no world outside our world, for Putnam. We see values active both in our choice of questions (which determine ontological level) and in our criterion of theory acceptability. Although Putnam realizes that those of an instrumentalist persuasion will deny that facts are value laden, he maintains that they do assume many values. His contention that their value system is "sick" merely underscores the way in which this positivist doctrine attempts to eclipse all other forms of discourse that do not
meet its criterion for rational acceptability, as to be deemed knowledge, under science; and we have seen what disastrous consequences this has for those of us who want to maintain an ethics, where ethics became a matter of evaluative preference. As Putnam says:

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\text{I have tried to suggest that an adequate philosophical account of reason must not explain away ethical facts, but enable us to understand how there can be facts, and how we can know them.}^{16}
\]

Some, of course, will try to hold on the fact/value dichotomy by citing that there is a convergence with regard to methods in science, but in ethics, no convergence is possible; there are the same debates we find in Plato's Republic. There still exists no method for yielding ethical facts. Even on this account, however, facts are merely grounded by convergence, collective agreement, as opposed to being recognition transcendent. Thus, facts as such, have shown themselves not to be independent of values.

Seeing that all knowledge has come under the sway of science, and rushed to emulate its methods, styles, dialect, and so on, ethics has been reduced to scientific psychology (instinct) or sociology (conditioning), says Putnam. Ethics was no longer a matter of existential choice, but required, as a phenomenon, explanation, to discern what lay behind its appearance. Nothing can any longer be taken at face value, there has to be something deeper, some explanation. In our tradition, it is our eyes that lie, being sensuous, and our mind that grasps the eternal formula, the theory.
The distinction between facts and values maintained by the logical positivists was not entirely unjustified, in that they held that facts were verifiable, and values were not. The fact that the pot weights three kilograms is verifiable, but the goodness of the pot is taken to be evaluative. With such simple examples the fact/value dichotomy seems plausible, but with some attention to the history of science, and what actually a scientific theory looks like (it is not a single proposition), the idea of verification breaks down. It is naive, claims Putnam, to even assume a verification method exists. For example, Newton's theory of gravity implies no testable hypothesis per se. So, do we want to conclude that Newton's theory is factually meaningless? Ironically, for Putnam, perhaps, we can go as far as to say everything is factually meaningless insofar as there is no such thing as facts; they fall with metaphysical realism, since realism assumes facts. What is one a realist about, accepts facts, that are recognition transcendent? Even, however, if one assumes a verification method, this will not yield facts, because it is contaminated by values (e.g. by our choice of questions, and our criterion of theory acceptability).

There is a positive repercussion from paying heed to the deconstruction of the fact/value dichotomy, for Putnam. Namely, one way in which to legitimate the human sciences is by recognizing science is not value free. If we agree that Putnam is right in his thinking science is not value free,
this means that the human sciences no longer have to try to be value neutral, objective. Rather, they need to adopt values that are congenial with their area of study, be it the human being, community, or whatever. Put differently, instead of raising, or attempting to, the human sciences up to the standards of verification and justification of the hard sciences, Putnam has brought science down from its claims to metaphysical objectivity, facts, truth and so forth.

To reiterate, by recognizing science adheres to certain values, a certain conception of rational acceptability, we need to adopt different conceptions of rational acceptability for different domains of inquiry.

As we can see, by throwing metaphysical realism into disrepute, many other concepts fall by the way side (not to mention "reason"). Indeed, different conceptions of rational acceptability legitimate different bodies of knowledge, such there is no longer assumed to be a monolithic conception of reason. One of the causes for the fall of the doctrine of metaphysical realism, or scientific realism, has been abandoning the fact/value dichotomy, abandoning the idea there are mind-independent facts, and mind-dependent values. For in the practice of science, the so called facts are yielded by a commitment to many values (that are, moreover, by no means static).

(3.3) Subjectivity. The subject poses a problem for scientific realism in more than one way. That is to point out, the
subject, beyond contaminating knowledge through its many conceptual schemes, becomes an enigma by its very being, as we shall see.

Putnam thinks that to have a conception of truth that has nothing to do with the mental is an illusion. Thus, while some have found in Tarski the tools to discuss "truth" without appeal to dubious notions like, "intentions" or the "mental", Putnam cannot walk with these people.

The problem of the subject, for the scientific realist, reintroduces the issue of reductionism. Since, for the realist, we can simply reduce the mental events of, what we condescendingly call, "folk psychology" to what is really there: neurons, brain cells, etc. Yet, Putnam, like many competent cognitive scientists, does not believe reductionism, eliminativism, is feasible. Putnam holds that physicalistic accounts (if reductionist) are incomplete because they cannot deal with intentionality. Of course, this is an analytic truth insofar as the entire idea of eliminativists, those of Churchland's ilk, just do not believe in out dated notions like consciousness. Putnam notes, the belief "there are a lot of cats in the neighbourhood" does not equal the same computational or neurophysical state in everyone. So, we could all think the thought, "there are a lot of cats in the neighbourhood", but we may not be in the same brain state. If scientific realists cannot reduce the mind, they are left with an enigma: there is something,
minds, that we cannot eliminate to what theory X specifies as really there. In short, scientific realists have to be able to account for subjects, and if they cannot, the orientation towards knowledge becomes implausible. Although there are those who have tried to model the mind on a computational model, where thinking is more or less syllogistic, where there is a logical language to thought (e.g. mentalese), Putnam finds this highly implausible, and more a reflection of the values of these thinkers as scientific realists. At any rate, if one does not want to be a dualist, the subject poses a problem for metaphysical realism, by conflicting with what it stipulates is really there.

(2.4) Reference. The final problem for metaphysical, or scientific realism, is the problem of reference. We need only to understand why reference is an important issue for a metaphysical realist. On Putnam's formulation of metaphysical realism, there has to be some correspondence between words or thought signs and real objects. If, however, our words do not refer to the world, as it is in-itself, Putnam will have been able to throw into question the correspondence criterion of metaphysical realism. Putnam's intent will be to show that we can say some words do refer, yet he has to re-interpret the truth status of the objects which are being referred to as "true" and "real" in the way an internal realist would.

Putnam notes that the traditional problem of epistemology, "how does a subject grasp an object", in the
sense of how can we be sure the ideas, or pictures, in the mind of the subject correspond to the object, which is really there, is asked today under the auspices of "how does language hook on the world". So, here, we have the idea, or word, "tree", and we ask how we know "tree" refers to tree. As one can see, we have just asked the old question of epistemology with a, slightly, new slant. Realism requires a correspondence between words or thought signs and an existing thing or things, and if the reference project is shown to be bankrupt, the doctrine of metaphysical realism will be completely dead, according to Putnam. In Putnam's treatment of the question of reference, one finds some oscillation (he does say different things at different times), yet, in toto, his position can be seen to support his internal realism.

Putnam's position on the issue of reference is in line with his position on the many other issues we have discussed, insofar as he can be characterized as anti-reductionist, holistic, and social (as opposed to reductionist, atomistic, and individualistic). The ethos of Putnam's approach will show itself in his internal realism. At any rate, in opposition to those who think reference can be fixed he takes reference to be indeterminate (at least for a certain class of words). He takes indeterminacy to be sensible insofar as it follows from a recognition of the interest-relativity of explanation. "In short, 'indeterminacy of translation' (and, reference) is plausible to the extent that it follows from the interest-
relativity of explanation.\textsuperscript{18} In other words, just as one can only give an explanation from a certain perspective, within a certain context, conceptual scheme, with all its values, one can only use terms in a certain context.

The moral of recognizing that reference of some words is fixed by the contexts of the language users, is that the reference of those terms is bound to be imprecise, and can never be fully captured. In fact, Putnam thinks those who think reference can be precise are victims of scientific utopianism. Putnam writes: "Giving any precise analysis of the notion of reasonable reformulation of a definite description is, if any thing, more hopeless than giving a precise list of constraints for translation."\textsuperscript{19} Both translation and reference are relative to a context (which is itself never static or fixed). That is to say, with the case of reference, not all terms refer to things in the world, which are really there, but, terms refer to things which are there from the perspective, context, of the language users.

Putnam often mentions, also, that his father was a translator, and knows from his personal experience all the nuances involved in translation. If all words simply referred to things, that were really there, one would think it easy to translate languages from one to the other. In fact, we might (as Carnap dreamed) have one language - a perfect language
which referred to the real world. But, as it happens, we have different languages, and dialects within even one language, each embodying the diversity of values, culture, thought, embodied in words.

Putnam cites the fact that the notion of "electron" used by Bohr in 1934 and 1900, differed in both theory and description. So, do we want to say the term "electron" referred to one thing in 1934 and another in 1900. Well, in a sense, this is correct, because, this is how an electron was defined. We may discover something new about electrons, and the meaning will change yet again. Putnam also considers the term "water", which meant "pure substance" for the Medievals, but, today, we take it to denote H2O. Again, our conception of what water is changes. There is some realist residue in ourselves, however, that will whisper, "but there is still an electron there", even if we describe it wrong. Here, we have to harken back to a magical theory of reference where "electron" refers to electron, as a Platonic form links the idea "tree" with tree. Yet, if one was to understand terms as context dependent, contingent upon our theories and social use, one would have to abandon the idea of reference as correspondence between an idea (eidos) with an mind-independent object. "In sum, reference is SOCIALLY fixed and not determined by conditions or objects in individual brains/minds." Putnam has to avoid the conclusion that theories of different types of discourse construct their
objects, their facts, in order to be any type of realist whatsoever. Putnam, therefore, does allow that, at least a certain class of words, do refer. We can hold, says Putnam, that "water" does refer to H2O, because, under ideal epistemic conditions, we should be able to discern what in fact water is (at a certain ontological level). When we find out water is H2O, we could say that we wrongly called substance X water, if it was revealed substance X was not H2O.

The real point of controversy is over the status of objects referred to by theories or certain types of discourse. Putnam does not, like a metaphysical realist, want to claim H2O is really there, that this fact is recognition transcendent. As an internal realist, Putnam would want to say that under ideal epistemic conditions we could verify that water did refer to H2O.

At this point we have to go back to the problem of the subject. To refer, requires a subject, a language user, and this requires intentionality, the mental, and so forth. But, if materialists believe they can reduce the mental to the physical, as to eliminate the mental, they have liquidated subjectivity. Putnam thinks a materialist has a problem talking about truth or reference, for, there has to be someone there to apprehend the truth and do the referring. If, as Putnam believes, metaphysical realism has trouble admitting the subject in any form except as a separate kind of substance, these problems will accrue to metaphysical realism.
Since they want to reduce all levels, psychological, sociological, etc. to what is essential, fundamental, the subject is also eliminated. Putnam writes, however, it is not subjectivity that is in trouble:

To me it seems that what we shall have to give up is the demand that all notions that we take seriously be reducible to the vocabulary and the conceptual apparatus of the exact sciences. I believe it is reductionism that is in trouble - not intentionality itself."

It is not possible, according to Putnam, to survey all languages, and find out which one corresponds to what is really there, because there is too much that is nuanced in language. "To ask a human being in a time-bound human culture to survey all modes of human linguistic existence - including those that will transcend his own - is to ask for an impossible Archimedean point," writes Putnam.

(2.5) The Death of God. Putnam has opposed scientific realism for a number of reasons. There are two reasons for the rejection of capital "R" realism, and all other reasons can be traced back to one of those. First, metaphysical realism's claim to providing a God's eye view, or having a recognition transcendent notion of truth is viewed as incoherent. Second, to affirm one correct description, as to privilege one ontological level, is seen as untenable - this was the moral of conceptual relativity. Metaphysical realism, as Putnam formulates it, fails to deal with ethics, subjectivity and depends on a fictional fact/value distinction. In some of these cases, it was the reductionism of scientific realism
which requires a liquidation of these issues. Since, if we cannot accept metaphysical realism without biting the bullet and denying the phenomenal world, we have to abandon metaphysical realism. It is clear that Putnam is not willing to abandon ethics, and subjectivity. In other words, he is not willing to grant an ontological priority to one level of discourse that will throw other domains of inquiry into disrepute. He wants to affirm a plurality of methods that yield a pluralistic knowledge, psychological, social, ethical and so forth.

Also, he has argued, scientific realism sets up a mythical distinction between facts and values. Once we recognize the implication of conceptual relativity, we notice, what were once taken to be facts, were interest and value relative. Without facts, there is really nothing to be a metaphysical realist about. What is worst, on this score, is that facts are elucidated in propositions composed of terms that do not refer to mind independent things. One is lead to think that the relation of language to the world is not one of correspondence, of mirroring, but, at least in part, of interpretation or creation. Some would argue, different linguistic communities see the world in different ways and inhabit a different form of life. Yet, to avoid this relativistic conclusion, Putnam proposes a human view of knowledge. Under ideal epistemic conditions, we can, says Putnam, know what terms, like water, refer to; thus,
reference, for some terms, is secured trans-culturally, for Putnam.

Putnam sees the relation between all the issues, such as reference, subjectivity, and ethics, he has dealt with, and a common thread to his treatment of them, which I call, holistic. Putnam writes:

The connection between the epistemological issues just mentioned and questions of reference and meaning is secured by the truth of meaning holism. As we saw in the first chapter [meaning and mentalism], reference is not just a matter of "causal connection"; it is a matter of interpretation (this was the point of phlogiston example used in that chapter). And interpretation is an essentially holistic matter. A complete "formalization" of interpretation, we argued is as utopian a project as complete "formalization" of Belief Fixation."

Putnam is willing to draw out the consequences from his conclusion, not only about metaphysical realism, but about the failure to explain reference absolutely, which was the vehicle to bridging the gap between the subject and the object, the signifier and signified, to employ French terminology. Given that the project of achieving metaphysical truth seems untenable, Putnam declares (with others) that analytic philosophy has come to an end. Just because analytic philosophy has lost its raison d'etre, does not mean it will actually end, in that, people will stop practising it. As Colridge pointed out, many things continue through the lethargy of custom. Putnam writes:

Analytic philosophy has great accomplishments, to be sure; but these accomplishments are negative. Like logical empiricism (itself just one species of analytic philosophy), analytic philosophy has succeeded in destroying the very problem with which it started. Each
of the efforts to solve that problem, or even to say exactly what could count as a solution to that problem, has failed...This 'deconstruction' is no mean intellectual accomplishment. We have learned an enormous amount about our concepts and our lives by seeing that the grand projects of discovering the Furniture of the Universe have all failed. But analytic philosophy pretends today not to be just one great movement in the history of philosophy - which it certainly was - but to be philosophy itself. This self-description forces analytic philosophers (even if they reject Ayer's particular views) to keep coming up with new 'solutions' to the problem of the Furniture of the Universe - solutions which become more and more bizarre, and the which have lost all interest outside the philosophical community. Thus we have a paradox: at the very moment analytic philosophy is recognized as the 'dominant movement' in world philosophy, it has come to the end of its own project - the dead end, not the completion.25

Metaphysical realism was, first, criticized for being incoherent in assuming a recognition transcendent notion of truth. Yet even if one was to think truth was something which required justification or verification, it is not clear how one would assess which methods of verification are correct. The idea that we can find foundations of our knowledge has failed. Although we can justify a corpus of knowledge by appeal to a criterion of rational acceptability, that criterion, per se, remains groundless. Or, rather, it seems a canon of rational acceptability is grounded in the human intersubjective world, our choices, preferences, values, and so forth. Putnam, in his Ph.D dissertation, tried to work out the most reasonable path to grounding one of the major facets of one conception of rational acceptability: a justification of induction. If we could ground induction, we could legitimate scientific knowledge. But, in retrospect, we come
back to Hume, as Putnam says, there is no deductive proof for induction. The failure of this project, marks Putnam's abandonment of metaphysical realism and transition into small "r" realism, internal realism. To avoid the Wittgensteinian conclusion that knowledge claims are not reasonable or unreasonable, but rather they are just there, like our life, Putnam proposes internal realism. Knowledge claims are reasonable insofar as they adhere to our conception of what counts as rationally acceptable. Reality, our conception of it, is something in which we dwell, our home. Put differently, what we think is reasonable is further ground in our worldview, values, and what Putnam calls, our conception of the good (More about this later).

Putnam is not willing to abandon our reality in favour of the one correct description of the world, which Putnam's understanding of metaphysical/scientific realism requires. Rather, Putnam wants to affirm a plurality regarding knowledge. To the extent scientific realism has attempted a reductionism and/or elimination of subjectivity, ethics, ordinary language and so on, Putnam is unwilling to accept scientific realism. The rejection of scientific realism, then, is not based on conceptual relativity alone, but, also, on the many unsavoury implications that it yields. Namely, realism, one Putnam's formulation, requires one to ontologically privilege one level of discourse as to render other types of discourse mythical - as opposed to true. As we
shall see, Putnam becomes increasingly hostile to metaphysical realism, and theories that he thinks thwart our experience in the world as human beings, where we do think we have knowledge of ethics, ourselves, society, and so on.
Internal Realism

The problem of knowledge, the attitude we can adopt towards it, has shown that to be a metaphysical realist about knowledge is highly problematic. Putnam would go as far, perhaps, to concede that metaphysical realism is simply untenable, for the numerous and far reaching reasons we have discussed hitherto. Yet, as already alluded to, Putnam does not want to take the implausibility of metaphysical realism to be a gateway, or legitimization for relativism/idealism. Thus, it has been Putnam's goal to propose a middle way, which he calls pragmatic, or internal, realism.

We need to investigate what are the motivations for internal realism, as understood by Putnam himself. Secondly, we need to glimpse at Putnam's thought on rationality, seeing that it is tightly bound up with what attitude we adopt towards knowledge. Finally, I shall consider internal realism. Here, it will be my task to explain what exactly internal realism is, as a theory of knowledge/truth.

(3.1) The Motivation. Generally speaking, Putnam reminds his audience that one thing that was problematic with both metaphysical realism and idealism is that it caused one to
lose part of oneself. What Putnam means by this contention, is laid bare by the implications of these two theses. Namely, metaphysical realism asked one to "lose a part of oneself" by asking us to accept all that we believe and think about the world may be based on a collection of illusions, behind which lay the one, true reality. All the different facets of human existence, ethics, aesthetics, subjectivity, are eclipsed by truth. Although metaphysical realism is not a monolithic concept, scientific realism does require an elimination of our world for an essential world, which is really there. Drawing on Husserl's thought, Putnam notes it was with Galileo that we came to think the real world could be described by mathematics. "With the Galilean revolution: the idea of the external world as something whose true description, whose description "in itself", consists of mathematical formulas." On the other hand, to accept idealism, we also lose a part of ourselves, because, even though we can affirm what is given to us by our experience in the world, we have to denude it of significance by a qualification: we have to take our world, our reality, to be purely contingent, relative, and arbitrary. In other words, for an idealist, it just happens that we see the world from perspective X and there is no rational reason to see it one way rather than another (whether we are speaking in the domain of ontology or ethics). Putnam calls for a non-alienated view of truth. Thus, in contrast to the way metaphysical realism and idealism, which cause one to lose a part of one-self, he hopes that internal realism will not lead
to the type of alienation we have seen hitherto. Internal realism is an alternative to metaphysical realism and idealism, according to Putnam. This is the broadest way in which Putnam characterizes internal realism.

One thing that is striking about the theory of internal realism, which seems little noticed, is that it proposes an alternative to a range of problems. In fact, to each problem that metaphysical realism encountered, internal realism proclaims a remedy. It is unclear whether Putnam, himself, realized the extent to which internal realism is applicable to problems that range from ethics to reference. It does not seem, however, it was his intention to solve a range of problems; yet, since internal realism is a remedy for metaphysical realism, it is not surprising that it would offer solutions to problems that were intractable from the metaphysical realist position. In *Renewing Philosophy*, Putnam says the book seems to deal with a conglomeration of seemingly unrelated issues. But it is Putnam's belief that these "unrelated issues" may have a common cure. It is by a cure that Putnam hopes to "renew philosophy". In another text, Putnam, upon reflection on his internal realism, says he did not grasp all the connections in internal realism to a diverse range of issues, which "at bottom...are the same issue, the issue of the relation of thought to the world". Notice, the different attitudes we assume towards knowledge specify how thought relates to the world, whether it corresponds, or is
merely a projection, as in the case of idealism. We can see the idea of realism and idealism apply to ethics, metaphysics, and reference, for instance. One can be realist about values, or an idealist, to take another example.

Idealism and realism can be taken to be interchangeable with subjectivism and objectivism, respectively. To be a realist, is to attempt see things as they are. Subjectivism, conversely, implies knowledge is based on the preferences and prejudices of the subject. Subjectivism is many times, in the western tradition, seen as whimsical. One goal of internal realism is to overcome a dichotomy of subjective and objective views of reason and truth. He writes:

In the present work, the aim which I have in mind is to break the strangle hold which a number of dichotomies appear to have on the thinking of both philosophers and laymen. Chief among these is the dichotomy between objective and subjective views of truth and reason. It has seemed to Putnam that philosophy is in a strangle hold. We have been oscillating, repetitively, back and forth between subjective idealism and objective realism for over two millennia. This oscillation is tiresome, and above all, vain, in that both positions require us to "lose a part of ourselves", for Putnam. Once we come to characterize views as either subjective and objective we become stuck in an irreconcilable dilemma, according to Putnam. For instance, all denial of truth is seen as equivalent with subjectivism qua relativism. Some, Putnam believes, like Kuhn and Foucault, attempt to make a virtue of relativism, or, at least, espouse
positions which Putnam takes to be blatantly relativistic. Putnam's attempt to show there is a "middle way", manifests itself through an answering of the question, "what is reason"?

(3.2) Rationality. Putnam does not think there is a given, ahistorical conception of rationality, but, at the same time, he does not want to say anything can count as rational. Thus, he wants to avoid absolute reason on the one hand and cultural relativism on the other. Again, the two poles which Putnam wants to avoid should appear characteristically familiar of the motivations for internal realism. He writes:

I do not believe, however, that rationality is defined by a set of unchanging 'canons' or 'principles'; methodological principles are connected with our view of the world, including our view of ourselves as part of the world, and change with time. Thus I agree with subjectivist philosophers that there is no fixed, ahistorical organon which defines what it is to be rational...The dichotomy: either ahistorical unchanging canons of rationality or cultural relativism is a dichotomy I regard as outdated.

This quotation is very dense and requires a significant background to fully appreciate. At any rate, we can point out the salient features. Reason is not defined by an unchanging canon. Rather, what is rational is bound up with our conception of ourselves and the world. What is reasonable, what counts as knowledge, is part of a world-view, and this changes. At the same time, however, Putnam does not want to bow down to relativism and concede that truth is purely relative, and what counts as rational changes. "The view which I shall defend holds, to put it very roughly, that there
is an extremely close connection between the notions of 'truth' and 'rationality'; that, to put it even more crudely, the only criterion for what is a fact is what it is rational to accept." The criterion for what makes X qualify as true is called rational acceptability. As conceptions of rational acceptability change, truth changes.

Putnam outlines three characteristics to his treatment of rationality. First, he avoids a positivistic conflation of rationality with science. Positivists adopted a notion of rational acceptability which will legitimate scientific knowledge only. Secondly, he denies the mind makes up the world or merely copies it. Rather, knowledge is the result of a collision between a subject's (or community's) engagement with the world. Thirdly, rationality is part of our conception of human flourishing, the good. "A final feature of my account of rationality is this: I shall try to show that our notion of rationality is, at bottom, just one part of our conception of human flourishing, our idea of the good. Truth is deeply dependent on what have been recently called values." Knowledge, and what legitimates it, reason, are part of our conception of human flourishing for Putnam. What we count as knowledge reflects our deepest values. It is by an exploration of rationality, in fact, that Putnam thinks he can overcome the fact/value dichotomy. For, if reason does not reflect a static canon which defines what counts as true, the facts, reason reflects certain value commitments embodied in our
conception of human flourishing. Without an unchanging conception of rationality, the notion of facts falls by the way side. As "reason" changes, facts change. Further, "reason" changes as a reflection of changes in our deepest values, our conception of human flourishing. For the metaphysical realist, of course, knowledge has nothing to do with the values of the subject, of what we think is good. But, with the collapse of metaphysical realism, knowledge is a reflection of evaluations. Even if we grant that knowledge requires a commitment to some values, it does not follow that these values have anything to do, logically, with our ultimate values, our conception of human flourishing. We have to understand that knowledge's relation to values, and in turn, these values to those we find in our world-view, is an argument, a claim, Putnam is making.

The relation between knowledge and reason is first expressed by Putnam in the notion that X is knowledge if X is rationally acceptable. Since Putnam has admitted that there can be more than one correct description of the world, and that there are different descriptions of the world, between which we have to adjudicate, Putnam qualifies what he means by "rational acceptability". Namely, X counts as knowledge, not only if X is accepted by our peers, where rationality is collective agreement, but if X must be justified on idealized rational acceptability. He writes:

Truth, in an internalist view, is some sort of (idealized) rational acceptability - some sort of ideal
coherence of our beliefs with each other and with our experiences as those experiences are themselves represented in our belief system - and not correspondence with mind-independent or discourse-independent states of affairs.¹⁰

Truth, for an internalist, is not recognition transcendent, but what is there from a certain perspective. In other words, we do not have knowledge, in the way of metaphysical objectivity, but we do have human knowledge. Putnam remarks:

Our conceptions of coherence and acceptability are, on the view I shall develop, deeply interwoven with our psychology...objectivity for us, even if it is not the metaphysical objectivity of the God's eye view. Objectivity and rationality humanly speaking are what we have; they are better than nothing.¹¹

Given that we cannot grasp the world as it is in-itself, as the metaphysical realist requires of us, we can still grasp it from our human perspective. As Putnam says, we have a human objectivity that is "better than nothing". The way in which Putnam escapes the conclusion that truth is merely a collective representation, or agreement, is by employing the notion of idealized rational acceptability. Putnam notes that three thousand years ago it was rationally acceptable to conclude the world was flat, but this does not make it true, because, in this case, we would have to believe the earth changed shape: three thousand years ago it was flat, but now it is round; as our ideas change the world changes. The theory that the world is round is just a better theory than the world is flat. Putnam says:

What this shows, in my opinion, is not that the externalist view is right after all, but that truth is an idealization of rational acceptability. We speak as if
there were such things as epistemically ideal conditions, and we call a statement 'true' if it would be justified under such conditions. 'Epistemically ideal conditions', of course, are like frictionless planes: we cannot really attain epistemically ideal conditions, or even be absolutely certain that we have come sufficiently close to them. But frictionless planes cannot really be attained either, and yet talk of frictionless planes has 'cash value' because we can approximate them to a very high degree.

Putnam uses the notion of idealized epistemic conditions not to suggest such conditions exist, but rather as a thought experiment. If we imagine idealized epistemic conditions, then, a truth candidate is true under these conditions. The idea that the world is round (elliptical) is true from a human perspective, in that, if we thought of what would count as ideal epistemic conditions for this question, we could say that the idea "the world is round" is true under these conditions. Whereas, the thesis, "the world is flat" is conjecture, in that it is based on given evidence, and is thus only rationally acceptable in relation to that evidence. If one had tried to sail off the edge of a flat earth, one would realize the world is round, however (or, at least, that it was not flat). Under the ideal conditions that one could sail, safely, to the edge of the earth, one could verify if the thesis in question was true.

The idea of idealized epistemic conditions is problematic, in that, one would think that the ideal conditions for knowledge is God's perspective. That is, if we are going to hypothesize ideal conditions, why not just admit that the idea conditions are to be able to see the world
as it is in-itself? Who is to say what counts as ideal epistemic conditions, when technology is always changing? Maybe, in other words, we can develop a technology that would allow us to see the world as it is in-itself. Our very notion of ideal seems relative. If Putnam cannot specify what he means by ideal conditions the concept is vacuous, and merely presents itself as a pseudo-solution to the problem of knowledge. Putnam responds to the vague element in "idealized" by defining a criterion of what counts as ideal. To begin with, he remarks that to say something is possible in principle is vacuous, and merely a way of saying "science will figure out a way", which is entirely utopian. For Putnam, "possible in principle" means possible in the next three hundred years (or so). Putnam says that he is writing for today's epoch, and to make allusions to statements like "possible in principle" is vacuous. To say something is possible in principle, is similar to saying that X true under ideal epistemic conditions, in that, it requires a consideration of what is possible. Yet, if there are not restraints on possibility, beyond the law of the excluded middle, we have not said very much. To say "possible in principle" is to posit a God-like knower, what Carnap called logically omniscient Jones. Putnam wants "in principle" to mean in principle for human beings, taking into account the real time it would take to compute an answer. For instance, if we thought that it is possible to prove X true, but this may
take six billion years, it is not humanly possible in principle, for Putnam. "I am not writing philosophy for the next historical epoch and for our post-human descendants; I am writing for human beings in the present period." What we can extract from Putnam's comment on the notion of "possible in principle" we can bring to bear on defining what is meant by "ideal epistemic conditions". First, "ideal" does not mean we can hope to be God (logically omniscient Jones). Rather, we have to have a human conception of ideal. Idealized epistemic conditions does not mean perfect conditions but, very good conditions. As Putnam has already stated, absolute ideality is only an impossible notion we try to approximate. Putnam writes:

I do not by any means ever mean to use the notion of an 'idealized epistemic situation' in this fantastic (or utopian) Peircian sense. By an ideal epistemic situation I mean something like this: If I say 'there is a chair in the study', an ideal epistemic situation would be to be in my study with the lights on or with day light streaming through the window, with nothing wrong with my eyesight, with an unconfused mind, without having taken drugs or been subjected to hypnosis, and so forth, and to look and see if there is a chair there. Or, to drop the notion of 'ideal' altogether, since that is only a metaphor, I think there are better and worse epistemic situations with respect to specific statements." Again, by ideal conditions, Putnam merely want us to think of the practically best possible situation in which we can test our hypothesis in question. Moreover, what counts as a good condition is relative to the domain of inquiry, what sort of questions we ask. If we ask whether there is a chair in the next room, the ideal condition will be different than if we
ask something at the quantum level, for instance. Putnam says:

One cannot say what are good or better or worse epistemic conditions in quantum mechanics without using the language of quantum mechanics; one cannot say what are good or better or worse epistemic situations in moral discourse without using moral language; one cannot say what are good or better or worse epistemic situations in commonsense material object discourse without using material object language. There is no reductionism in my position.15

Although Putnam has tried to define what he means by "ideal conditions" by appealing to what we take to be, by common sense, very good epistemic conditions, this is not at all satisfactory. Upon scrutiny, it still seems unclear what ideal conditions could mean. If an ideal condition is different from Carnap's omniscient Jones and Reichenbach's immortal inquirer perspective, it is not at all clear what an ideal condition is. Technology changes, and what was unthinkable in the past becomes possible in the future. Thus, we can always imagine an in principle ideal, epistemic situation in the future. Putnam, himself, realizes that "idealized epistemic conditions" remains hopelessly vague, and a theory that would specify what could count as ideal (for a given context) may not be possible.16 What is possible and impossible regarding an ideal epistemic condition need not be tenseless. Rather, what we take to be ideal today may change in the future. Possibility, in an epistemic sense, is in relation to our best available knowledge.17 To reiterate, what we think of as ideal conditions today, may be different in the future. Putnam, however, wants "ideal epistemic conditions" to reflect what we
take to be humanly possible. Further, he hopes that what we take to be humanly possible, in our thought experiment, will not change.

Putnam has characterized truth as not independent of justification (being rationally acceptable), but, he has suggested truth is independent of justification of the here and now (present rational acceptability); it is ideal justification (ideal rational acceptability) under ideal conditions that counts X as true. Given that he does not want ideal conditions to be equivalent to God's eye view, Putnam tries to suggest a weaker, human, notion of ideal epistemic conditions. We have to suspend judgement on whether this concept contains sense, in order to be able to appreciate the theory of internal realism Putnam proposes.

(3.3) The Human Foundation of Knowledge. Putnam argues that a fact is what it is rational to believe. Facts are rationally acceptable (under ideal epistemic conditions). Rationality, itself, however, involves a notion of relevance. That is, what questions we decide to ask, will set the parameters of knowledge; it is dependent on our interests: what we want to know. Thus, rationality is a commitment to certain values that lead to facts. Putnam writes:

And I argued that being rational invokes having criteria of relevance as well as criteria of rational acceptability, and that all of our values are involved in our criteria of relevance. The decision that a picture of the world is true (or true by our present lights, or 'as true as anything is') and answers the relevant questions (as well as we are able to answer them) rests on and reveals our total system of value commitments. A being
with no values would have no facts either.\endnote{16} Not only do we need a criterion of relevance in order to achieve facts, but what we find relevant reveals our values. Putnam notes how our values can be discerned from the language we employ. For instance, considering the statement, "the cat is on the mat", shows that we are interested in animate/inanimate distinctions, purpose, and spacial relations. The question of what criterion we should adopt for relevance and rational acceptability becomes moral, in that, we have to choose what we value, and hence, a world-view. We choose a conception of rationality which is consistent with our notion of human flourishing. Putnam says:

\begin{quote}
I am saying that theory of truth presupposes a theory of rationality which in turn presupposes our theory of the good. 'Theory of the good', however, is not only programmatic, but is itself dependent upon assumptions about human nature, about society, about the universe (including theological and metaphysical assumptions). We have had to revise our theory of the good (such as it is) again and again as our knowledge has increased and our world-view has changed.\endquote

Truth depends on a notion of rationality; this is a great insight on Putnam's part. Yet, rationality, itself, presupposes a commitment to a conception of the good, human flourishing. In other words, what is rational is not a given a priori, but, on the contrary, we find our conception of rationality to be tied up with what we think is good. The idea of human flourishing is, perhaps, the most beautiful and tantalizing concept Putnam has created. The idea holds allusions to enlightened liberal values which ask the
individual to develop their faculties, to flourish. Also, the idea of flourishing comes from biology, and thus has teleological overtones: to flourish is to fulfil one's telos. The notion of human flourishing is the lynch pin on which the entire theory of internal realism rests. Like many fundamental concepts, it is not entirely clear what human flourishing means. Basically, it is a conception of what it means to be a full human being.

When considering the idea of human flourishing, we can see that people will take different positions. Some will argue that to be a full human being is to adhere to a moral life, virtue. Here, rationality means adherence to truth. If we can understand the truth of our nature, we can conform to it, as to be fulfilled. Others, of course, will argue there is no one conception of human flourishing, and different people may choose different ideas of fulfilment. But, "belief in a pluralistic ideal is not the same thing as belief that every ideal of human flourishing is as good as every other. We reject ideals of human flourishing as wrong, as infantile, as sick, as one-sided." Putnam makes the point here that even if we admit that different people have different conceptions of what is good, there are limits, human limits, to this. Putnam makes the point about plurality in relation to a certain reading of Aristotle, thus, I have to make some clarifications here. Putnam claims, Aristotle held that to have a notion of the good life, means that everybody would
have to adopt the same lifestyle. Thus, we may have to admit that the good life may be being an artist, so everybody should be one. Yet, by "good life", we do not mean one should adopt certain actions as a certain way of living. For instance, if we said it is virtuous to work hard, it would not matter what one did per se, as long as one did it with integrity. In short, to hold a conception of human flourishing need not entail that everybody would be, literally, doing the same thing. Many things that were taken to be virtuous, like moderation, do not prescribe specific actions.

The point is, at any rate, that, for Putnam, our values are inextricably bound up with our conception of human flourishing, the good, the good life. What we think is important, relevant, is an evaluative choice. Further, this choice does not exist in an intellectual vacuum but is bound up with our conception of human flourishing. Human flourishing defines the parameters of human nature, and, hence, human interests. In fact, the reason we can understand other cultures depends on a certain commonality among us. Putnam says: "There seems only one possible explanation: human interests, human saliencies, human cognitive processes, must have a structure which is heavily determined by innate or constitutional factors. Human nature isn't all that plastic." To decide what is rational is relative to our interests. And to determine correct interests is to adopt a theory of human nature. Even if such a theory is not
forthcoming, we still assume a certain conception. Some, like Chomsky, are worried that if knowledge is contingent upon our interests, knowledge becomes relative. But, Putnam points out, that this assumes that all interests are as good as any other (free from normative criticism) and that we are free to choose our interests; and, Putnam denies these assertions (as they are stated). The entire idea of human flourishing is to delimit the boundaries of what we take to be valuable interests. As it happens, much of what we value is incipient in our conception of human flourishing, which, itself, is unconscious. Putnam says:

The position of beings who cannot have a view of the world from no where, but who are, for all that, committed to regarding some views of the world - and, for that matter, some interests and values - as better than others.\textsuperscript{23}

We cannot, as Putnam has stated time and again, have an absolute conception of the world: our theories depend on commitments to certain values. Yet, our values are rooted in our conception of human flourishing, which is to say, some values, and interests, are more congenial to what it is to be a human being than others.

Internal realism begins by conceding the failure of metaphysical realism, of the idea we can have the one, true, correct, description of the world. Yet, internal realism denies that any description of the world is as good as any other. To avoid the conclusion of relativity, internal realism posits the idea of idealized epistemic conditions. What is
ideal is so from a human point of view. Also, internal realism stipulates a commitment to the recognition that our interests and values, which determine our knowledge, are part of our world-view, our conception of human flourishing. Our conception of human flourishing, in short, defines what a human point of view is. It is at this point that we enter a moral question: we have to choose a conception of reason that reflects our values. We will see this when we examine Putnam's thought on "reason". Though Putnam has pointed out that much of the time our conception of human flourishing is unconscious, it need not be merely assumed uncritically. Even though Putnam does not suggest there is one true conception of human flourishing, he does seem to think there are conceptions more congenial to what it is to be a human being. Notice, this contention merely means he does think there are better conceptions of human flourishing. He does believe, more or less, in a human nature or human condition that set the parameters for what is possible. Internal realism does not offer metaphysical objectivity, but it does offer relative objectivity. For instance, "the objectivity of ethical principles, or, more broadly, of 'moralities', is connected with such things as width of appeal, ability to withstand certain kinds of rational criticism (which I have tried to spell out), feasibility, ideality, and of course, with how it actually feels to live by them or attempt to live by them."24 We do not achieve the metaphysical truth, but neither
are we confined to relativism. We can have truth, which is true from a human point of view.

It is by coming to terms with "reason" that we can recognize that we have different conceptions of rational acceptability, all of which have their place. What makes an assertion rationally acceptable in physics will be different than in ethics. Our criterion of rational acceptability must be congenial with the object of study. For example, when Putnam speaks of the virtues of literature, he is emphasizing a radically different way of knowing. "We can only understand the way in which the literary imagination does really help us to understand ourselves and life, on the one hand, and the way in which science does really bear on metaphysical problems on the other, if we have an adequate view of moral reasoning, where, by moral reasoning in the widest sense - reasoning about how to live."25 We have reasoning, conceptions of rational acceptability, that vary depending upon the domain of inquiry. Internal realism legitimates different types of knowing, yet, it does not privilege any one. Thus, science is not more true than common sense. For instance, belief in tables and chairs is no more true than belief in time slices of elementary particles. "Internal realism denies that there is a fact of the matter as to which of the conceptual schemes serve us so well...but the question 'which kind of 'true' is really Truth' is one that is one that internal realism rejects."26
As far as Putnam is concerned, internal realism is all the realism we need. It realizes there is no matter of the fact apart from theory and perspective. Yet, not all theories are as good as others. We can judge what is better by adopting a conception of rational acceptability. Further, what we take to be rationally acceptable reflects values that are ground in our conception of human flourishing. We saw the way rational acceptability is dependent on values when we considered, briefly, the impact of scientific imperialism. Here, science defined what was rationally acceptable, as to qualify X as knowledge, thus, ethics became a matter of caprice, a thesis propounded by the emotivists. Our conception of values were bound up with science and technology (and still, largely, are). Further, our values were embedded in a conception of human flourishing that was propounded by people like Bacon and Descartes. Human fulfilment will come through adopting the correct methods to unconceal truth, free us from error, tradition and superstition, and help us conquer nature. Indeed, the very progress of human societies is merely a recognition of these methods, for these thinkers. Here we see, then, how certain value commitments, and interests, are rooted in a broader conception of what we take to be the good.

The idea of internal realism was Putnam's attempt to save the realist spirit. As he remarks: "It is my view that reviving and revitalizing the realistic spirit is the important task for a philosopher at this time". One way of
doing this was to reduce truth to idealized epistemic conditions. In other words, he wanted to show that truth and ideal epistemic conditions are interdependent. One cannot talk of truth, if metaphysical realism is implausible, without talking of idealized epistemic conditions. "But it seems clear to me that the dependence goes both ways: whether an epistemic situation is any good or not typically depends on whether many different statements are true." Seeing that Putnam has shown that the very idea of metaphysical realist's conceptions of truth are incoherent, it is not clear what he means by asserting that a good epistemic conditions are good because they reveal truths. He cannot mean that mind-independent truths verify that we have the correct methods, epistemic situations and so forth, because this would be metaphysical realism. Thus, I think we can only take Putnam to be saying a good epistemic situation will yield more knowledge, than bad epistemic conditions.

As we began by noting, internal realism is the middle position between metaphysical realism and idealism. When Putnam considers a debate on causation, he notes the same options. Some take causation to be in the world, the realist about causation. Others, like Kant, of course, take it to be a projection on the world. Putnam notes, however, the reason we can ask about causation, is because it is part of our life-world; we experience causation continually. Yet, to ask if causation is real or ideal is to ask for God's eye view, to
If there are different ways to see the world, from different perspectives, where each paradigm has its own brand of justification and rationality, we will fall into scepticism/relativism. Thus, Putnam requires a trans-paradigmatic conception of rationality. In other words, Putnam needs a conception of rationality that transcends the limits of a subject or group of subjects. Thus, Putnam grounds reason in a conception of human flourishing. Basically, what is reasonable depends on certain values which, in turn, depend on what it means to be a human being. We have realism with a human face because we have truth for us, as human beings. "We don't have an Archimedean point; we always speak the language of a time and place; but the rightness and wrongness of what we say is not just for a time and place." On the contrary, the truth of what we say is determined by idealized epistemic conditions, from a human point of view, for an internal realist. The two pillars of internal realism are, first, the notion of idealized epistemic conditions, which allow truth to rise above what is true at a given historical time. Secondly, the notion of human flourishing is where our values are ground, as to respond to the charge of conceptual relativity. That is, admitting knowledge depends on values, Putnam thinks the values we hold are bound up with our conception of human flourishing, the good. Moreover, he retains a normative conception of what it is to be a human being as to maintain
that some conceptions of human flourishing are better than others. Both the notions of idealized conditions and human flourishing, which are the essential concepts of Putnam's theory of knowledge, allow him to maintain a human view of knowledge.

(3.4) Internal realism. Putnam has, himself, defined what he takes to be the three options we can adopt toward knowledge. He has spent considerable time criticizing metaphysical realism. Notwithstanding the problem of both incoherence (it does not make much sense to speak of mind independence) and conceptual relativity (if we do have a view from somewhere, how do we know which one is correct), scientific realism was not able to use a method to discern the correct description. Basically, with the failure of verificationism, which was only one brand of rational acceptability, because of attention to how scientific theories are chosen (even if we accepted induction a priori), the dream of scientific realism collapsed. Struggling to avoid the slippery-slope of relativism/scepticism, where anything could be rationally acceptable, Putnam proposed a third option, internal realism. Here, truth is a function of idealized epistemic conditions, which vary depending upon the domain of inquiry. Further, rationality, on which truth depends, is shown to be rooted in a conception of human flourishing. What we think of as rational, what types of rational acceptability we decide to hold, is a reflection of our deepest values, and conception of
what it is to be a human being. It is with some of the problems regarding the sense of "idealized epistemic conditions" and "human flourishing" that Putnam will water down his internal realism. I will argue, however, the essence of internal realism, the spirit, is maintained by Putnam, in his commitment to the notion of human knowledge.

Putnam has characterized his internal realism in various ways, all of which capture an aspect of it. Sometimes he says, internal realism means truth does not transcend use, as to emphasize truth is not mind independent but dependent on theories, values, interests, and so forth. At other times he remarks that the entire point of internal realism was to show that conceptual relativity is not incompatible with realism. "Internal realism is, at bottom, just the insistence that realism is not incompatible with conceptual relativity." That is, just because we recognize conceptual relativity, we need not abandon realism. Of course, we have to abandon metaphysical realism, but we can be realist from the perspective of different conceptual schemes (given the stipulation of ideal epistemic conditions). We can be realist at the level of physics, biology, sociology, and so on; but, we cannot reduce all the levels to one truth which we ontologically privilege.

Putnam is at pains to distance himself from Rorty, who has become a symbol on the philosophical landscape. Rorty is associated with the view that truth is a collective agreement;
the word "truth" is a compliment we pay to assertions we agree with. For someone of a realist temperament, truth has to rise above whether we agree or not, for the simple reason we can be wrong. Truth, as mind independent, however, is not a plausible option for Putnam. In the spirit of realism however, Putnam has proposed that what could count as true is justified in the best epistemic situation; thus, truth is what can be known from our perspective under ideal (or near ideal) conditions. Further, the values that define what is rationally acceptable, are rooted in a conception of human flourishing, the good, according to Putnam.
Putnam: On Reason

Putnam's thought on the issue of reason is not, we can admit, thorough. Yet, there are a few virtues to Putnam's treatment of the issue. First and foremost, Putnam raises the issue of reason; he asks what do we mean by "reason". In asking this fundamental question, he has questioned something we take to be an unchanging given, and all that rests on this conception. Secondly, even though Putnam's remarks on reason do not represent a thorough critique, they do reveal certain themes in different conceptions of rationality, which we will pursue on our own later. Our goal here, however, is, primarily, to introduce the question of reason and see how Putnam's assessment of reason supports the theory of internal realism. In seeing how Putnam's treatment of the question of reason supports his internal realism, we will have to revisit the issue of scientific imperialism. That is, we will see another way in which the power exercised by the ideology of science determined a key concept of western man, a concept called reason.

(4.1) Within History. Putnam begins his discussion of rationality by noting that the concept of reason is not a
timeless, ahistorical notion. "Our notions of rationality and rational revisability are not fixed by some immutable book of rules, nor are they written into our transcendental natures, as Kant thought...") For Kant, illogical thought was not thought; to think was to think rationally, using the categories of the mind. Other thinkers, Putnam notes, had radically different conceptions of reason. For Frege, for example, concepts were transparent to reason in the same way the Platonic mind grasped forms. In fact, for the ancient Greeks, truth, Being, was grasped by the reasoning faculty of our minds. In this way, the mind was made for truth: not only did the mind strive for truth but it apprehended it. As Putnam says: "The beauty of Greek metaphysics was that nous (the reason in us) and the Forms were made for each other. Since the appearance of modern science and philosophy in the seventeenth century, the notion of a form and notion of a special faculty for knowing the forms have ceased to meet our standards of clarity and explanatory value. We are no longer able to believe that Reason-in-the-world and Reason-in-Us fit together like the pieces of a jigsaw puzzle."

Since "reason" has been conceived in such different ways, we have a hard time defining what we mean by the term. Putnam notes that for terms like "God", we can appeal to the way the term was used in different situations, to understand its meaning. For reason, however, we cannot follow this method, because "reason" has been used in such different ways. Putnam remarks: "There are powerful universal laws obeyed by all
instances of gold, which is what makes it possible to describe
gold as the stuff that will turn out to obey these laws when
we know them; but what are the chances that we can find
powerful universal generalizations obeyed by all instances of
rationally justified belief?" We may be able to define "gold"
by the way it acts in certain situations (e.g. it melts at X),
but it does not seem that we can find universal
characteristics of true beliefs, that would define "rational"
for us. Putnam suggest that rational justification, then, is
not a given, but rather, it is a convention which delimits its
meaning by becoming institutionalized. Putnam writes:

The forms of 'verification' allowed by the logical
positivists are forms which have been institutionalized
by modern society...and the public recognition of the
correctness, or the probable correctness, or the 'highly
successful scientific theory' status, exemplifies,
celebrates, and reinforce the images of knowledge and
norms of resonablesness maintained by our culture.

What we take to be rational is a matter of convention, which
is institutionalized, according to Putnam. Further, however,
rationality reinforces itself, since we appeal to the
rationality of belief X, even though reason per se remains
groundless. Since there is no a priori conception of
rationality, what counts as rationally acceptable changes.
Reason is historical; what counts as a good reason differs
from epoch to epoch. At one time, a good reason was an appeal
to scripture, which was taken as veridical. We can infer,
therefore, that what will count as a good reason in the
future may differ from what we now take reason to mean.
(4.2) Reason in the Age of Science. It is not surprising, in retrospect, that in the age of technology, we have a technological conception of rationality. That is, rationality is equated to a method, or technique. There have been attempts, Putnam notes, to define "rational justification" by a list of canons. Putnam cites the logical positivists as having attempted to determine a list of canons that would serve as a criterion for rational justification. In short, the idea was to equate the scientific method with rationality. What could be verified by the method was rational, and what could not, was meaningless, non-rational. Putnam writes: "the algorithm-to-be-discovered for inductive logic - might exhaustively describe or 'rationally reconstruct' not just scientific rationality, but all rationality worthy of the name." Again, as we have already encountered, if we could ground induction, it was hoped, we could equate rationality with the scientific method. It was with the logical positivists, and their overt and unashamed scientism, Putnam claims, that rationality was narrowed down. Putnam, however, also sees relativism as based on scientism, since it through values into disrepute. "Both sorts of scientism are attempts to evade the issue of giving a sane and human description of the scope of reason."

When rationality was equated with science (as opposed to faith, irrationalism, and superstition), it put values on trial, according to Putnam. We have already glimpsed at the
movement of reason against values. Basically, the renunciation of the factual status to values occurred using the following logic. Science, so it was claimed, can verify its knowledge claims by a canonical method. A method can tell one how to achieve Y, since a method is always a means to an end. Ends are values because they are not determined by reason, justification and so on. Means, however, can be justified instrumentally. We can say that method X will best allow us to achieve Y. For example, the question, what is the fastest way from A to B, admits of a rational answer. We can determine (let us suppose) the best method to achieve our goal, to get from A to B, which is the end; yet, the goal, to go to B, remains an evaluative choice. Science provides facts which are always instrumental. Putnam remarks:

Any scientific theory is really just an 'economical' way of stating a number of facts of the form: if you perform such and such actions, then you will have such and such experiences...Whatever our reason for being interested in them, all facts are ultimately instrumental.  

To exemplify Putnam's point, we can consider a simple example. If you raise the temperature of water to one hundred degrees celsius (given certain purity of water and atmospheric pressures), you will experience the boiling of water. Thus, the fact is merely an elucidation of a causal connection, a law of nature. The fact shows one how if you do X, Y will ensue: condition X leads to condition (state of affairs) Y. Putnam goes on to note that we cannot, like the logical empiricists, reduce all science to instrumentalism. That is,
the ends of science cannot themselves be justified instrumentally, but are value commitments. One could ask, of course, why one should privilege science and its methodology. The answer was always that science could verify its knowledge claims. Science admits of public verification. In other words, anyone can do test X and achieve the same answer. For science, as understood by the logical positivists, "rational beliefs are capable of being publicly checked...the very notion of rationality that what is rationally verifiable is verifiable to the satisfaction of the overwhelming majority."\(^4\)

The problem, at least one of them, with equating rationality with the scientific method, is that other brands of knowledge achieve the status "irrational". For example, history is not a science, thus, is it irrational? Again, on the logical positivist model of rationality, all domains of inquiry had to emulate science or become non-sense (e.g. metaphysics), what Feigl called "immature thinking". "The claim of these philosophers that reason is co-extensive with science landed them in some peculiar predicaments"\(^9\), as Putnam notes.

Under the sway of science, reason was associated with method, seeing that method was the heart of science."\(^7\) It was held that method led to truth, thus a method becomes reason; what is rationally acceptable is specified by a method which yields truth. Putnam remarks on what he calls method
Science alone has consistently employed this method, then perhaps rationality, to the extent that there is such a thing, should be identified with the possession and employment of this method...influential philosophers of science continued to believe that something like a formal method (inductive logic) underlies empirical science, and that continued work might result in an explicit statement of this method, a formalization of inductive logic comparable to the formalization of deductive logic that was achieved starting with the work of Frege in 1879.¹

The hope, here, was to be able to achieve some algorithm which would yield truth. Rationality would merely be to employ this algorithm. It is widely accepted today, however, there is no such thing as the scientific method. That is, there does not seem to be one method, algorithm, which science employs. Most accounts of the scientific method miss, says Putnam, the way in which many scientific theories are accepted.³ Many scientific theories are accepted for a host of reasons, some of which are sociological, that is, to some extent, rational acceptability is defined by the practitioners' temperaments.

Under the paradigm of the scientific method, reason is set the task of dealing with datum, what is given. The story which is usually told is that the so-called scientific method involves observing and gathering data, from which one puts forward a hypothesis, which in turn is tested. Putnam says, however: "Rationality has be defined as consisting exclusively of raw and neutral observation and the drawing of inferences from value-neutral premises. But why should one accept such a definition?"⁴ In contrast to thinking of reason as equatable to a method, Putnam notes the connection of his treatment of
language with that of reason. Namely, his approach is holistic and social. Thus, Reason cannot be reduced to an algorithm or some calculus format. In fact, Putnam, himself, tried to work out such a project in his doctoral dissertation. He notes, there, that scepticism over induction was equivalent to scepticism in toto. "scepticism as to induction is virtually equivalent to scepticism as to knowledge", wrote Putnam. Notice, here, all knowledge is dependent on a method, the scientific method. As Putnam realizes, knowledge is seen as a prize in a game, where induction represents a strategy or method of winning. Putnam writes:

A more sophisticated recent approach to these matters, proposed by Professor Alivin Goldman (1978), runs as follows: let us call a method (as opposed to a single belief) reliable if the method leads to a high frequency (say, 95%) of true beliefs in a long series of representative applications (or would lead to such a high truth frequency in such a series of applications). Then (the proposal goes) we can define a rational belief to be one which in arrived at by using a reliable method.

Putnam denies this approach, since he sees it as hopelessly metaphysical (and thus prey to the problems we have already considered, namely, induction remains groundless).

Although Putnam concedes that reason is culturally relative, in that, what is rationally acceptable is dependent on our interests and evaluations, he also holds a transcendental notion of reason, which he takes to be "messy" and "intuitive". Again, he cannot allow reason to fall into collective agreement, or this will entail the same fate for truth. Thus, Putnam needs a conception of rationality
that transcends collective agreement. Putnam's treatment of reason plays into his internal realism, insofar as reason is defined by the limits of being human. In other words, he will propose a human conception of rationality (as opposed to a metaphysical conception).

(4.3) Rationality. Putnam argues that there are limits inherent in what it means to be human that bridle what can count as rational. "However different our images of knowledge and conceptions of rationality, we share a huge fund of assumptions and beliefs about what is reasonable with even the most bizarre culture we can succeed in interpreting at all." Even though there is no one conception of rationality, there are values which guide us. Putnam says:

Rationality may not be defined by a 'canon' or set of principles, but we do have an evolving conception of the cognitive virtues to guide us...it is not true that we would be just as well off in the long run if we abandoned the idea that there are really such things as impartiality, consistency, and reasonableness, even if we only approximate them in our lives and practice, and came to the view that there are only subjective beliefs about these things, and no fact of the matter as to which of these 'subjective beliefs' is right."

We have certain values which guide us, and these are, as Putnam is fond of saying, "better than nothing". So, although there is no unchanging canon which defines rationality, there are limits to what can count as rational in the human situation. For example, if we adhere to a notion of the good, we can say that it is irrational to do X (where X does not lead to Y, the good). But, if we do not assume objective values, and ends are, themselves, subjective/emotive, means
will lack any ultimate justification. In fact, we end up in the dilemma of choosing ends, where we cannot find a foundation on which to base a choice. Similarly, with knowledge, we seek a justification, and we can always ask for a justification, reason, for that prior justification. Thus, reason can always go beyond whatever it can formalize, and transcend whatever it can survey. This conception of reason undermines itself, since it cannot provide a reason for itself. Putnam remarks:

> Of course, from my point of view the 'epistemological' and the 'ontological' are intimately related. Truth and reference are intimately connected with epistemic notions; the open texture of the notion of an object, the open texture of the notion of reference, the open texture of the notion of meaning, and the open nature of reason itself are all interconnected. It is from these interconnections that serious philosophical work on these notions must proceed.  

Reason has an "open" texture, according to Putnam. What Putnam means here, is that reason is not fixed, or unchanging. Reason is a pliable concept, and to work our way out of the problem of epistemology, we need to revise our conception of rationality. Further, changes in our thinking about rationality are bound up with our thinking concerning truth, reference, and meaning. More precisely, reason is a social concept that has limits as specified by a conception of human flourishing, which itself is limited by the human situation (human nature).

Since rationality is not exhausted by science, there is no need to abandon all values in favour of instrumental
conceptions; values are grounded in a conception of human flourishing. Putnam says:

On the one hand, the idea that science (in the sense of exact science) exhausts rationality is seen to be a self-stultifying error. The very activity of arguing about the nature of rationality presupposes a conception of rationality wider than that of laboratory testability...rather than do what we are doing, which is to reject some - the ones which do not fit in with our a narrow instrumentalist conception of rationality which itself lacks all intellectual justification - we should recognize that all values, including the cognitive ones, derive their authority from our idea of human flourishing and our idea of reason. These two ideas are interconnected: our image of an ideal theoretical intelligence is simply a part of our ideal of total human flourishing, and makes no sense wrenched out of the total ideal, as Plato and Aristotle saw."

To reiterate, rationality is not exhausted by science, or some supposed scientific method. Further, even if the methods of science lack ultimate justification, and are, thus, committed to values (e.g. simplicity), all these values, moreover, gain their authority from adhering to our total world-view, our conception of human flourishing, the good.

(4.4) Putnam on Reason. Putnam's treatment of reason starts from the contention that reason is not an unchanging given, something we can accept a priori. Understanding that our conception of rationality changes, it is not surprising that in the age of technology, we adopt a scientific/technological conception of rationality. Namely, it was attempted to associate reason with "method" - the scientific method. Reason defines what can count as knowledge, what is rationally acceptable, and in the modern world, science defines the paradigm of rationality. The problem with associating reason
with science is shown in our previous exploration of scientism. That is to say, if we associate reason with science, we end up deeming many other types of discourse as irrational. So, just as we saw how scientific realism eliminated ethics (because there are no subjects really) and deemed values a matter of caprice, a scientific conception of rationality calls what does not live up the epistemological paradigm of the positive sciences "irrational".

As it happens, however, Putnam has claimed, science's own method(s) have no foundations, objective justification, rather, they rest on values. Putnam deals with reason as intricately bound up with internal realism. First, just because knowledge is based on values and interests, does not, for Putnam, mean all values and interests are as good as any other. So, and secondly, if interests are not purely subjective, neither is rationality. That is, it is not true that X is (necessarily) as rational as Y. Just as interests and values are bound up with our conception of human flourishing, so too, is reason. What we take to be rational reflects our deepest values, our conception of the good. Given that, Putnam claims, there are limits to what can count as good, a plausible account of human flourishing, there are limits to what can count as rationally acceptable. In sum, although Putnam does not accept a technological conception of rationality, he does think there is a conception of rationality that is congenial to human beings. This conception
of rationality which Putnam favours is broad, in that, different domains of inquiry may adopt different conceptions of rational acceptability.

Reason, which determines our knowledge, our truth, is, itself, rooted in our human existence. In other words, Putnam can be seen to be calling for a human conception of reason. In the same way that Putnam did not want to accept metaphysical realism because it thwarted our experience in the world, as human beings, he does not want to accept a monolithic conception of rationality, one conception of rational acceptability, that will buttress metaphysical, or scientific realism. Neither does Putnam want an idealist conception of rationality such that what is rational for me may not be so for you (pertaining to a certain domain of inquiry). Here, one would have to admit that no criterion for rational acceptability is better than any other for a given domain of inquiry. Rather, in line with internal realism, Putnam wants a notion of reason which recognizes a pluralistic knowledge, while allowing normative criticism of irrationality. With a conception of rationality that allows for plurality, Putnam achieves a conception that pays heed to our experience in the world. With a rationality that will be congenial to conceptual relativity, it will reflect our conception of human flourishing, where we do think we have knowledge on many different levels. First and foremost, Putnam attempts to adopt a conception of reason, or a criterion for such a conception,
that is rooted in our experience and reflects our values, what we take to be the good, how we see ourselves, the world, and our place in it. The upshot is that reason becomes diversified; there is not one conception of rational acceptability, but different ones for different domains of inquiry. Also, Putnam can maintain a normative criticism of any one canon of rational acceptability by arguing how it does, or does not, adhere to our conception of the good (which Putnam also leaves open to normative criticisms).
Putnam: The Future of Philosophy?

There seems to be the general idea which floats about among some of Putnam's readers that Putnam continually changes his position. I will argue people who think this are wrong. The idea, however, is so ubiquitous that even Putnam, himself, on occasion believes that he is always changing his position. Yet, from the point of view of someone writing scholarship on Putnam, one can appreciate the spirit, and development, of Putnam's thought, which is not fragmented, as some have suggested. After Putnam abandoned scientific realism, there is no fundamental change in Putnam's thought. The failure of scientific realism has led Putnam in a direction whose internal logic is still unfolding. In fact, Putnam's recent allusions to the philosophy of Aristotle are not flippant, if one understands the problematic from which Putnam's thought has emerged. Although there is much distance between my thought and Putnam's (as we shall see later), Putnam has come far enough, for us to introduce the notion of existential epistemology. I have, of course, made many contentions in the introduction I have presented. It is my purpose to substantiate these claims, in the following way. I will first
consider the effects of Putnam's abandonment of foundationalist epistemology. Second, I will consider what Putnam thinks philosophy should do, if metaphysical realism is no longer feasible. In explicating Putnam's thought on the future of philosophy, I will show what Putnam has in common with existential epistemology and, how his thought further connects to the spirit of internal realism.¹

(5.1) Saving the Appearances. Whether Putnam has abandoned internal realism is open to debate, and depends on how one defines internal realism. There is textual evidence for both sides of the argument. According to Putnam, insofar as it is thought he has moved away from internal realism, he thinks he is even more of a realist than he was as an internal realist.² We have to, however, understand what Putnam means by "realist". Basically, he means realist in a very colloquial and non-technical sense. In elucidating Putnam's view on what philosophy should be doing, Putnam notes that this is his chance to say something positive. That is, Putnam has spent much time criticising metaphysical realism, analytic philosophy, and non-analytic philosophy. Putnam is tired of an endless debate, and angry that the debate has brought us so far from what he see's as philosophy's task. Returning to realism, for Putnam, means returning to our lives. He does not think, for example, we should let our normative beliefs fall into scepticism or relativism, even though theories of reference, foundations, and so on, were a failure.³

Putnam notes that David Hume once remarked that he left
behind his scepticism as soon as he left his study. What this means, is that Hume could, while at his desk, maintain, "there are no necessary connections", yet in the real world he did believe the sun was going to rise tomorrow. Of course, even Hume realized this was "belief". But it is not satisfactory, for Putnam, to hold to a philosophy whose plausibility ends when one "leaves one's desk". Putnam has launched a sustained attack on those who think we can merely abandon our truths because some philosopher has decided there are no morals, no world, no minds, and so on. For example, Putnam has criticized metaphysical realism because, for one reason, it asked us to take our world to be an illusion, behind which there is something essential, really there. What is "really there" is our lives, how we live them, and the fact of our death. Putnam thinks relativism is unsatisfactory because, for one reason, it conflicts with our experience: to be human is to be moral.

If we accept scientific realism we accept one method, one criterion of rational acceptability, and if we accept that there can be many different descriptions of "the world", we will have to accept different methods, according to Putnam. In this way, ontology is linked to epistemology: one method entails one truth, and different methods entail different truths, be they social, psychological, personal or metaphysical. Putnam calls for a moratorium on both ontology and epistemology. First, he thinks that we lose our problems if realize that they rest on the dichotomy between the subject
and the object. The rupture between the subject and the object is what allows for epistemology, as to discern what is really there, beyond the pictures in the theatre of the mind. Secondly, if we renounce the notion that we can find the correct method to the truth, we may, says Putnam, regain a sense of mystery: not everything can be explained. Putnam asks us, further, not to recoil from "the common", our experience in the world. For instance, Putnam notes, although we cannot solve ethical problems, we can adjudicate them, achieve some convergence. Putnam, in fact, abandons the idea of philosophical problems. There are no solutions in philosophy, and this leads Putnam, at one point, to conceive philosophy as personal expression. He says:

If the great pretensions of philosophy have collapsed, so have the equally great pretensions of those who debunk the problems of philosophy. A great philosophical picture, one might argue, should be viewed as we view great artistic creations: as something which does not simply copy a ready-made world, but something which creates a world - or even, as Nelson Goodman has put it a 'world of worlds'...we have to view all philosophy as having an expressive component: as being concerned to reveal (or conceal) an author as much as to 'solve problems.'

Philosophy cannot achieve the one correct theory of the world, yet, neither can we call all philosophical problems pseudo-problems. If we consider a great philosophical theory, like the Monadology, we should, suggests Putnam, see it as a work of art. Moreover, we should see it as a type of personal expression. Now, we need not take personal expression as frivolous. Rather, we can think of personal expression as a
serious reflection on human existence.

In some of Putnam's writings of 1994, he moves forward, expands, his philosophy, which was once called pragmatic/internal realism. In these writings, Putnam says that our words and life are constrained by a reality. We can only describe the world in a finite number of ways, so, he still maintains some ways of describing the world are better than others. What constrains how we can see the world, is our lives. He says: "The notion that our words and life are constrained by a reality not of our own invention plays a deep role in our life, and is to be respected." In other words, the fact that we have truths about the world not of our own invention plays a deep role in our lives and not to be dismissed out of hand.

In these writings, Putnam makes an allusion to Aristotle. Aristotle dealt with the same problematic Putnam did. On the one hand, Aristotle wanted to avoid Parmenides'/Plato's conclusion that the world is an illusion, yet, on the other hand, he did not want end up in idealism. Aristotle's metaphysics allows a realism which legitimates common sense objects, as substances. For example, when we see a horse, there is a horse "there" for Aristotle, because it is a substance. Putnam's appeal to Aristotle is sensible if we see that they both deal with the same problematic: they attempt to save the appearances; avoid scepticism and reductionism, and allow the intentional to interact with the body. "As
Aristotelians we do not discover something behind something else, a hidden reality behind the complex unity that we see and are. We find what we are in the appearances. And Aristotle tells us that if we attend properly to the appearances the dualist's questions never even get going." Putnam says he wants to revive Aristotle's "naive realism" without the metaphysical luggage. What is important for us is to appreciate that Putnam wants to take as veridical our experience in the world. In the face of two unworkable positions, realism and idealism, Putnam proposes a "second naivete". This means that the concepts we use in our lives can be considered true, even if metaphysical realism is untenable. Because, what we think in our lives must have weight. Putnam wants to be naive by affirming our common sense intuitions, and he wants to be a realist by taking them to be true. Putnam writes we should not:

give up on concepts that, whatever our philosophical convictions, we employ and must employ when we live our lives. Until now, I have not mentioned the word 'pragmatism' in these Dewey lectures. But if there was one great insight in pragmatism, it was the insistence that what has weight in our lives should also have weight in philosophy."

Again, Putnam does not want to dismiss our experience in the world. As Putnam has become fond of saying, pace Wittgenstein, "this is where the spade turns". We cannot find final foundations for knowledge claims, except that they rest on our interests, our values, ourselves, as the bedrock. It is from the pragmatists that Putnam salvages the notion that the
first-person point of view must be taken seriously. So, far from trying to achieve, mind independent, subject independent, "truth", Putnam thinks we must pay attention to the subject and his/her experience. We have as (capital 'R') Realists always looked for a truth which is true from an impartial third person perspective. Putnam cites Rawls and Kant as examples of the idea that one can have third-person knowledge in ethics, for example.¹¹

Putnam thinks that although we can use instrumental rationality, our ends are only yielded by reflection. He says: "the alternative to instrumental rationality is not transcendent knowledge but reflection"¹². Further, many problem we experience in such fields as value theory rest on an unrealistic expectation of justification. We cannot find an algorithm to justify knowledge. "Most puzzles about the very 'possibility' of normative knowledge spring from a too narrowly empiricistic picture of how knowledge is gained and how actions are justified."¹³ In other words, we cannot apply the epistemological paradigm of the positive sciences to other domains of inquiry. We think rape, for instance, is wrong by our experience in the world, empathy, and so on. Putnam finds much in common between himself and pragmatism. For instance, like Dewey, he sees a weak distinction between ethics and science, because both rest on value commitments, agreement, and so on.¹⁴ The spirit of Putnam's approach is to attribute weight to our intuitions about things. As a rule of thumb,
Putnam says, we should ask for a reason, justification, when we are asked to doubt our sensibilities. We do not start, pace Descartes, by doubting everything. Even from the fact that we may have some perceptions that are erroneous (e.g. the stick in water, or the tower example), do we want to conclude that because some of our perceptions are imprecise, there is no world? Putnam's point is that we should not give up our experience in the world so quickly.

Putnam's attitude toward philosophy begins by noting that we should not think that there are philosophical problems, as if there were solutions: there are merely issues. It is fitting that Putnam ends one of his books, in fact, by an essay on a poet, Alexander Pope, who he sees as a way to deal with philosophical issues. Philosophical issues are not, as should be obvious, new. The issues are new in the way they relate to us, since we live in a different world now than did the ancients, according to Putnam.

(5.2) The Future. We have only glimpsed what Putnam suggests we should do, as opposed to trying to find the foundations for knowledge. One thing we have seen is that whatever philosophy does, he does want it to respect our experience in the world. In contrast to philosophers who have merely wished to rationalize science, ground the methodologies of science, Putnam says we need to
reflect on the world with our hearts and minds. Putnam writes:

Most constructions in analytic metaphysics do not extend their range of scientific knowledge, not even speculatively. They merely attempt to rationalize the ways we think and talk in the light of a scientific ideology. But I am growing tired of criticizing the errors of contemporary philosophers, analytic and non-analytic alike. In the area of this book I want to sketch a better way in philosophy. I shall not do that by issuing a blueprint for a new philosophy, or even a manifesto. At the best, blueprints and manifestos always involve a good deal of fantasy, and we have seen enough fantasy in recent philosophy - both the fantasy of being scientific and the fantasy of putting an end to the claims of truth and reason. The only way I know of pointing to a better way in philosophy is to engage in a certain kind of reading, a reading of the work of some philosophers who, inspite of their mistakes and their flaws - and what philosopher does not make mistakes and have flaws? - point the way toward and exemplify the possibility of philosophical reflection on our lives and language that is neither frivolously sceptical nor absurdly metaphysical, neither fantastic parascience nor fantastic parapolitics, but serious and fundamental honest reflection of the most difficult kind.

Again, Putnam wants to avoid metaphysical realism and scepticism/idealism. The future of philosophy should attempt a serious reflection on our lives, a reflection on existence. "At its best, philosophical reflection can give us an unexpectedly honest and clear look at our situation, not a 'view from no-where' but a view through the eyes of one or another wise, flawed, deeply individual human being." In this quotation we can, now, recognize some motifs of Putnam's thought. Namely, philosophy is expressive of an individual's reflection on his/her being-in-the-world. Far from achieving a method to give us objective knowledge, we have knowledge based on subjects; we have human knowledge.
It is with Dewey that Putnam sees the avoidance of both scepticism and metaphysical realism. With Dewey, Putnam wants to bracket (modern) epistemology, and take it as a hypothesis. Even though we do not have foundations for knowledge, we still have knowledge, says Putnam. Philosophy must not, claims Putnam, become scepticism, or merely elucidate the ethos of the times, as the positivists did, for, even scientific realism, asked us to dismiss our world as illusory; in contrast, philosophy can offer an honest reflection on the world.

Putnam suggest, what he calls, a deliberate naivety. "The problem now is to show the possibility of a return to what I called 'deliberate naivety', or what James called 'natural realism'. Nevertheless, it seems to me that is the direction in which we need to go." Sometimes Putnam will characterize his view of philosophy as a movement from "familiar to familiar". That is, we begin in the world, and then study philosophy. Those who take philosophy seriously may be thrown into a pit of scepticism and doubt, being good Cartesians. Yet, there is a return to the world from solitary scepticism and metaphysical fantasies, to the world: from familiar to familiar." Our experience is the ground, ultimately, of our knowledge; this is "where his spade turns". "Recognizing that there are certain places where one's spade is turned; recognizing, with Wittgenstein, that there are places where our explanations run out, isn't saying that any particular
place is permanently fated to be "bedrock", or that any particular belief is forever immune from criticism. This is where my spade turned now. This is where my justifications and explanations stop now." To be a naive realist, then, does not mean blindly accepting whatever is taken to be true. What we take to be knowledge changes, and is open to rational criticism. Knowledge is justified by being rationally acceptable, as specified by a method. Yet, we cannot justify these methods, without committing to certain values. A justification of these values is not possible apart from subjects, thus, justification cannot find the foundations a Realist would have hoped for. Putnam rejects "the project of Epistemology with a capital 'E' - the project of a Universal Method for telling who has 'reason on his side' no matter what the dispute..." Putnam's idea of what philosophy should be doing harkens back to what he takes philosophy to have been traditionally doing. He writes that he wants to "redirect philosophical energy to one of its very traditional tasks - the one task philosophy should never abandon - the task of providing meaningful, important, and discussable images of the human situation in the world." (5.3) Naive Realism. Putnam has tried to suggest the direction philosophy should go, after metaphysical realism is abandoned. With dropping metaphysical realism we concurrently drop foundationalist epistemology which tries to give an ultimate justification for knowledge claims. That is, it tries
to give a justification for knowledge claims that are true for realists, independently of minds. Putnam's brand of realism, is a self-characterized, naive realism.

Putnam's thought concerning the future of philosophy is consistent with internal realism in a few ways. First, Putnam wants knowledge to be neither a matter of idealism or metaphysical realism. Rather, he wants a "human knowledge", knowledge from a human point of view. Putnam wants knowledge which does not conflict, secondly, with our experience in the world, where we see tables and chairs, sunsets and blue skies. Putnam wants a philosophy which will not eliminate ethics or other domains of inquiry we take to be integral to our lives, because he does not want to end up like Hume, where one's work, philosophy, contradicts one's life, for instance. Third, he still maintains the fact of conceptual relativity as consistent with realism. Fourth, just as ideal epistemic conditions were defined by human limits, as were our values and interests, Putnam still maintains that there are limits on how we can think of the world. We cannot, for instance, think it is alright to commit murder. Our knowledge is based on what we see as rational, which is confined by our conception of human flourishing. Whether Putnam is still willing to call himself an internal realist is not known. He may not be committed to it word for word (if such a formulation was possible), but the spirit of internal realism is still very much present and growing in Putnam's recent thought, in the
idea of human knowledge.

Putnam's thought on what philosophy should be doing falls out very easily from what he thinks philosophy should not be doing. More precisely, Putnam suggests an attitude we can adopt towards philosophy. If philosophy cannot, pace metaphysical realism, give us the one correct description of the world, then, perhaps, we should see philosophy as a reflection on the human situation, our situation. As such, philosophy is a reflection from the point of view of a given author: to this extent it is personal expression. Yet, the reflection is not frivolous in that it is based on our experience and need not merely accept the values and truths one finds oneself surrounded by: one can criticized one's form of life, and thus, contribute to its evolution, as the men and women of each epoch inevitably do. Also, I might add, the idea of philosophy as containing a element of personal expression is not offensive unless we assume different people see the world in radically different ways. But, it is also possible that the reflections from one person may reveal things common to all persons (e.g. Dostoevsky). The fundamental tenet of existential epistemology is that our knowledge must be based on a reflection of existence. The ground of our knowing, where our spade turns, is our bloody lives. Philosophical theories, like Leibniz, are not so much right or wrong, true or false, but different visions, insights into the nature of Being. In this way, philosophy is like art, it tries
to say something which cannot be said, describe the undescrivable. Philosophical theories merely point. But, this pointing is always based on the here and now, and is thus a seeing of what is present.
The Old Way: Hermeneutics and Argument By Analogy

I want to end our discussion on Putnam with a more extended consideration of what it is possible for philosophy to do. The essential ideas have already been discussed and it is my purpose to expand further on them here. I require, therefore, the patience and indulgence of the reader, in this very dense part of the text. It has long been that western man has tried to come to terms with science, as to find some place for other types of discourse (e.g. religion). Some, of course, have merely wished to eclipse all discourse into that of science, under full influence of the enlightened spirit. Hermeneutics as a new approach offers a safe-guarding of areas of discourse outside of the positive sciences, the human sciences. I believe that the method of hermeneutics, if we can call it that, is similar to argument by analogy, as employed by Aquinas. Here, I will explore the relation between these two, so as to explore fully Hilary Putnam's call for a pluralistic episteme, for a different criteria of rational acceptability for different domains of inquiry.

I will begin by elucidating the problems hermeneutics
tried to solve, and the solutions it offered. Secondly, I will examine Aquinas' argument by analogy. Thirdly, I will argue that the motivations for argument from analogy, and (some of the motivations) for hermeneutics are similar. Further, I will argue that hermeneutics can be seen to offer a similar methodology to argument by analogy. In so doing, we can see an attitude towards the relation of theory to truth emerge which is, what I call, symbolic.

(6.1) Hermeneutics. According to Gadamer, philosophical hermeneutics, as distinct from hermeneutics, has sought to explicate a general theory of human understanding. As a general theory of understanding, philosophical hermeneutics transcends the instrumental way in which Aquinas employs argument by analogy. Yet, in relation to specific problems, which I shall call "the crisis of method", we can see many points of contact between hermeneutics and argument by analogy.

The general problem of knowledge has been to bridge the gap between the subject and the object. Gadamer points out, however, that it is only possible to have any understanding at all because we come to our experiences with pre-understandings, prejudices. "Understanding always implies a preunderstanding which is in turn prefigured by the determinate tradition in which the interpreter lives and that shapes his prejudices." The only way that we can have any understanding of the world is because we come to the world with certain prejudices. Our mind is not a tabula rasa upon
which we merely see the world, for Gadamer. So, in response to
the epistemological problem of how I, a subject, can have
knowledge of the world, as an object, Gadamer is pointing out
that all knowledge requires pre-understanding, and further, it
is by interpreting the world that we become subjects.

The human sciences are interested in understanding human
beings. To understand ourselves as human beings (as opposed to
anatomically, for instance), requires an excavation of our
prejudices, for, it is through an uncovering of our
prejudices, our historical consciousness, that we gain insight
into our selves, for Gadamer. J.G Droysen remarks: "History is
the know thyself of humanity, the self-consciousness of
mankind." Gadamer says: "Because the human sciences
contribute to human self understanding even though they do not
approach the natural sciences in exactness and objectivity,
they do contribute to human self-understanding because they in
turn are based in human self-understanding." So, although
the human sciences do not approach the exactness of the
positive sciences, they do contribute to human self-
understanding. The human sciences, further, contribute to our
self-understanding because they excavate what allows
understanding, such as prejudice, pre-understanding, and so
forth.

It is now that we have hit upon the issue which I want to
highlight, the problem of method, the crisis of method. That
is, the positive sciences have adopted a method which
canonically establishes, verifies, knowledge claims. So, as Gadamer has already anticipated, should we, those concerned with the human sciences, adopt the method that has been so successful with the hard sciences? In fact, Gadamer takes as his point of departure, regarding this question, Aristotle. For, it was Aristotle who recognized that each corpus of knowledge requires a method that is commensurate with its object. He writes: "According to Aristotle, for example, the idea of a single method, a method which could be determined before even having penetrated the thing, is a dangerous abstraction; the object itself must determine the method of its own access."

"It is the object itself that should, says Gadamer, determine the method one decides to utilize to apprehend the object in question. Therefore, all knowledge determined by a single method is dangerous. We can say, in fact, that a single method will lead to a single type of knowledge. And, as Gadamer notes, we have seen this homogeneity of knowledge under the sway of the epistemological paradigm set out by the natural sciences.

Gadamer notes that it was Dilthey who saw the need to justify the human sciences as a legitimate mode of inquiry even though the human sciences need not hold to the epistemological paradigm of the natural sciences. For Dilthey the certitude and precision of natural science is an exception and not something that human understanding need emulate. "Dilthey stressed that we can only know from within a
historical perspective since, as it happens, we are ourselves historical beings."⁵ We are interpretive beings, according to Dilthey. Although, and this is where Gadamer sees the weakness in Dilthey, he thought different perspectives were a mere road to the absolute. Dilthey, however, offered, by posing the question, a place to begin a serious investigation into understanding the human being. The key word that Gadamer picks up on is "understanding". With Dilthey, Gadamer wants to emphasize his distinction between "explanation" and "understanding". For example, to explain how a clock works requires causal analysis. Understanding, on the other hand, suggests a more holistic approach. Pertaining to "explanation", Rainbow and Sullivan remark:

The then new discipline of mathematics was expected to provide this norm. It offered an ideal of intelligibility according to which the meaning of any term or element in a system is unequivocally determined in a rigorous manner according to its relation to the other elements within the system.⁶

Notice it is, like a clock, that one can understand the effects of the clock by drawing strict causal relations, e.g. \( X > Y > Z \) etc. In contrast to strict deductive causal explanation, there has been renewed interest in a more holistic approach:

Gregory Bateson's recent attempt to apply models from systems theory to the problems of the relations of mind to society and Jean Piaget's development of the structuralist project represent significant advances over what Piaget terms the atomistic empiricism of causal explanation in social science. For both the key focus is upon holism, for which Bateson uses the metaphor of ecology.⁷
Now, it is very interesting to evoke the metaphor of ecology. For it is with ecology that a holistic approach, in comparison to a strictly deductive, atomistic explanation paradigm, was required due to the insufficiency of that model. Also, the idea of ecology was taken to be peripheral by the dominant institutions, and is only now receiving the attention it deserves. Similarly, the idea of understanding as opposed to explanation, for some, marks a move away from rigour, and serious work. Yet, it is due to careful attention to the object, as Gadamer has called for, and the limits of the explanation model itself, that has brought upon us the possibility of radically different epistemic criteria for different domains of inquiry.

To sum up, Gadamer, drawing on Dilthey, has drawn a distinction between explanation and understanding. We can define the problem as one of epistemological hegemony, to state the issue in a polemical fashion. The direction in which Gadamer wants to head starts with the insight from Aristotle, that the nature of the object should determine the method employed. So, for instance, where the behaviourist attempted to explain the human being on the dominant scientific paradigm, they explained the human being only at the expense of all that was human. What is called for, or suggested, then, is an epistemological paradigm commensurate with its object, in this case the human being. Consequently, we can infer at this point that we can achieve understanding regarding the human
being but never explanation (in the technical sense). As already stated, it is hermeneutics that attempts to give a general account of human understanding. The salient feature I want to call attention to, for this investigation, is that different domains of inquiry call for different methodologies (to use the term broadly), different canons of rational acceptability for different areas of inquiry.

(6.2) Is Truth Self-Evident? Let us now turn our attention to Thomas Aquinas. In question two of the Summa, we find Aquinas addressing three questions, each of which is divided into three questions, and those are again divided into three further questions. We are particularly interested in the question of divine essence. This question is divided into three questions, and I will preoccupy myself with the first two: is the proposition "God exists" self-evident, and is the proposition demonstrable.

The first objection to God's existence that Aquinas considers here is whether the knowledge of God is innate, for what is innate is self-evident, according to Aquinas. In response to this objection, Aquinas points out that it is not that the knowledge of God is innate. What is innate, however, is our desire to know God. So, the knowledge of God is not self-evident.

The second objection asserts that as soon as the word "God" is understood God's existence is self-evident, because, existence is entailed (or can be deduced from) the meaning of
the word "God". In response, Aquinas notes that even if everybody understood the definition of "God" they may still hold "that it exists mentally". So, we cannot hold that God's existence is self-evident by definition alone. Although Aquinas, in the third objection, affirms the self-evidence of truth, he goes on to say: "The existence of truth in general is self-evident but the existence of Primal Truth is not self evident to us."

Seeing that the knowledge of God is not innate, hence self-evident, Aquinas considers if the proposition "God exists" can be demonstrated. Objection one states that God is an article of faith. "But what is of faith cannot be demonstrated, because a demonstration produces scientific knowledge; whereas faith is of the unseen. Therefore it cannot demonstrated that God exists." Although Aquinas does not see faith as illegitimate, he maintains that just because something is an article of faith does not entail that it cannot be proven.

In the second objection, Aquinas states that we do not know of what God's essence consists, but only of what it does not consist in. We cannot, therefore, prove, demonstrate, what we do not know to be the object of our investigation. In response, Aquinas says that we need not deal with God's essence but merely what we understand by the word "God", which we derive from the effects of God. Also, when the existence of a cause is demonstrated by an effect, the effect takes the
place of the cause. So, it is by the effects of God that we can know God.

The third objection states that if God was demonstrable it is from his effects. Yet, the effects of God are not proportionate to the cause, which is God, since the effects are finite and the cause infinite. Since a cause cannot be demonstrated by an effect that is not proportionate to it, God cannot be demonstrated because his effects, as already stated, are not proportionate to him. In response, Aquinas admits that one cannot attain perfect knowledge of a cause by effects that are not proportionate. "Yet from every effect the existence of the cause can be clearly demonstrated, and so we can demonstrate the existence of God from his effects; though from them we cannot perfectly know God as He is in His essence."12

The heart of Aquinas's argument is found in a quotation he cites from the Apostle: "The invisible things of Him are clearly seen, being understood by the things that are made."13 Aquinas also writes: "the existence of God, insofar as it is not self-evident to us can be demonstrated from those of His effects which are known to us."14 Aquinas notes that there are two types of demonstration, a priori, and a posteriori, which argues from effect. Since, as is already established, knowledge of God is not innate, self-evident, knowledge, it must be based on demonstration a posteriori. Further, we learn the existence of what we do not know from what we do: the world. In other words, it is by starting with
what we do know that we can achieve knowledge of God. As with Aristotle, by knowledge of creation, we can gain knowledge of the absolute, Being.

(6.3) Argument by Analogy. Although Aquinas thinks that the existence of God can be demonstrated from His creation, it remains to be seen how this demonstration would proceed. Thus, it is now that we need to turn our attention to argument by analogy, for it is this style of argument that provides a demonstration of God.

(i) Metaphor. Upon considering the nature of sacred doctrine, Aquinas asks whether metaphor should be used in sacred doctrine. In the first objection, he says that scripture should not use metaphors for this is the mark of poetry and not science. Thus, theology should emulate the higher science not the lower. As a rejoinder, however, he notes that poetry and scripture use metaphor for different purposes. The former uses metaphor for pleasure, the latter because it is useful and necessary (for explicating truth).

In the second objection, Aquinas notes that it is the object of doctrine to make the truth clear, but, metaphor seems only to obscure truth. Aquinas offers two points in response to this objection, of which I will only mention the stronger. He says that the truth of sacred doctrine "does not allow the minds of those to whom the revelation has been made, to rest in the metaphors, but raises them to the knowledge of truth..." In other words, metaphors serve as a vehicle which
can transport the devotee to what is true. Metaphors point to what is sacred by what is profane. In the third objection Aquinas asks that if we are to argue by analogy, should we not use higher creature as examples of divine likeness? He asks this question because there appears in scripture reference to lower creatures. In response, Aquinas offers three replies. First, arguing in this manner preserves men's minds from error by remembering that we are not giving literal descriptions of divine truths. For, if we used nobler bodies, higher creatures, one might mistake them for the truths of scripture. Second, knowledge we have in this life of God is largely what he is not as opposed to what he is, thus, using lower creatures is not problematic. Thirdly, and perhaps the weaker argument, he says using lower creature is a way to hide divine truths from the unworthy. This last reason is instrumental insofar as it is concerned with the relation between knowledge and the knower. That is, scripture caters to the knower, so as to exclude the unworthy and help those lacking in intellectual powers. In short, instrumentally, metaphor teaches what is not of this earth to those who are.

The tenth article asks whether a word can have different senses. The first objection states that when a word has different meanings only confusion is produced. The reply, however, states that we do not end up with a equivocation because it is not as if one word denotes several objects; rather, many words can signify the same thing. For example, of
course, Being, good, beautiful, all apply to God, for Aquinas; the different terms all signify the same thing.

Beyond the objections and response, Aquinas offers some other general arguments why a word can have different senses. First, scripture is different from other texts insofar as most sciences use words to signify things; but, in scripture, the things signified have the quality of being a signification. That is, usually, a word signifies a thing, but here a word signifies a thing which, in turn, signifies something beyond itself, Being. "So far as they signify what relates to eternal glory, there is the analogical sense." For example, when we speak of "God's arm" we do not think God has arms. Rather, we are indicating the operative power God has, as a mover. Just as a hand can move a cup, God moves, animates, life.

(ii) Analogy. In question thirteen of the Summa, Aquinas considers the names of God. It is here we can get an insight into argument by analogy at work. The first article asks if we can attribute a name to God. Objection one asks if God is ineffable. In reply, Aquinas writes: "The reasons why God has no name, or is said to be above being named, is because His essence is above all that we understand about God and signify in word." Again, it is because we cannot talk about truth literally that we must utilize metaphor and analogy.

Objection two states that words are either abstract or concrete. Since, however, God is neither abstract or concrete, it does not seem we can apply words to Him. In response he
says we use words only to point to God. "And as God is simple, and subsisting, we attribute to Him abstract names to signify His simplicity, and concrete names to signify His subsistence and perfection, although both these kinds of names fail to express His mode of Being, for as much as our intellect does not know Him in this life as He is." The recurrent theme arises, when we try to speak of something that we cannot fully grasp in our earthly existence, we can only argue by analogy from the world around us.

Objection three says that language is constituted by nouns which signify substances with qualities; verbs that signify substance with time; and pronouns deal with relation. But none of these apply to God because He is has not quality, accident, or time. Thus, it would seem he cannot be named. Again, different words reveal different aspects of God, which in themselves, are not different (e.g. Goodness and Being). So, for instance, verbs, by indicating time point to God's eternity. "We can understand and express simple eternity only by way of temporal things, because our intellect has a natural affinity to compound and temporal things." Again, we try to talk about what is above the world by what we are most acquainted with, the world.

The second article asks if a name can be applied substantially to God. Objection one states that since every word expresses what God is not, or some relation of something following from God, we cannot apply a name to Him
substantially. In response, Aquinas concedes that names signify him in an imperfect manner. "None of these names is perfectly expressed what He is; but each one signifies Him in an imperfect manner, even as creatures represent Him imperfectly."\textsuperscript{20} The way we speak of God, Being, is only analogical, and not literal.

The third objection notes that we name a thing as we understand it. Since we do not know God in this life substantially, we cannot apply a name to Him substantially. We cannot know God as he is in himself, but we can "know Him accordingly as He is represented in the perfection of His creatures; and thus the names imposed by us signify Him in that manner only."\textsuperscript{21} The names we apply to God indicate Him in an indirect manner. When we apply words to God we do not apply them as attributes; for example, God does not have goodness, but is goodness.

The third article asks if a name can be applied to God literally. The first objection begins by noting that it does not seem that we can apply a notion literally to God, because the names we apply to God come from creatures (His creation), as when one says God is a lion. In reply, Aquinas notes, names can signify their object in different ways. Some names, for instance, signify a perfection moving from God to his creation, and the imperfect way a creature receives perfection is also part of the signification. Other names, like goodness, belong more to God than creatures, says Aquinas.
But, in the case of words like goodness, their mode of signification applies to creatures and not properly to God. Thus, even though some words are more of the domain of God their mode of signification is still of his creatures; this fact exemplifies the maxim already established: we talk about what we do not know per se, God, by what we do, the beauty of His creation.  

The fourth article asks if the names we applied to God are synonymous. The first objection proceeds as follows. By "synonymous" we understand two words which mean the same thing. Since God is not a composite, the different words we apply to Him must be synonymous. The reply states that the words are not synonymous but the thing they signify is one thing; this is because different words illuminate many aspects of the same thing, God.

The second objection: If God is one thing and we have different words that apply to him, this means we have different ideas. (assuming each word is an idea). Yet, to have different ideas that do not have a referent is a "vain idea". The ideas embodied in the different words are not vain because the simple reality of God is represented to us, imperfectly, as a manifold (e.g. the good, beautiful...). As the third reply states: "He is one in reality, and yet multiple in idea, because our intellect apprehends Him in a manifold manner, as things represent Him."  

The fifth article, dealing with the names of God, asks if
what is predicated of God and his creatures is done so univocally. The reply given to the first objection answers the question why the predication of God and His creatures cannot be univocal. Although Aquinas notes, all equivocal predication must be reduced to a univocal one to secure the meaning of terms, God is neither purely univocal or equivocal. If God was purely equivocal, he could not produce his own likeness as Man. All univocal predication is reduced to one first non-univocal agent, Being.24

The thrust of these comments is to emphasize that pure equivocity would mean that we could not say anything about God based on his creation, because words would mean something different when applied to His creation as opposed to Him. "Therefore it must be said that these names are said of God and creatures in an analogous sense, that is, according to proportion."25 In line with the gist of Aquinas' approach, the names we apply to God are names by analogy, because the beauty of a flower is not Beauty, as Being. Yet, the word "beauty" can be used, analogically, to indicate beauty/God.

The sixth article asks if the names predicated of God are done so primarily of creatures. The first objection states that names seem primarily predicated univocally of creatures rather than God, for, we know creatures before God, and names are signs of ideas, it would seem the names we use apply to creatures. Again, since words can function in different ways, we find words that are metaphoric, which apply to creatures
primarily, and other words which exist in God in a "more excellent way". Since, however, we first know our world, we apply names to God through a mode of signification that belongs to us. Further, even though words are first predicated of creatures, and primarily of them, this does not apply to metaphor, and all names, as already stated.²⁶

The eight article asks an interesting question: Is God the name of His Nature? The second objection states that we only know God through his effects (the world), so the name God cannot signify His nature. Aquinas says, however: "The name God signifies the divine nature, for this name was imposed to signify something existing above all things, the principle of all things, and removed from all things; for those who name God intend to signify all this."²⁷ In sum, the name God is used negatively, insofar as it indicates more than X, Y, and Z. We use the word God to signify not only the operation of God, but also the cause, which is God.

The ninth article asks whether the name God is communicable. The first objection states that the name does seem communicable, for, if one understood the name, one would understand the thing it signifies, the divine nature. In reply, Aquinas says, the divine nature is only communicable according to the participation of similitude. The name God is communicable by similitude but not properly. All words signify universals, like lion, but God is a single thing (not a class). It is impossible to have a word or idea of a single
thing, thus, God is incommunicable. But, we can name his attributes by similitude, which, in turn we use to signify, indicate, his divine nature. Divine nature as such cannot be communicated per se.

The tenth article asks "whether the name God is applied to Him univocally, by nature, participation and according to opinion?" To answer the questions posed in this article, Aquinas draws a distinction between predication and signification. One can predicate a thing, an idol, as God, but one cannot signify what one does not know. In other words, to indicate the truly divine nature, one has to know God (to some extent): "But if any one should be quite ignorant of God altogether, he could not even name Him, unless, perhaps, as we use names the meaning of which we know not." We can say, therefore, that God, the name, is used equivocally, by opinion and to indicate the true God.

The eleventh article asks whether the name, "HE WHO IS", is the most proper name of God. The first objection states that the name, "he who is" is not the best name for God, because His name is incommunicable. In response to this objection, Aquinas makes some clarifications about the naming of God. "He who is", Aquinas says, is a good name for God insofar as it indicates existence; "God" is a name which is better to indicate divine nature; and finally, "still more proper is the Tetragrammaton, imposed to signify the substance of God itself, incommunicable and, if one may so speak,
The third objection proceeds as follows. Since most divine names suggest a relation between God and His creatures (e.g. creator), "He who is" does not seem like a good name, because it does not indicate this relation of God to His creatures. Aquinas say that not all names of the divine have to indicate the relation of God to His creatures; it is good enough that the terms we use show some of the perfection that flow from God to His creatures. The first of these, again, is existence for which comes the use of the name, "He who is". This name is most properly applied to God for numerous reasons, which Aquinas also offers. For instance, "He who is" (Being), indicates existence itself; it is the most universal name; and given that we cannot know the essence of God in this life, the less determinate and more universal the name is, the more it applies to God. Again, we have to recall our predicament for Aquinas. That is, we have words which we use to apply to corporeal, finite things. From this world we use the words analogically to indicate what is divine (and cannot be named per se.). Aquinas says, in this beautiful passage:

HE WHO IS, is the principal of all names applied to God; for comprehending all in itself, it contains existence itself as an infinite and indeterminate sea of substance. Now by any other name some mode of substance is determined, whereas this name, He Who Is, determines no mode of being, but is indeterminate to all; and there it denominates the infinite ocean of substance. 

In the last article, "the names of God", the twelfth, Aquinas asks "whether affirmative propositions can be formed
"The first objection states that we can say things negatively about God not positively. That is, we cannot name him, his essence, but we can say what He is not. In response, Aquinas notes, we can say things about God, which are affirmations, but they may be vague.

The second objection proceeds as follows: It is first established that God is not a subject because he is absolutely simple, and simple things cannot be subjects. Next, it is noted that we can only predicate subjects. Therefore, it follows, God cannot be predicated of. In response, Aquinas notes that our intellect cannot fathom simple subsisting forms as they are in themselves. Thus, we apprehend a simple as a subject, as to be able to make positive affirmations about it. Again, the gist of all the responses is to illuminate the proportionate difference between God and us. We use terms to indicate God the way Van Gogh painted trees as if they were reaching to touch the heavens. They never reach there per se, but they point there. Aquinas writes: "God, however, as considered in Himself, is altogether one and simple, yet our intellect knows Him by different conception because it cannot see Him as He is in Himself...Therefore the plurality of predicate and subject represents the plurality of idea; and the intellect represents the unity by composition."

To reiterate, Aquinas started by noting that the existence of God is not a self-evident, a priori truth. Thus, God must be established by demonstration. It is possible to
make an argument for God, and this argument is one by analogy. First, we can name God, yet we do so imperfectly. Our words are of this world, and only relate to God proportionately. We can also name God substantially, because some words apply to God "in a more excellent way" than to His creation. Third, the words we use to describe God are synonomous, in that, they indicate the same thing, God, yet reveal His different aspects to us (e.g. beauty, goodness, etc.). Fourth, although God is incommunicable, we can point to Him, as what is beyond. Fifth, "He who is" is seen to be the best name for God, because it indicates His existence. Lastly, although we can say many things about God negatively, like He is more beautiful than X, we can also say things about Him positively, even though these assertions are bound to be vague. In sum, we can speak of what is above the world, God, by His creation, the world. We use the world, and the words that relate to it, to analogically argue for God.

(6.4) The Comparison. There are four areas that I would like to draw attention to regarding point of comparison between the methodology of Hermeneutics and Aquinas's argument by analogy, and I will deal with each one in turn; from this point we should be able to understand the moral of this investigation, i.e. the conclusion.

First we have to turn our attention to the problem that hermeneutics was reacting to. I do not contend there are not other things that hermeneutics has to offer, but that goes
beyond the scope of our investigation here. At any rate, hermeneutics reacted to what I called a crisis of method. The crisis was, for some positivists, lived out as a (supposed) liberation from metaphysics, where all knowledge would be scientific knowledge (as defined by the practitioners of science and philosophers of science), and all else would be conjecture, superstitions and so forth. In fact, the old dichotomy between sophia (wisdom) and doxa (opinion) now became science and not-science/pseudo-science. I am not suggesting science had (has) nothing to offer, since it is obvious that it does. What I am questioning, taking my leave from Heidegger, is how obvious the truth of science became, such that we can say we live in the technological milieu.

The force of science/technology posed a crisis because all disciplines rushed to fall under the umbrella of legitimacy, science. To be legitimate meant adopting a certain method (or perceived method), that entailed certain inherent values: for example, precision, prediction, control, manipulation, quantifiability and so forth. Hermeneutics offers a legitimatizing of the human sciences with an approach that is honest. That is, hermeneutics began by considering the object of the human sciences, Man (as knower). To this end they posited a term, "understanding", which marked a distinction from "explanation". Where explanation was the mark of the positive sciences, understanding was now hailed the goal of the human sciences. The new goal, understanding,
allows a freedom from the epistemological paradigm of the positive sciences (as perceived by the human sciences). As opposed to the precision of causal explanation, understanding recognizes that there are worthwhile insights to be had concerning humans that do not live up to the paradigm of the positive sciences. Thus, the other disciplines were given not only a new lease on life but could pursue their research honestly. That is, they did not have to portray themselves to be doing something they were not doing (and, perhaps could not do), science

Aquinas has a problem of method that requires a different type of demonstration than would be given for most corporeal objects. That is, Aquinas wants to discuss God. Being well aware that he cannot do this in the way one can demonstrate the existence of a tree, he employs argument by analogy. In fact, we are forced, he says, to use such a type of argument; for, our terms are based on knowledge of the world we experience on a day to day basis. We can never, he says, know God essentially during our lives. Thus, both the human sciences and theology have a problem of method.

So, what type of knowledge can we have of God? Well, perhaps the term understanding would not be inappropriate. We can have understanding. For instance, when we say "God is a lion", we can recognize the operation of strength that we wish to signify of God. Our understanding may be vague and imperfect, yet it is understanding nonetheless. The point is
that we can have knowledge that is legitimate, and perhaps existentially more significant than a new element for the periodic table. Secondly, then, we can use the term "understanding" to apply to both hermeneutics and Aquinas' style of knowledge. Given that there is a difference between being face to face with God and gaining some understanding of Divine essence as a corporeal being, this may be an appropriate term. The technical term, "understanding", indicates the goal of the human sciences (human self-understanding), and Aquinas' knowledge of what is "above" the world.

Thirdly, as for Aristotle, one had to apply a method that was congenial with the object of study. The study of hermeneutics and Aquinas' systematic theology both show a method that is interpretive. That is, Aquinas argues from the effects of God, His creation, to God. As he says, we know God through His creation. It is through the beauty of the world that we learn of the Beauty of God, for it is the perfection of God that flows into His Creation. We, however, experience the effects which lead us back to the cause, which is, for Aquinas, God. What is interesting about Aquinas, and Aristotle, in this respect, is that one does not have to renounce the world to achieve knowledge of the divine (e.g. Plato), and in this way, it is actually through (an interpretation of) the world one knows the absolute. Here lies Aristotle's claim to empiricism. What is troubling about the
idea of interpretation, is found in the question "how do you know what is the correct interpretation?" Well, this is the whole point, which we may not like, but still, nevertheless, confronts us. How do we know what is the correct interpretation? Of course we cannot appeal to any verification dogma or we would not have the crisis of method which argument by analogy and hermeneutics is a response to. Simply put, we cannot prove (as understood by scientific standards of verification and justification) many assertions about God or Man. But, we can make arguments, put forward theses, based on our experience in-the-world, that not only provide genuine insight but enrich our live by helping us to understand things better. With metaphysical understanding comes peace. Does not the history of ideas (Freud, Marx, etc.) show us that putting forward arguments is exactly what we have been doing (regardless of the claim to science)?

Fourthly, we find certain characteristics among argument by analogy and hermeneutic understanding in the knowledge yielded. Many of the characteristics have been given such a pejorative reading by the children of the enlightenment, it is hard to achieve a more balanced view. Indeed, scientific realists find the very word "interpretation" offensive, as would be anticipated by any hermeneutist. At any rate, we find terms like "imprecision" and "vague" used by both Aquinas and hermeneutics. We have to understand these terms in context. That is to say, we have to understand such terms as offering
a distinction from science, and being commensurate with their objects of study from a human point of view. So understood in this more technical way, they should not imply some sort of sloppy "anything-goes" syndrome.

(6.5) The Lesson. The moral or point can be summed up very concisely. We have to apply a method that is congenial to our object of study. To do this means accepting, what Putnam calls, a plurality of methods, for different areas of inquiry, different canons of rational acceptability for different areas of inquiry. There is room, thus, for different types of knowledge all of which contribute to what Putnam calls "human flourishing". Further, philosophical-metaphysical knowledge is an expression of what is divine in the world. Here we have found a new, or more correctly, old way in which to understand the relation of theories to truth. Although theories may not correspond to \( \text{real}_f \) (the correspondence theory), neither must we view truth idealistically as a theoretical construction (the coherence theory). Rather, we can view theories symbolically; theories can be seen to indicate or point to the truth, which is beyond the "reason", or "rational justification" of modernity.

Putnam abandons metaphysical realism due (for one reason) to a conceptual imperialism, where one conceptual scheme is taken to be true, while other schemes are taken to be false or unreal. In order then to affirm truth at different levels of description, thus having truth at a chemical, biological,
psychological, social level, and so on, Putnam disregards the idea that any one type of discourse is capital "T" true. As he says, in Meaning and the Moral Sciences, "But the question which kind of 'true' is really Truth' is one that internal realism rejects." Put differently, Putnam's internal realism does not favour one level of description, discourse about atoms and photons, or hearts and lungs, for example, as being the one correct description of the way the world really is. Putnam's solution is to just abandon metaphysical realism because he thinks it contains an inherently imperialistic element, as he tried to show in his critique of scientific realism, which is just an ad hoc metaphysics for him.

Agreeing that we have to affirm different levels of description, different conceptual schemes or types of discourse, I do not think we have to abandon metaphysical truth to do this. There are different ways in which to solve the problem Putnam raises. One way is to see different descriptions of the world, different theories as symbols which point to or indicate truth, the divine. Drawing on the scholastic notion found in Aquinas, it is possible to view different types of knowledge, ethical, social, physical, and so on, as all symbols, such that no one level of description annuls the other; therefore, neither does one have to abandon truth, due to the problem of ontological imperialism.
Part 2

Reason
"Reason" For The Ancients

The first, and greatest, reaction to the enlightenment, the age of reason, was the romantic movement. The romantic poets and thinkers were in some sense both resisting the enlightenment values and still caught up in them insofar as their thought emerged out of a clash with the enlightenment, which thus helped to define their own thought. Since the romantic thinkers reacted against enlightenment values, it should come as no great surprise that they would offer resistance to the sine qua non of the enlightenment: the idea of reason. Interestingly enough, the reaction against the "reason" of modernity took on two forms. On one hand there was a re-evaluation such that values opposed to technological rationality were eulogized: spontaneity as opposed to planning; subjectivity as opposed to objectivity; body as opposed to the intellect; the emotions and matters of the heart over reason; and so on. On this front, there was a re-evaluation of the role of reason in human existence, where reason was seen to play a minor role, and one that was not always even necessarily good.
On the other hand, some thinkers went as far to reconceptualize reason per se. In doing so, these thinkers posited a new understanding of reason, a type of "reason" which best approximates an older conception of reason, one which held sway in the ancient world where reason is the "mirror of nature". Barfield remarks: "'Reason' for Coleridge is not something to be found manifest in human beings; it is something in which human beings - and the whole of nature - are manifest. It is not merely a part or function of the individual mind. Rather it is that spiritual whole in which the individual mind - all individual minds - subsist. It is, to quote him, 'superindividual'." The reason in Man grasped the reason of the world. In 1825, Coleridge delivered a lecture to the Royal society of Literature, which reveals his interpretation of Reason. Consider this lengthy passage:

The generation of the nous, or pure reason in man. (1) It was super added or infused, a supra to mark that it was no mere evolution of the animal basis - that it could not have grown out of the other faculties of man, his life, sense, understanding, as the flower grows out of the stem, having pre-existed potentially in the seed: (2) The nous, or fire, was 'stolen' - to mark its hetero- or rather its allo-geneity, that is, its diversity, its difference in kind, from the faculties which are common to man with the nobler animals: (3) And stolen 'from Heaven' - to mark its superiority in kind, as well as its essential diversity: (4) And it was a 'spark' - to mark that it is not subject to any modifying reaction from that on which it immediately acts; that it suffers no change, and receives no accession, from the inferior, but multiplies itself by conversion, without being alloyed by, or amalgamated with, that which it potentiates, ennobles, and transmutes: (5) And lastly (in order to imply the homogeneity of the donor and of the gift), it was stolen by a 'god', and a god of the race before the dynasty of Jove - Jove the binder of reluctant powers, the coencer and entrancer of free spirits under the fetters of shape, and mass, and passive mobility; but likewise by a god of the same race and essence with Jove,
and linked to yore in closest and friendliest intimacy with him. This to mark the pre-existence, in order of thought, of the nous, as spiritual, both to the objects of sense, and to their products, formed, as it were, by precipitation, or, if I may adopt the bold language of Leibnitz, by a coagulation of spirit. In other words this derivation of the spark from above, and from a god anterior to the Jovial dynasty - (that is, to the submersion of spirits in material forms) - was intended to mark the transcendency of the nous, the contra-distinctive faculty of man, as timeless, and, in this negative sense, eternal. It signified, I say, its superiority to, and its diversity from, all things that subsist in space and time, nay, even those which, though spaceless, yet partake of time, namely, souls or understandings. For the soul, or understanding, if it be defined physiologically as the principle of sensibility, irritability, and growth, together with the functions of the organs, which are at once the representatives of these, must be considered in genera, though not in degree or dignity, common to man and the inferior animals. It was spirit, the nous, which man alone possessed.\(^3\)

Here is Coleridge's interpretation of the myth of Prometheus. Reason is viewed as the divine spark, fire, stolen from the Gods. Reason is above the world, beyond space and time, and as the sole property of man distinguishes him from all other animals. Reason, intellect, consciousness, is taken to be\(^†\) which is divine in man, and makes him, as some authors say, "akin to the gods".

It is our purpose here to trace the idea of reason in ancient Greece, from which our modern conception first emerged. I have utilized Coleridge as an introduction to this exploration, since he highlights the salient features of reason, as that which apprehends truth: the divine or sacred in man apprehends the divine or sacred in the world\(^′\), reason mirrors reason.

(7.1) Pre-Socratic. Owen Barfield had two contentions about
words. First, we can understand the thinking of an epoch by
the meanings of its words, and secondly, if one was to trace
words back to their etymological roots, one will find that
words have a rich experiential dimension, from which we have
abstracted over the decades; this contention can be no more
ture than in the case of reason.
(i) Homer. In Homer "noein" means "to understand a
situation". Von Fritz says that noos and noein are derived
from, etymologically, the root meaning "to sniff" or "to
smell". The noos, which was so fundamental, then, to an entire
epoch, came from a very concrete human experience. Just as one
has to smell to tell what something is, we can see the
metaphor to reason as that which apprehends truth, what is; we
have to seek out, sniff out, truth. Yet, the development of
these terms within the Homeric poems becomes more closely
related to vision, notes Von Fritz.

Homer employs the word "idein", which has a very wide
range and covers all the ways in which something can come to
be knowledge based on the sense of vision. Namely, something
can come to be known by the sense of vision which is
indefinite, definite, or by a recognition of importance. The
term "Gignosken" is used like "idein", yet it indicates a case
where an object is identifiable and recognized, especially
where the object is recognized after being seen as an
indefinite object. So, for example, if one was to see
something, but not quite make it out, so to speak, and then,
in an instant, recognizes it, this is "Gignosken". "Noein" is used mainly where an object is recognized and this leads to the realization of a situation, especially one of great emotional importance." The essential meaning of "noein" means to recognize, become aware of, a situation. For example, one may be taking to someone and, all of sudden realize, one is in danger. To understand this situation, to recognize the meaning of this situation is the function of "noein".

Von Fritz traces how the fundamental meaning of "noos" and "noein" breaks into derivative meanings, within the work of Homer: (1) A situation can have different meanings for different people. So, a given party may have its own "noos". In other words, noos allows an understanding of a situation, and different understandings are termed "nooi". In this sense, Von Fritz remarks, "nooi" sometimes means attitudes. Different understandings of a situation reflect different attitudes toward a situation. For example, while one sees the meaning of a situation to be one of danger, another may see the same situation to be one of celebration. These two people have, thus, a different attitude toward the situation in question. (2) "noos" or "noein" can mean to envision a plan, when one is in danger, for example, one may think one is in danger and envision a plan of escape. (3) The very realization of a situation, such that one sees the meaning of a situation is one way in which the term is used. One may be talking to someone who is being friendly, and then see evil
intentions; the re-cognition of the meaning of this situation is facilitated by noos. The important point here is that one has to distinguish surface appearances from the essential meaning of the situation. We could say that the truth of the situation is hidden and noos reveals, unconceals, the truth (e.g. I am in danger). (4) Noos is that which penetrates beyond the surface appearance to the real truth about the matter. (5) Noos makes far-off things present (6) Noos is "seeing", which means intuitive grasping: e.g. one recognizes, sees, the meaning of a situation. The important point here is that the "seeing" is instantaneous and not the result of deductive inferences. For instance, to follow Von Fritz's example, one does not see certain behaviours as to argue, to oneself, "this person has bad intentions", on the contrary, one just sees, perceives, danger. The fundamental meaning of "noos", to reiterate, is to understand a situation. Sometimes Homer uses this term in the context of understanding a situation, which one previously misunderstood (e.g. this person seems friendly - this person has bad intentions). "The realization of Truth comes always as a sudden intuition: the truth is seen".

(ii) Hesiod. According to Von Fritz, all the derivative meanings of "noos" and "noein" can also be found in Hesiod. Yet, one can still trace a development of these terms that began in Homer, says Von Fritz, who points out three essential features. (1) First, the idea different people can have
different nooi is further elaborated such that the same person can have different noos at different times. (2) In Hesiod there is a definite fusion between a recognition of the present (e.g. danger) and an in envisioning of the future, a wish (e.g. a plan to escape), such that "noos" now maintains a purely volitional character, encompassing first deliberation and then willing. Thought and wish become associated with reason while the notion "to recognize a situation" is no longer felt in Hesiod's employment of "noos". (3) Where for Homer, noos grasps truth, in the limited sense discussed, "noos" now is associated with "intelligence" and "cleverness". In Homer, noos could not be deceived, it grasped the truth of a situation. Yet, when the meaning of "noos" is construed in this new way, even if the change is one of nuances, "noos" takes on a new meaning. Homer allows that noos can be "dulled" such that the truth escapes one's gaze. One may just not recognize the bad intentions of an interlocutor if one is intoxicated, for instance. Yet the transition from the fact that noos can be "dulled" to the idea that it can be "deceived" creates a new concept, says Von Fritz. (iii) Xenophanes. Xenophanes, in a poem about God, says: "All of him sees, all of him noein, all of him hears." Here, says Von Fritz, "noein" is related to hearing and seeing. Since God has no organs, He is conceived as pure hearing, pure seeing, pure reason. Here, Xenophanes seems to be reacting against a conception of God that is not monothetic, as if He could be
composed of many parts, faculties or organs. "In Xenophanes' mind there was obviously no such clash between the notions of sensual perception and of noein as must have been felt by those later Greek authors who refused to connect these notions with one another...Xenophanes' concept of noos is still the same as Homer's. For in Homer also the noos is very closely related to sensual perception." Xenophanes still maintains a close connection between the senses and noos such that the later distinctions between reason and the senses (e.g. Descartes) is not felt. Truth is perceived by the senses. Von Fritz says: "The noes in Homer and elsewhere perceives by means of and through the organs of the senses. There is no reason to believe Xenophanes thought otherwise." Also, in Homer, everybody has noos, whereas in Xenophanes, even though God has noos, it is very rare in humans. "In Homer all people naturally have noos, even though of varying quality and degree. In any case, the notion that noos is something exceptional which only few people possess becomes very prevalent in the generation after Xenophanes, especially with Heraclitus..." (iv) Heraclitus. In Heraclitus, noos is not possessed by everyone. Noos is related, for Heraclitus, to theoretical knowledge (e.g. mathematics), where one says what is true, and practical knowledge, where one does what is true. Those few who speak with noos must base it on what is common, "xynon" or "koinon", according to Heraclitus. Here we understand common,
as what is common to all things. The importance Heraclitus attributed to noos goes far beyond what we have seen in Homer and Hesiod, for noos grasps the truth of the world, even though the concept is closely related in many respects. "The xynon [the common] on which any noein must be based is identical with the divine law which governs everything." Noos grasps what is common to all things, the logos, which "gathers together", as the ordering principle of the universe. Although we see discord in the world, it is noos which grasps the "hidden harmony". If one has noos one will speak the truth because one will see the truth, which is otherwise hidden, concealed. "The hidden harmony in discord is stronger and more profound than the obvious harmony which everybody sees." The hidden harmony is obvious for one that has noos, yet the one that does not have noos, cannot see what is obvious, "ta phanera". Heraclitus is very clear that he means that the truth must be seen intuitively. Von Fritz writes: "The logos contains the truth, but it can be understood only by him who 'sees' it - of course, with his noos but through his eyes. It is still the same close relation between vision and intuition which we found in Homer...In order to realize the essential truth, a man must see or 'witness'..." To reiterate, in Heraclitus, noos becomes purely intuitive such that it loses any deliberative aspect Homer may have attributed to it. "...Even that element of reasoning 'by inference' which, though perhaps unconsciously, was inherent in some examples of
noos in Homer is now completely eliminated from the function of noos."¹⁹ The truth is not inferred but seen. Von Fritz points out that it was Sextus Empiricus who misinterprets Heraclitus and identifies noos with logos, or sees noos as a manifestation of logos, which he understands as "logical reasoning".²⁰ Of course, in Heraclitus, noos had nothing to do with logical reasoning, and retained a thoroughly intuitive meaning.

(v) Parmenides. In Parmenides, Being (eon) is the sine qua non of noein. As Parmenides says, Being and thinking are the same thing. Yet, there is also the contradictory idea that noein can err²¹. So, there is the possibility of different nooi in different people: people can think the wrong way or the right way. There remains, then, a standard for correct and incorrect noos. As with Homer's idea of a dulled noos, there is the incipient idea of a not-dull noos. Parmenides conception of noos is intuitive, although it is not separate from logical reasoning. Noos ²² is both identified with logical reasoning and sensuous perception, as we found in Homer's "idein". Although Parmenides notion of noos is sensuous, in that it can perceive sound, it can also perceive silence, which is not, notes Von Fritz, a sensuous quality. Von Fritz writes: "It is still the primary function of the noos to be in direct touch with ultimate reality. It reaches this reality not only at the end and as the result of the logical process, but in a way is in touch with it from the very beginning, since, as
Parmenides again and again points out, there is no noos without eon [Being], in which it unfolds itself." The role of noos, in Parmenides, takes on grand proportions that bring it even father from Homer's idea that noos merely grasps the truth of a particular situation.

(vi) Empedocles. For Empedocles, noos can be blunted by paying to much attention to trivial things, (not because of sorcery, passion or a physical blow, as Homer maintained). Noos, here, has limited comprehension, yet is understood broadly as to carry out several functions. First, as a mental capacity, noos selects, shifts, corrects, coordinates and interconnects the testimony of the senses. Secondly, noos is responsible for planning and foresight (an idea already present in Homer). In Empedocles, the senses are a starting point for knowledge, which the noos amends, and corrects. Although Empedocles maintains a broader conception of noos, it still retains a meaning as direct perception. He cites the idea that "we see earth by means of earth, and water by means of water, and bright air by means of air, and also destructive fire by means of fire, and love by means of love, and hate by means of painful hate." The point is that we grasp like by like. The direct perception, of love for example, is the function of noos. "The recognition of Love and the insight into its nature is not an indirect one and that it is not brought about by inference or logical reasoning but is as direct and immediate as the recognition (or perception?) of
earth, fire, and water. Yet he has stated with equal clarity that Love is not seen or recognized by the senses." In the same way, says Von Fritz, that one can see one's facial expression and grasp, recognize, that one is sad, one directly perceives love and hate (which Empedocles takes to be driving forces in nature). So, here too, it is the vocation of reason to grasp metaphysical truth. Von Fritz writes: "Empedocles attributes the 'direct perception' of love and hate not to the senses but to the noos." Empedocles retains a pre-Parmenidean notion of noos by associating it with direct perception as opposed to the reasoning of a logical variety (where conclusions follow from premises). Von Fritz writes:

"...In the philosophy of Empedocles noein never has the meaning of 'reasoning' and that, in his opinion, all knowledge seem to be acquired by some kind of direct perception, since even the coordination and integration of the testimony of the very various senses in his philosophy seems due rather to some special faculty of the noos by which it directly perceives the inter-relation between the various sensual data that to any kind of reasoning."

So, although Empedocles adopts an expanded notion of noos, which seems to carry out more cognitive functions, it never becomes reasoning in the modern sense. That is, noos maintains, is inextricably linked to, direct perception.

(vii) Summary. Von Fritz draws some general conclusion about the changes in the meaning of the "noos" and "noein". First, noos was always set about to discover the truth, of a situation, and eventually, of the things themselves. Second,
there is a trend away from the association between the senses and noos (reason), where, finally the two become separated and juxtaposed. The senses are taken to be confused, a source of error, but the intellect leads to truth. Third, "noos" is expanded as to cover more than intuition and direct perception. Namely, noos is said to interpret the senses and is identified with logical deductions. Finally, in a thinker such as Democritus, knowing becomes a complex process of seeing, analogy, inference, and so on, a seeming combination, expansion, and amalgamation, of the ideas surrounding "noos" which had gone before.

In Homer, reason is experiential, yet, there is already the idea of planning, which is incipiently associated with logical reasoning. To plan is to think causally, to find a means to an end. Consider, if one want to escape danger, Z, one may have to plan to do actions X, and Y. The plan, therefore, can be understood as a creation of theoretical model where the elements are causally connected (e.g. X\(\Rightarrow\)Y\(\Rightarrow\)Z). A plan offers a means to an predetermined end. Yet, even though there is the notion of planning in Homer, it does not even begin to overshadow the experiential and intuitive understanding which reason affords. Hesiod moves the conception of noos further, by associating it with cleverness and intelligence. Here, noos can actually be deceived, and by no means leads to knowledge which must be taken to be veridical. In Xenophanes, noos is related again
with the senses, although it is not taken to be something common to all of mankind. Heraclitus agrees with the idea that not everybody has noos. Yet, those who do have it can grasp truth. Noos, in Heraclitus, does not just grasp the meaning of a particular situation itself, but a metaphysical truth. Further, this "grasping" is taken to be intuitive. It is in Parmenides that noos grasps truth not only intuitively, directly, but also by way of logical reasoning which collaborates in the search for truth. Finally, Empedocles demonstrates a pre-Parmenidean flavour by maintaining noos as direct perceiving.

Although, as we have seen, "noos", from its inception, was not necessarily separated from logical reasoning, the intuitive aspect of reason held sway. It was not until later that reason would be seen as antithetical to intuition, the senses, and defined against these, from which it was so closely related, at one time. Technological rationality would finally eclipse, in toto, any aspect of intuition. Even in Descartes, there still remained a intuitive aspect to reason (in a very specific way, of course). But it seems that it was almost destined, in the technological milieu, that reason would be completely transformed, such that intuition could be seen as irrational, without methodological justification. The idea, at any rate, of reason as intuitive, direct perceiving, was largely lost, except for a few thinkers who, as goes without saying, remained on the periphery of the
intellectual fashions of the day.²⁹ The paradigm of intuition was that of vision, where we have the analogy of grasping truth as a "seeing", immediately, in an instant. Just as one has the experience of "oh, I see", insight, inspiration, and so forth, reason became completely divorced from, and antithetical to this original heart or root meaning of "reason", which was inescapably intuitive.

(7.2) And So On. As the idea of noos was adopted, and thus made its way through the later thinkers in ancient Greece, it still retained, in large part, the salient features that it held in the pre-Socratics. Although, it can be argued, the idea of noos, as that which grasps the meaning of a situation, was never felt in the same way as time proceeded.

For example, in Aristotle, reason is still intuitive, and said to grasp the first principles that ground knowledge. For Aristotle there is an active noos, and for Aquinas an active intellect. The senses, which belong to all animals, are seen to be something different from reason which is still seen as the divine element in man.³⁰ Man is the rational animal. Noos receives truth passively, yet it also actively posses it. In Plato, the senses are seen as a corruption of the pure reason of the intellect, which grasps the eternal forms and survives death. Here, in Plato, we see the complete opposition between reason and the senses.

(7.3) Experience/Intuition. The idea of reason lost, in the vast majority of authors, its experiential dimension in
modernity. The slow progression from an intuitive notion of reason, which was either associated with or modeled on the faculty of vision, from which it became separated, and taken to be a fundamentally different faculty (ultimately, one taken to be discursive), one antithetical to both the senses and intuition. Yet, for the ancients, reason did not suggest a method, even less a technique, than a immediate seeing. Reason is not even necessarily seen as the property of a self-consciousness or ego, but of the universe itself. It was reason which grasped the logos, the essence of all things, the essential principle.\[31\] Reason was far closer to a real communion, than an objective looking at the world as other.\[32\]
Reason for Pre-Modernity
(And Some Case Studies in Resistance)

"Reason" has a long history within the western tradition. Although, each epoch has, generally, its own conception of rationality, it was never doubted that reason was something sacred, something not of this world. Reason not only allowed man contact with what is divine in the world, Being, but was that which per se was above the world. Indeed, even the modern world has been heralded as the age of reason.

I will consider, first, some examples, as to substantiate the claim that reason has held a sacrosanct status; secondly, I will consider the thought of Descartes on reason. It will be our task here to examine a change in the conception of reason which has one foot in the ancient world, and one in the modern. That is, we shall find a conception of reason in Descartes which holds the seeds of technological rationality, while still bearing the inscriptions of the ancient world. Finally, I shall, briefly, examine some resistance the authority of modern rationality (Jaspers, Bergson, Tolstoy). (8.1) The Fire of Prometheus. Reason has always been taken to be that which is particular to human beings. For instance, in
Leibniz the intellect and the senses are separated. While the truths of the senses are contingent, the truths of the reason are "necessary". We see, in fact, that in the so-called rationalist tradition (Spinoza, Descartes, Leibniz) the senses are always denigrated, and taken to be a source of error. Conversely, reason allows necessary truth. The perennial distinction which is found in authors too numerous to even list, is that man has reason, and this is what separates him from the beasts; man is the rational animal. Whitehead notes that the question, "what is reason?", is the oldest of philosophical questions and one that it is our duty to ask in lieu of modern ways of thinking. According to Whitehead, it is the function of reason to promote the "art of living". Although Whitehead seems to have much faith in reason, he also thinks that it is the nature of human beings to seek, what he calls, the unattainable, what is beyond methods. Others have tried to conceive of reason as synonymous with thinking, or the rules of thought (e.g. Kant, early Wittgenstein). Although even Kant realizes that reason, thinking, poses question which it cannot itself answer. Kant writes: "Human reason has this peculiar fate that in one species of its knowledge it is burdened by questions which, as prescribed by the very nature of reason itself, it is not able to ignore, but which, as transcending all its power, it is also not able to answer." In other words, reason as thought, can pose questions which it per se cannot answer, for Kant. There are even those today which try to naturalize reason so as to show that to adopt a
certain way of thinking is commensurate with human development (e.g. Piaget, Kohlberg).  

The point I am trying to bring to our attention, which in itself is rather banal, is that reason has been taken to be something very sacred. Even contemporary writers on rationality pay homage to reason. For example, Rescher writes: "It is thought, intelligence - the exercise of rationality in the interests of knowledge, valuation, and right action - that sets humans apart from other creatures and renders us (mere animals that we are!) akin to the gods".  

Descartes, in this respect is no different, for reason allows thinking and survival after death: reason is immortal.  

(8.2) Descartes. It would seem odd that I have not included Descartes, the father of modernity, under our discussion of technological rationality. Many have been very quick to provide a caricature of Descartes in which he is the author of the modernity. Although this is not completely false, there is much in Descartes that links him to the medievals and thus, indirectly to the ancients.  

(i) Intuition. Reason for Descartes is not merely a method, as in a technological or instrumental conception of rationality. Rather, Descartes posits "intuitus", intellectual intuition, which differs from sensory intuition; intellectual intuition is passive and merely receives truth but has no active part in this. It receives what is primitive and basic, what is clear and distinct.  

Aaron points out that in the
Seventeenth century, intellectual intuition was seen paradigmatically in mathematics: intuition of procedure, of self-evident principles (e.g. Euclid's geometry). It was only through the intuition of the intellect that one could be sure, attain certitude. Aaron remarks:

Seventeenth and eighteenth century thinkers were clear that the science which best illustrated the workings of intellectual intuition was mathematics. The basic principles were intuited; theorems could be deduced with the help of these principles and further theorems from the first theorems; the deduction itself was a series of intuitions of implications, each intuition making possible the passage to the next step. Unless our memory of the steps involved failed us - the memory was admitted to be fallible - the mathematical system could be built up without error, for the intuitions themselves were wholly infallible.¹⁰

Descartes begins his discourse on method in order to guide people to use their reason correctly. Descartes hoped to free himself from false belief, prejudice, tradition, culture, and so forth, as to get at what is indubitable, certain, the truth. The only thing Descartes could trust was an inner compulsion to accept clear and distinct ideas (e.g. a triangle has three sides). Gellner remarks, "Liberation is to be achieved by purification through doubt: that which is based only on custom and example is dubitable but, he eventually concludes, that which is rational is not. Culture and reason are antithetical. Culture is questionable, reason is not. Doubt and reason must jointly purge our minds of that which is merely cultural, accidental and untrustworthy."¹¹

In beginning of the discourse Descartes says, all men have reason, what Descartes calls "good sense". He says: "It
provides evidence that the power of judging rightly and of distinguishing the true from the false (which, properly speaking, is what people call good sense or reason) is naturally equal in all men."\textsuperscript{12} This reason, which all men have, is what distinguishes men from animals (and other machines). Descartes remarks: "For as to reason or good sense, given that it alone makes us men and distinguishes us from animals..."\textsuperscript{13} Reason becomes a faculty of judgement, which in a sense it always was, distinguishing truth from appearance, yet it is now to be associated with a methodology which can discern truth from falsity.

(ii) The Procedure. Although Descartes does maintain that the truths of theology are beyond his feeble reason, he does think he can find a method to know all that he can. He emphasizes, moreover, that he is not suggesting a method for others (not to mention an entire epoch), but only for his own personal search. He says: "I was attempting and searching for the true method of arriving at the knowledge of everything my mind was capable of attaining."\textsuperscript{14} In order to posit a method that would aid in achieving all the knowledge that it was possible to attain, he sets out some basic principles or rules, a procedure. (1) Never accept anything as true that is not presented to the mind with such clarity and distinctness that it is indubitable. (2) Divide difficulties into parts (3) conduct thought in an orderly fashion: from simple to complex, and (4) always review one's thought such that one will not
miss anything. This method (or these virtues) are based on Descartes' observance of geometry, where he sees these principles in action. Although he realizes this method is not perfect, he still maintains that it allows him to consider things "rigorously" and "distinctly". Thus he has decided to apply this method to all areas of inquiry. He says: "I have promised myself to apply the method just as profitably to the problems of the other sciences, as I had done to problems in algebra." 

(iii) Pre-Modern. Even though Descartes does suggest a method, and does associate it with reason, he still maintains a notion of reason that represents a faculty which grasps truth. In doing so, he claims, the reason people doubt God, the soul, and so on, is because they cannot imagine such things, because they think these things come from the senses. Yet he points out, to try to understand such things in this way, by the senses, is to try to smell with the eyes. In other words, one is using the wrong faculties. In order to smell one must use one's nose, and to grasp truth one must use reason. With Descartes' notion of reason as that which carries out intellectual intuition, apprehends clear and distinct ideas, Descartes is firmly in the tradition of the ancients. Yet there is enough that remains revolutionary in Descartes, with his ideas of methodical doubt, that helped him usher in instrumental rationality, and modernity itself.

(8.3) The Difference. The modern, instrumental conception of
rationality, and its pre-modern ancestor are fundamentally different. The modern conception of reason takes reason to be a method, a way that stipulates how to get from X to Y (e.g. long division). Yet, this conception of reason is free from any discussion of intuition. The consequences of such a intellectual move, which seems innocuous, is nothing short of a watershed. Again, if we consider Euclidian geometry, we find certain first principles which can be clearly intuited (let us suppose). From these beautifully simple principles we can derive an entire geometrical system. So, as a paradigm of knowledge, let us turn our attention back to Descartes. Here we have the supposition that we can also intuit first principles, foundations. From these principles, clear and distinct ideas, an entire epistemic architecture can be constructed. What would happen, however, if we were to deny intuition, and just understand reason in its technological manifestation? Well, let us recall the philosophy of David Hume; here we have the employment of an instrumental rationality without any ultimate foundations - because we have no way to intuit foundations. Simply put, the modern world just does not believe in such a magical idea as intuition (in its traditional sense). Rather, because the modern world only recognizes what is verified by a method, a procedure, there is no room for intuition: how does one verify intuitions one asks? Perhaps intuitions, if such things exist, they say, are of mere tautologies, analytic truths and so
forth? Reason without intuitions, means that reason must rest on something other than itself, the passions. For Hume, much of what we know is not dependent on reason but on choices we make, thus, metaphysical realism becomes untenable by the very role of the subject in the acquisition of knowledge. Whereas once reason allowed access to truth, now instrumental rationality cannot find the ultimate justification for truth.

At any rate, one can begin see how technological rationality not only arose out of an older idea, but, how this new conception of reason, simultaneously gave rise to modern epistemology. If justification could no longer stop at first principles that were intuited, we fall into an infinite regress: we cannot find methods to verify our methods; we cannot find reasons for our reasons. Once the foundations of knowledge could not be intuited, we fall into method relativism. As we will see, we end up with different canons of rationality, different methods, different styles of reasoning, and consequently, different truths, different bodies of knowledge.\(^7\)

8.4 Case Studies in Resistance. As goes without saying, once the modern conception of instrumental rationality held sway, there were always those who questioned such a notion of reason and the scepticism or idealism it entailed. These people did not think that technological rationality could achieve a metaphysical truth, but neither did they believe
that the lack of foundations made truth a matter of caprice. Jaspers, Bergson, and Tolstoy can be seen to represent those who believe in a metaphysical truth, yet do not think it can be achieved by instrumental conceptions of rationality.

(i) Karl Jaspers. Karl Jaspers thinks that there is reason and what is beyond reason/thought. Although reason, for Jaspers, can never capture truth, he does not think philosophical activity will come to a halt: "Whoever even once thought he heard softly the authentic philosophical note can never tire of trying to communicate it." Here Jaspers makes a psychological point. Although he denies reason or thought can ever fully explicate truth, he still recognizes that those who feel the force of a sprouting seed, or idea, within themselves, will never tire to express it.

For Jaspers, reason can be seen to take on a two-fold development. First, reason is seen as a stepping stone for what is beyond reason. Reason always suggest what is other than reason. Jaspers says: "The rational is not thinkable without its other, the non-rational, and it never appears in reality without it. The only question is, in what form the other appears, how it remains in spite of all, and how it is to be grasped." In other words, how are we to apprehend what is beyond reason, truth. Jaspers notes that "in Christianity, the opposition between reason and non-reason, developed as a struggle between reason and faith in each man." So, even in Christian thought, there is the idea that there are things
which cannot be established by reason, hence we need faith. We always see things from a certain perspective, within certain conceptual schemes, yet we always seek beyond this. "We always live and think within a horizon. But, the very fact that it is a horizon indicates something further which again surrounds the given horizon." There always seems like there is something beyond any one way of seeing the world. What is beyond, is called the "encompassing" by Jaspers, for it encompasses our horizon, the limits of our seeing, our reason. Since truth cannot be grasped by reason/thinking per se Jaspers writes: "The ultimate in thinking as in communication is silence."

Secondly, there is a reaction against the reason which gave birth to foundationalist, critical epistemology. Reason is functional here, for Jaspers, because, reason can take us to the edge of its limits, mystery, an impasse, an abyss, we cannot cross; reason, is not something purely pejorative, because it is only through reason that we know. In fact, he thinks, "knowing is the self-consciousness of reason." Yet, again, reason exists in a symbiotic relation to non-reason. Reason always suggests, indicates, what transcends itself. So, even once instrumental rationality came into favour, there were always those who recognized the limits of reason. We should not forget, however, that with Jaspers we are still dealing with a technological conception of rationality which seems naturalized as an internal method: to think is to think
rationally; although reason, thinking, always suggest an other, the encompassing, which cannot be captured by rationality\(^2\). In short, truth always remains outside the purview of the gaze of reason.

(ii) Henri Bergson. Another dissenter to technological rationality is Henri Bergson, whom we shall just mention in passing. For Bergson, there are two aspects two consciousness: the intellect and intuition.

(a) Reason. The intellect is associated with what we have called the "reason" of modernity. Reason is based on a mechanistic worldview which not only sees the world as a collection of causal happenings, but employs causal procedures, methods, to reveal the laws which govern them. The laws per se are taken to be static and unchanging - that is why they are laws. He says:

We shall see that the human intellect feels at home among inanimate objects, more especially among solids, where our action finds its fulcrum and our industry its tools; that our concepts have been formed on the model of solids; that, consequently, our intellect triumphs in geometry, wherein is revealed the kinship of logical thought with unorganized matter, and where the intellect has only to follow its natural movement, after the lightest possible contact with experience, in order to go from discovery to discovery, sure that experience is following behind it and will justify it invariably."

(b) Experience. Intuition, on the other hand, reveals the real world, according to Bergson. The metaphysical assumption is that the world is in a state of constant flux. Whereas reason yields static truths, intuition allows access to reality, which has to be understood as a becoming, an event,
a happening. He writes:

may bring the intellect to recognize that life does not quite go into the category of the many nor yet into that of the one; that neither mechanical causality nor finality can give a sufficient interpretation of the vital process. Then, by the sympathetic communication which it establishes between us and the rest of the living, by expansion of our consciousness which it brings about, it introduces us into life's own domain, which is reciprocal interpenetrating, endlessly continued creation."

For Bergson, the world is a flux, a constant change, a process, and while the intellect is at home with categorizing the world, elaborate taxonomies, and so forth, which are all static, there is still remains something essential about reality the intellect misses, that it cannot "get around". Where the intellect, reason, logical thought, stops, intuition "throws a light feeble and vacillating, but which nonetheless pierces the darkness of the night in which the intellect leaves us." The intellect, reason, is at home with static truths (e.g. 1+1=2), yet the truth of the world, reality, is Heraclitian flux, and can only be captured by intuition, according to Bergson. Again, however, we have a thinker who affirms a metaphysical truth, yet denies that reason can achieve it. Further, he associates both reason and the truths it yields with the inanimate, static and mechanistic.

(iii) Leo Tolstoy. Tolstoy also fits into the tradition of what we can call, anti-rationalists, the heretics of modernity. We need to understand the concerns of Tolstoy, as
to appreciate his thought on the role of reason in human existence.

(a) The Enigma. One of Tolstoy's major preoccupations was the problem of death. As Tolstoy said to Fet, "once a man has realized that death is the end of everything, then there is nothing worse than life either." Tolstoy discusses his concerns by way of a character, Levin, in his novel, Anna Karenin. Basically, Tolstoy is concerned about the meaning of life, given that life comes to an end. For Tolstoy, the great enigma of existence is its temporality - it does not last.

Levin is heartbroken over a loss of the love of his life. Although he goes on to find some solace in leading a disciplined life, he remains willing to risk it all for love. "However good that simple life of toil may be, I cannot go back to it. I love her." Yet finding solace within the temporality of existence, in love for example, does not fully seem to rectify the fact that, as is said, "all good things come to an end". The question of death presents itself to Levin:

...death comes and puts an end to everything, that nothing was even worth beginning and that there was no help for it. Yes, it was awful, but it was so. 'But I am alive still. Now what's to be done?' he said in despair. He lighted a candle, got up cautiously and went to the looking-glass, and began examining his face and hair. Yes, there were grey hairs about his temples. He opened his mouth. His back teeth were beginning to decay...

The type of questions that Tolstoy is preoccupied can be called existential, one's pertaining to human existence. For example, he is concerned about understanding life. Levin says:
"I cannot live without knowing what I am and why I am here. And that I can't know, so therefore I can't live...Levin, a happy father and husband, in perfect health, was several times so near suicide that he had to hide a rope lest he be tempted to hang himself, and would not go out with a gun for fear of shooting himself."  

(b) Reason. We must understand that Tolstoy's treatment of reason is dependent upon certain problems which he feels reason cannot answer. Tolstoy anticipates his thought on reason early in his book, Anna Karenin, although much of the substance of this thought lies towards the end of the book. He writes: "Some mathematician has said that happiness lies in the search for truth, not in finding it." Here, because it is said to be the words of a mathematician, we can infer that search for truth by reason may be more rewarding than the actual finding of truth, which may remain elusive. This conclusion is very tentative, and does not present us with anything very substantial in the way of textual evidence. Yet the next anticipation of Tolstoy's position is given in a passage where Levin is blessed with the birth of his first son. Here Tolstoy emphasizes the idea that reality, the way things are, are much richer than even the imaginings of abstract theoretical constructions. He writes:

Had Levin been told but a short time earlier that Kitty was dead, and that he had died with her, and that their children were angels in heaven, that God was present before them - he would be surprised at nothing. But now that he had returned to the world of reality, it took a prodigious effort to realize that she was alive and well,
and that the little creature yelling so desperately was his son...It seemed to him too much, a superabundance, to which he was unable to get used to for a long time."

Tolstoy sees the world itself as richer than imagination (and reason). For Tolstoy, whatever one can dream of theoretically will never be as impressive as the real world of the everyday.

Tolstoy manifests his problematic in the difference between religion and science. For it is science which is associated with reason, that caused Levin to reach a point of existential despair. "These terms and the theories associated with them were very useful for intellectual purposes. But they gave no guidance for life, and Levin suddenly felt like a person who has exchanged his warm fur coat for a muslin garment, and out in the frost for the first time is immediately convinced, not by arguments but with his whole being that he is as good as naked and must inevitably perish miserably."

Reason can give birth to theories, but they leave Levin cold, whereas experience does not (as we shall see).

In using his reason, Levin had been led to concluding everything was, ultimately, meaningless. Yet it is when Levin abandons reason that his life improves. It is, in fact, reason which had led him astray:

He read and thought, and the more he read and the more he thought the farther he felt from the goal he was pursuing...But he only had to forget the artificial train of reasoning and to turn from real life to what had
satisfied him so long as he kept to the given chain of argument, for the whole artificial edifice to tumble down like a house of cards, and it became evident that the edifice had been constructed of those same words transposed and regardless of something in life more important than reason...[another theory] collapsed when he reviewed it in relation to real life, and proved to be a muslin garment with no warmth in it.\textsuperscript{36}

Here we get the first clear indictment of reason by Tolstoy. Reason, and all the theories it creates, are seen to offer a "muslin garment" with no warmth. All his questions are not satisfied by the efficacy of rationality, and all the theories it gives birth to. Theories are seen as artificial constructions which never satisfy the true questions they are set about to answer.

Levin finds his solace, his peace, outside of reason. Levin's coming to terms with his concerns is echoed by Kitty who saw "that it was necessary to forget oneself and love others in order to be at peace, happy, and good.\"\textsuperscript{37} This is the one conclusion that Levin, himself, comes to, yet, he is clear that this is not achieved by reason:

He said we must not live for our own wants...but we must live for something incomprehensible, for God, whom no one can know or define...I understood them [these words] fully and more clearly that I understand anything in life; and never in my life have I doubted them, nor could I doubt them. And not only I but everyone - the whole world - understands nothing but this one thing fully: about this men have no doubt and are always agreed...The only knowledge I and all men posses that is firm, incontestable, and clear is here, and it cannot be explained by reason - this knowledge is outside the sphere of reason: it has no causes and can have no effects...So goodness is outside the chain of cause and effect...And I sought miracles - complained that I did not see a miracle which would convince me. But here is a miracle, the one possible everlasting miracle, surrounding me on all sides, and I never noticed it!\textsuperscript{38}
Levin finds the answer to his questions (like why am I living) is life per se, which he cannot comprehend by his reason. Further, we get the very clear suggestion that the reason Tolstoy is referring to is an instrumental reason, since he puts the miracle of existence, and morality, outside the realm of reason, outside of causation, which is an integral feature and trademark of instrumental rationality. Again, Tolstoy is very clear about what he means by reason, given that he is not writing a treatise on reason:

But reason could not give an answer to my question - reason was incommensurable with the problem. The answer has been given me by life itself, through my knowledge of what is right and what is wrong. And this knowledge I did not acquire in any way: it was given to me as it is to everybody - GIVEN, because I could not have got it from anywhere...But who discovered it? Not reason. Reason discovered the struggle for existence, and the law demanding that I should strangle all who hinder the satisfaction of my desires. That is the deduction of reason. But loving one's neighbour reason could never discover, because it's unreasonable.39

It is reason, according to Tolstoy, which leads one to a nihilism, where not only life is denuded of meaning, but there is not any reason to be ethical. Morality, according to Tolstoy, is beyond reason, and can never be justified in some meta-ethics. Rather, morality is, as Tolstoy writes, "given". (c) Truth. Tolstoy sees reason as unequipped to ground ethics, and looks upon theories, consequently, with suspicion. What use, one may think, are theories if knowledge is simply given? "And don't all the theories of philosophy do the same, trying by the path of thought, which is strange and not natural to man, to bring him to a knowledge of what he has
known long ago, and knows so surely that without it he could not live? [Philosophical theories are] trying by a dubious intellectual process to come back to what everyone knows?" Tolstoy, who has travelled the path of reason, feels cynical about what theories can achieve, and this position falls out from his negative view of reason. For Tolstoy, there is a recognition of a metaphysical truth, yet this is not disclosed to reason. Truth is manifest in the world itself. "Yes, the one obvious, unmistakeable manifestation of the Deity is the law of good and evil disclosed to men by revelation, which I feel in myself and in the recognition of which I do not so much unite myself as am united..."

For Tolstoy, truth is revealed in the world, namely in the fact of morality, which it presents itself as evidence of a way the world is. Yet, this truth is grasped by human experience and not human reason. He writes:

I am seeking to fathom the general manifestation of God to the universe with all its stars and planets. What am I about? Knowledge sure, unattainable by reason, has been revealed to me, to my heart, and here I am trying obstinately trying to express that knowledge in words and by means of reason...And just as the conclusion of the astronomers would have been idle and precarious had they not been founded on observations of the visible heavens in relation to a single meridian and a single horizon, so all my conclusions would be idle and precarious if not founded on that understanding of good and evil which was and always will be alike for all men, which has been revealed to me by Christianity and which can always be trusted in my soul..."

As Tolstoy says, knowledge is never grasped by reason. Although reason may explain something, it can never fully capture the truth. Further, Tolstoy relates reason to thought
by suggesting truth cannot even be spoken in words, remaining ineffable. He leaves it up to experience, to his heart, to gain knowledge, not reason. The book ends with an atonement for Levin, where once torn in the depths of doubt and despair, finds truth in life and experience, while putting reason aside. Reason not only led to doubt and meaninglessness, but yielded conclusions that were nihilistic. According to Tolstoy, reason leads to scepticism, nihilism, and meaninglessness,\textsuperscript{43} Tolstoy is not so naive as to say the abandonment of reason allows Levin to walk off into a sunset, but it is by a conquering of the primacy of reason that Levin can achieve an authentic human existence, become fully human, according to Tolstoy. Consider the last passage of the book:

\begin{quote}
I shall still lose my temper with Ivan the coachman, I shall still embark on useless discussions and express my opinions inopportune; there will still be the same wall between the sanctuary of my inmost soul and other people, even my wife; I shall probably go on scolding her in my anxiety and repenting of it afterwards: I shall still be as unable to understand with my reason why I pray, and I shall still go on praying - but my life now, my whole life, independently of anything that can happen to me, every minute of it is no longer meaningless as it was before, but has a positive meaning of goodness with which I have the power to invest it.\textsuperscript{44}
\end{quote}

(8.5) Historical Reason. Although reason, it would be fair to say, has always been taken to be something sacrosanct within the western tradition, there has been a fundamental change in what reason means. Technological rationality, whose seeds can be found in Descartes, arose out of a more experiential\textsuperscript{45} understanding of rationality as intellectual intuition in Descartes; although, as we saw, he also held a
conception of reason which holds the inscriptions of an even older conception of reason, which was intuitive and experiential. When the idea of intellectual intuition was thrown into disrepute, we were left with technological rationality, and the enigma of foundationalist epistemology, whose failure facilitated relativism. If there is no reason for preferring one method over another, any method, or style of reasoning, can be seen to be as good as any other, each with its own truths.

Even though technological rationality holds sway, there have always been those to oppose it, even though they remain woefully unequipped to critique such a central idea to the way in which modern man is, his way of being; some, like Jaspers, Bergson, and Tolstoy claim that reason can never fully capture metaphysical truth, Being; something always escapes the gaze of technological rationality which tries to fix truth in an unchanging formula. In fact, Tolstoy, not only denies that truth can be captured by reason, but that reason actually can lead one astray. Others, like Bergson, (and Colm:ridge) harken back to an ancient conception of reason (which ultimately becomes antithetical to reason ) called "intuition". Here, it is by intuition that we through sympathy, cognitive empathy, grasp truth, what is-ing, Be-ing, which reason, per se, remains oblivious to.

It was, to reiterate, however, with Descartes that both the idea of intuition and method existed side by side,
and, once the idea of intuition was thrown into disrepute, technological rationality became the conception of reason which held sway in the modern world. Yet, in pre-modernity, taking Descartes as our example, there lay the seeds of instrumental rationality, and the markings of the ancient conception of reason, which was, unescapable, intuitive and experiential.
Whisperings of the Heretic

To introduce the investigation of modern rationality, I am going to proceed in a rather backward manner. That is, I am going to add to the resistance we have already glimpsed at the most radical critiques of instrumental rationality, before defining this type of rationality. Here we understand "radical" from the Latin, "radix", meaning "a root". Thus, a radical critique, is one that goes to the root. It is hoped that by first considering the critiques of modern rationality, which henceforth we shall call "technological rationality", we will head upon the arduous road to define what reason means for the modern person. We also need to make a remark concerning the word "heretic". Although Zamyatin is, himself, a self-proclaimed heretic, Heidegger is not. In fact, Heidegger is perhaps the most orthodox philosopher insofar as he raises the most traditional of philosophical questions, the question of Being. Yet, to raise a traditional philosophical question, to be a philosopher, itself, is a heresy in modernity, in the age of technology. At any rate, what we can find in the writing of these thinkers, is the most radical questioning of technological rationality, which any thinker has been willing to pursue.¹ The critique, I should remind the
reader, is merely intended as an introduction to instrumental rationality, thus, it will maintain an impressionistic flavour, as if we were painting in pastels, and not fine ink. Yet, when communication is at stake, it sometimes happens that pastels admit of more precision than ink. We will first deal with Zamyatin, and then Heidegger.

(9.1) Yevgeny Zamyatin. Zamyatin begins his portrayal of what it means to be rational, with images. These images offer a contrast, such that two radically different images emerge. Basically, the contrast is between objectivity and subjectivity. For Zamyatin, objectification of the world by reason leads to, what Weber would call, a disenchantment.

(i) The Machine. The first image is that of reason, which illuminates some of the rationalist features of a mechanistic worldview:

You will subjugate the unknown beings on other planets, who may still be living in the primitive condition of freedom, to the beneficial yoke of reason. If they fail to understand that we bring them mathematically infallible happiness, it will be our duty to compel them to be happy...I write this, and I feel: my cheeks are burning. Yet, to integrate the grandiose cosmic equation. Yet, to unbend the wild primitive curve and straighten it to a tangent - an asymptote - a straight line. The great, divine, exact, wise straight line - the wisest of all lines.

The contrast, which is not even entirely obvious yet, is that between subjectivity and objectivity. Subjectivity is wild, in that consciousness is aware. Yet, to fit this awareness into categories, its theoretical place, is experienced as a denial of subjectivity, a domestication. If we recall, the author says his cheeks are "burning". The very feeling marks
the beginning of our hero, D-503's, corruption. Feeling is, unescapably, an intimate, subjective experience, yet that which is objective, then, becomes cold. And, D-503's world is a rational world where subjectivity is denied; it is a world of straight lines.

The images that Zamyatin affords his reader at the beginning of his book, *We*, are sharp and frightening. Let us consider a fairly lengthy passage, where Zamyatin, in his craftsmanship, integrates the two poles of his problematic:

Spring. From beyond the Green Wall, from the wild, invisible plains, the wind brings yellow honey pollen of some unknown flowers. The sweet pollen dries your lips, and every minute you pass your tongue over them. The lips of the women must be sweet (the men, too, of course). This interferes to some extent with the flow of logical thought...But the sky! Blue, unblemished by a single cloud (How wild the tastes of the ancients, whose poets could be inspired by those absurd, disorderly, stupidly tumbling piles of vapour!) I love - I am certain I can safely say, we love - only such a sterile immaculate sky. On days like this the whole world is cast of the same impregnable, eternal glass as the Green Wall, as all our buildings. On days like this you see the bluest depths of things, their hitherto unknown astonishing equations - you see them even in the most familiar everyday objects. Take, for instance, this. In the morning I was at the dock where the Integral is being built, and suddenly I saw: the lathes; the regulator spheres rotating with closed eyes, utterly oblivious of all; the cranks flashing, swinging left and right; the balance beam proudly swaying its shoulders; the bit of the slotting machine dancing up and down in time to unheard music. Suddenly I saw the whole beauty of this grandiose mechanical ballet, flooded with pale blue sunlight...An then, to myself: Why is this beautiful? Why is dance beautiful? Answer: because it is UNFREE motion, because the whole profound meaning of dance lies precisely in absolute, aesthetic subordination, in ideal unfreedom. And if it is true that our forebears abandoned themselves to dance at the most exalted moments of their lives (religious mysteries, military parades), it means only one thing: the instinct of unfreedom is inherent in man from time immemorial..."
The characteristics of reason and its antithesis can begin to be drawn out in this masterful passage. There is subjectivity which delights, for no apparent reason, in the clouds, "those absurd, stupidly tumbling piles of vapour", the irrational, and there is, conversely, the rational, whose first mark is unfreedom, causal efficacy. Here we have been presented with the image of machines, and the order which they are capable of, the very paradigm of unfreedom. The story of D-503, is the story of a man who lives in a state of unfreedom, and who, for a short time experiences freedom. Our hero, D-503, is sick:

Wasn't the whole day, from the earliest morning, full of improbabilities? Isn't it all like that ancient sickness of dreams? And if so, what difference does it make if there is one absurdity more, or one less? Besides I am certain that sooner or later I shall succeed in fitting all these absurdities into some logical formula.

Although there are things which thwart the reason of our hero, like life, he still remains hopeful that it, everything, will all be fit into a logical formula. Yet D-503's sickness only worsens, as he experiences more freedom. In meeting a woman, D-503 is enticed to break the law in two ways. First, not only does he sample the intoxication afforded by alcohol, but secondly, enters into a relationship with I-330, when only the state coordinates mating. The emotional turbulence which captures D-503, as the result of this state of affairs, only contributes to his sickness, freedom. Zamyatin describes the tension of D-503:

I am like a machine set at excessive speed: the bearings are overheated; another minute, and molten metal will begin to drip and everything will turn to naught. Quick -
cold water, logic. I pour it by the pailful, but logic hisses on the red-hot bearings and dissipates into the air in whiffs of white, elusive steam. Of course, it's clear: in order to determine the true value of a function it is necessary to take it to its ultimate limit. And it is clear that yesterday's preposterous 'dissolution in the universe', brought to its ultimate point, means death. For death is precisely the most complete dissolution of self in the universe. Hence, if we designate love as "L" and death as "D", then L=f(D). In other words, love and death...

D-503 is trying to contemplate things which will not fit into his world of straight lines. When he is confronted by the non-rational, his entire worldview is thrown into question. As Zamyatin says, he is "like a machine" about to explode with that which cannot be contained, the irrational.

It was the goal of D-503's world to be rational, and so it was. It was a world that tried to comprehend the world, in all its multifarious showing, by reason. Even ethics were to be grasped by reason:

Today any ten-year-old will solve this mathematical-moral problem in half a minute. They, with all their Kants taken together, could not solve it (because if never occurred to any of the Kants to build a system of scientific ethics, i.e. ethics based on substraction, addition, division, and multiplication).

As one could develop a method to discern truth, so too, was it hoped, in D-503's world, that ethics could be made scientific. If this was possible, a moral problem could be fed into an algorithm which would yield the right thing to do. Yet there are things which do not admit of calculative solutions. The greatest mystery, perhaps, for Zamyatin, is the subjective
consciousness, which can never by fully grasped, explained, or explicated by a logically consistent and complete theory. In fact, D-503's discovery that he exists, as a subject, is a struggle which began early in his youth:

One day Plapa told us about irrational numbers, and, I remember I cried, banged my fists on the table, and screamed, 'I don't want root-1! Take root-1 out of me....'

And, later:

I am alone. Evening. A light mist. The sky is hidden behind a milky-golden veil. If only I could know what is there, above it! If I could know: Who I am, what am I like?

But the displacement of the subject is the one requirement to exist in D-503's world. As a "self" he is a mystery in which he finds something beyond reason; this is symbolized by the root -1. As is indicated by his number, D-503 exists only as an object. As a mathematician, he finds it even more difficult to deal with that which he cannot comprehend by reason, like his subjectivity. There was one short coming of the state to which D-503 belonged, and that was imagination, which is seen as an intricate part of subjectivity, for Zamyatin; seeing that machines do not dream, this feature offers another contrast to a mechanical and impartial reason. Yet there is a day where it is announced that imagination can be removed, and with this the subject can be completely suffocated:

Every spark of a dynamo is a spark of the purest reason; each movement of a piston is a flawless syllogism. But are you not possessors of the same unerring reason? The philosophy of cranes, presses, and pumps, is as perfect and clear as a compass-drawn circle. Is your philosophy
less compass drawn? The beauty of a mechanism is in its rhythm - as steady and precise as that of a pendulum. But you, nurtured from earliest infancy on the Taylor system - have you not become pendulum precise? Except for one thing: Machines have no imagination. Have you ever seen the face of a pump cylinder break into a distant, foolish, dreamy smile while it works? Have you ever heard cranes restlessly turning from side to side and sighing at the night, during the hours designed for rest...The road is open. The latest discovery of State Science is the location of the centre of imagination - a miserable little nodule in the brain in the area of the pons Varollii. Triple-X-ray cautery of this nodule - and you are cured of imagination. You are perfect. You are machine like...Long live the great operation! Long live the One State! Long live the Benefactor!°

How far has the modern world gone to adopt the values or features of the machine in shaping its worldview? This is the question Zamyatin raises. And, moreover, what effects, in the sense of social praxis does this worldview entail? The irony for Zamyatin is that we invent machines to serve us, but they also effect us, the way we think about ourselves and nature.

To state what is only too obvious, there is a political dimension to the question of reason, for the thinker we consider here. Reason, that which defines our knowledge, is not neutral. Rather, knowledge has effects: believing one thing rather than another has effects upon the world. For instance, the effect of reason for Zamyatin not only requires the liquidation of subjectivity ontologically, but politically:

That ancient legend about paradise...those two in paradise, were given a choice: happiness without freedom, or freedom without happiness. There was no third alternative...Well, then, suppose a drop of acid is applied to the idea of 'rights'. Even among the ancients
the most mature among them knew that the source of right is might, that right is the function of power. And so, we have the scales: on one side a gram, on the other a ton; on the one side "I", on the other "We", the One State. Is it not clear, then, that to assume that the "I" can have "rights" in relation to the State is exactly like assuming that a gram can balance the scale against the ton? Hence, the division: rights to the ton, duties to the gram. And the natural path from non-entity to greatness is to forget that you are a gram and feel yourself instead a millionth of a ton.

In D-503’s world there is perfect happiness which is possible in ideal unfreedom, which has now been made possible by the great operation of the scientific state. On the political side, unfreedom is an existential reality in that one is asked to see oneself as a millionth of a ton, for here, at least one is part of something great, the ideal clog in the ideal machine. Zamyatin’s position on reason is very unequivocal, and one can extract it from some particularly clear passages:

"True, algebraic love of humanity is inevitably inhuman; and the inevitable mark of truth is - its cruelty. Just as the inevitable mark of fire is that it burns. Show me fire that does not burn." 9

Modern Rationality shapes the way we see the world, our values, insofar as reason becomes an end in-itself. According to Zamyatin, the mechanistic worldview, yielded by reason, is inhuman, in that it reduces the world to that which is less than the world, our theoretical/conceptual framework:

"You understand: everything is finite, everything is simple everything is calculable. And then we shall conquer philosophically - do you understand? And you, my dear sir, are disturbing me, you are not letting me complete my calculation, you are screaming..." 10

Again, we see the features of the worldview yielded by instrumental rationality, for Zamyatin. The world, truth, is
taken to be that which is quantifiable, thus open to algorithmic calculation. The screaming represents the subjectivity of the individual which can never by fully calculated, or as accountants say, "figured out".

(ii) The Essential Luddite. Zamyatin has enough taste to insure that the novel does not have a happy ending, as is indicated by the last words of the novel: "Reason must prevail". The images and motifs which Zamyatin uses in his treatment of reason can be summed up as follows. Reason is emblematized by the paradigm of a machine. What is reasonable is instrumental, orderly, logical, and admits of calculations. Conversely, what cannot be explained, like the subject, oneself, suffers a violence when it comes under the yoke of reason. Further, there is a political dimension where the preoccupation with reason leads to a will to expunge freedom, consciousness/imagination, and a preoccupation with planning. The biting distinction which Zamyatin seems to set up between the subjective and the objective, seems to show that there is always something which cannot be captured by reason, something more, which can only be captured subjectively, by personal, intimate experience.

(9.2) Martin Heidegger. Turning our attention to Heidegger, we do not find an explicit discussion of rationality, yet there is a reflection that allows us to extract some valuable insights. The joy of reading Heidegger lies in, partly, appreciating the precision of his use of terms as well his
endurance in following a path of questioning to its end. He says: "In what follows we shall be questioning technology. Questioning builds a way. We would be advised, therefore, above all to pay heed to the way, and not to fix our attention on isolated sentences and topics. The way is a way of thinking...." So, when Heidegger sets out to raise the "question concerning technology", he first asks "what is the essence of technology"; he looks for a definition.

(i) The Essence of the Machine. Heidegger notes, the essence of technology does not mean this or that machine. Just as the essence of a tree is not itself a tree, but what is common to all trees, treehood, Heidegger sets out to understand what is the essence of technology. The first feature, he notes, is that technology is always an instrument, a means to an end. "The end in keeping with which the kind of means to be used is determined is also considered a cause. Wherever ends are pursued and means are employed, wherever instrumentality reigns, there reigns causality." One feature of the essence of technology is causality. Heidegger notes, when we are questioning technology, we are referring to modern technology, which is something entirely different form technology, as a general term. Modern technology has the particular feature of, what Heidegger calls, "challenging". Technology, he claims, "sets-in-order" by manipulation and control. Heidegger says technology:

sets upon it [nature] in the sense of challenging it. Agriculture is now the mechanized food industry... This
setting-upon that challenges forth the energies of nature is an expediting, and in two ways. It expedites in that it unlocks and exposes...driving on the maximum yield at the minimum expense... it [nature] is stockpiled; that is, it is on call, ready to deliver the sun's warmth that is stored in it. 

Modern technology extracts from nature, and it stockpiles nature. In this vein, the world is turned into "standing-reserve"; the world is come to be seen as a resource, waiting to be exploited. What we notice, upon this path of thinking, questioning, is that technology does not only effect the world by moving this thing here over there but, technology involves a way of seeing the world. As Heidegger said, technology "sees" the world as standing-reserve:

That challenging gathers man into ordering. This gathering concentrates man upon ordering the real as standing-reserve... Enframing is the gathering together that belongs to that setting-upon which sets upon man and puts him in position to reveal the real, in the mode of ordering, as standing-reserves... The essence of modern technology starts man upon a way of that revealing through which the real everywhere, more less distinctly, becomes standing-reserve.

The term Heidegger uses to characterize the technological way of seeing is "enframing". It is through "enframing" that we come to see the world as "standing-reserve". He says: "It [nature] is challenged forth by the rule of enframing, which demands that nature be orderable as standing-reserve...nature reports itself is some way or other that is identifiable through calculation and that it remains orderable as a system of information." Here Heidegger is making specific reference to the enframing of modern physics, which sees nature as
standing-reserve, whose essence can be gasped through calculation. As Heidegger notes, nature is forced to report itself in a way amenable to calculation; in other words, nature must be understood through quantification and measurement. In short, nature can, it is thought, be represented as an orderly system of information (whose paradigm, of course, is mathematics). What is important about this type of enframing, is that it banishes any other type of revealing. The danger, in other words, is what we have hitherto called, with Putnam, scientific imperialism. For Heidegger, the danger is not this or that particular technology per se, but of who we are, and how we see. Enframing, says Heidegger:

banishes man into that kind of revealing which is an ordering. Where this ordering holds sway, it drives out every other possibility of revealing. Above all, Enframing conceals that revealing which, in the sense of poiesis, lets what presences come forth into appearance."

To the first question which emerged from Heidegger's thinking, "what is the essence of technology?" Heidegger now answers: the essence of technology is enframing. Further, this enframing, as one way of revealing, drives out other types of revealing (like that of the work of art).

(ii) Praxis. As with Zamyatin, seeing the world in one way as opposed to another entails different types of behaviour. It is Heidegger's great insight to see that the metaphysics of an age, defines an age. As Heidegger says: "Metaphysics grounds
an age, in that through a specific interpretation of what is and through a specific comprehension of truth it gives to that age the basis upon which it is essentially formed." The metaphysics of the modern epoch is that of science. Heidegger notes, the essential phenomenon of the modern epoch is science; as Putnam also remarked, it is the ideology with the most "clout". Heidegger goes on to make it clear that science is not the same as past science, just as modern technology is fundamentally different from past technology. He says: "When we use the word 'science' today, it means something essentially different from the 'doctrina' and 'scientia' of the Middle Ages, and also from the Greek 'episteme'." The essence of science, claims Heidegger, is research, which requires procedure. In short, the essence of science is technology, technique.

As we have already seen, the essence of technology is enframing. Since, science finds its essence in technology, for Heidegger, it follows that science enframes. Heidegger remarks:

The rigour of mathematical physical science is exactitude. Here all events, if they are to enter into representation as events of nature, must be defined beforehand as spatiotemporal magnitudes of motion. Such defining is accomplished through measuring, with help of number and calculation."

Modern science transforms the world into an object to be represented, where the Greeks had immediate perceiving we have "setting-before". Just as with the term, "standing-
reserve", the salient feature is that the world becomes other; it is set before us. In fact, the essay we draw from here is called, "The Age of the World Picture", which is itself revealing. The world has become a picture. We see this picture as a world-view, the technological way of seeing:

...this struggle of world views and in keeping with its meaning, man brings into play his unlimited power for the calculating, planning, and moulding of all things. Science as research is an absolutely necessary form of this establishing of self in the world; it is one of the pathways upon which the modern age rages toward fulfilment of its essence, with a velocity unknown to the participants.\textsuperscript{23}

Technology, its essence, reveals the world to us as amenable of calculation. The world, nature, is moulded, shaped, and mapped. This one way of seeing involves a closing of the possibilities of seeing and being. As Heidegger says: "In the planetary imperialism of technologically organized man, the subjectivism of man attains its acme, from which point it will descend to the level of organized uniformity and there firmly establishes itself. This uniformity becomes the surest instrument, i.e., technological, rule over the earth."\textsuperscript{24}

Science, as a way of seeing, claims objectivity, that is, it takes itself to be the correct way of seeing, as to discern what is really there. But science's claim to being disinterested, value free, Heidegger notes, is not value free. He writes: "Pure science, we proclaim, is 'disinterested'. And yet modern science as theory in the sense of an observing that strives after is a refining of the real that does encroach
uncannily upon it." A theory "encroaches" upon nature, and as he says "refines it". Heidegger cites, for instance, the idea that mathematics maps out the real. He says in this regard, we can only see the world through mathematics once we have already assumed the world to be mathematical; our theory predisposes us to see truth as amenable to calculation and quantification: what is measurable, res extensio, is real. "Modern physics is called mathematical because, in a quite remarkable way, it makes use of a quite specific mathematics. But it can proceed mathematically in this way only because, in a deeper sense, it is already itself mathematical." Science, far from being disinterested presupposes, in its theories, a certain way of seeing. Heidegger says: "The area-character of objectness is shown in the fact that it specifically maps out in advance the possibilities for the posing of questions. Every new phenomenon emerging within an area of science is refined to such a point that it fits into the normative objective coherence of the theory." A scientific theory already assumes parameters as to what can count as a reasonable question; it presupposes certain interests and values. As Heidegger has said, we refine nature. To refine, is not a physical changing, but a change in perception. Enframing refines nature.

Although science, which depends on technology, and not the other way around, for Heidegger, Enframes the world, it remains one way of seeing the world. Insofar as it presents us
with a purview of theories, none of these theories can fully
capture their object; there is always something which escapes.

I will simply itemize a host of quotations to this effect:

Theory never outstrips nature - nature is already
presencing - and in this sense theory never makes its way
around nature...  

Nature thus remains for the science of physics that which
cannot be gotten around. This phrase means two things
here. First, nature is not to be 'gotten around' inasmuch
as theory never passes that which presences by, but
rather remains directed toward it. Further, nature is not
to be gotten around inasmuch as objectness as such
prevents the representing and securing that correspond to
it from ever being able to encompass the essential
fullness of nature. It is this, at bottom, that haunted
Goethe in his abortive struggle with Newtonian
physics.

The openness-for-Being [Da-sein] in which man ek-ists,
remains that which for psychiatry is not to be gotten
around.

In the theory of histiography, history holds sway as that
which is not to be gotten around.

In the theory of philology language holds sway as that
which is not to be gotten around.

And, lastly:

...Nature, man, history, language, exhibit themselves
always itself remains only one kind of presencing, in
which indeed that which presences can appear, but never
absolutely must appear...That which is not to be gotten
around holds sway in the essence of science.

Even though science through enframing, tries to represent the
world, as object, it can never fully capture its object
ultimately (as a metaphysical realism). Nature is always
richer, overflowing, the theory of nature. Similarly, even
psychology, the theory of man, can never fully grasp man in
theory. For Heidegger, there is always something that "cannot
be gotten around", something is always "passed over", something remains inaccessible. Instrumental rationality can never reveal truth exhaustively.

Heidegger began by questioning technology. To this end, he inquired into the essence of technology, which showed itself to be Enframing. Here, Heidegger shows how this one way of seeing has attempted to eclipse other types of revealing. In the age of technology, the world, nature, is viewed, pictured, as standing-reserve, that which is set before us, as object. Nature, further, is viewed, seen, to be revealed by modern physics, which depends upon mathematics. Yet, Heidegger claims, even though we attempt to develop theories to describe the world, these theories never fully capture their object. Although, they do allow one way of seeing, and thus one way of revealing.

(9.3) Putting Reason on Trial. Returning to our own questioning concerning reason, let us briefly reflect upon where we have ended up. The metaphysics of the age, says Heidegger, grounds an age. It is not surprising, then, that in the age of technology, we employ a technological rationality. The values of our age are defined by and associated with the values of technology, and it is these values we have wanted to sketch out here. First, reason is associated with logic, a method, procedure. As a method, we see reason as calculative. The values and preoccupations of technological rationality are calculation and planning. With both Zamyatin and Heidegger
we have seen a questioning of the hegemony of technological rationality, and some of the detrimental consequences which fall out from the internal logic of technological rationality. For example, we have seen how this type of rationality limits the purview of knowledge, where knowledge is only that which is open to quantification and calculation. Also, we have seen how this type of rationality changes our relation to the world, by changing how we see the world. In this way, we have begun to see the values bound up with technological rationality.

Technological rationality means two things. First, it means we see the world as a machine, as a set of on-going causal processes. Technological rationality assumes a view of reality or a cosmology, for Heidegger and Zamyatin. This view, moreover, is understood to be a dehumanizing and alienating one. Second, it is thought in the technological milieu, this process (reality), or the laws that govern it, can be revealed exhaustively by the employment of procedures and methods which yield knowledge which can be represented in a formal system (like mathematics). Both Zamyatin and Heidegger (like Jaspers, Bergson, and Tolstoy) do not think instrumental rationality can ever exhaustively capture truth. We must now set out to define technological rationality, in more than this impressionistic manner we have utilized to both initiate us into the issues, and point out the salient features of modern rationality, which are all embodied in the idea of the machine.
The essence of technological rationality can be found in David Hume. Hume's thought, regarding reason, can, in fact, serve as a microcosm of both the definition of reason, which we shall elaborate here, and the problem with this conception (which we will deal with in turn). Hume is famous for saying: "Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them." One has to be careful not to take this quotation out of context, as to think Hume has a positive view of the passions (which he does not). In contradistinction to those, rationalists, who think reason can lead us to live better lives, and have a better world, social organization, and so forth, Hume thinks that reason cannot be our guide. Of course, as I will argue, we are operating with a particularly modern conception of rationality here. At any rate, Hume makes a distinction between reason and reasonableness. Although there is no "reason" to believe that the sun will rise tomorrow, it would most "unreasonable" to think that it will not. When Hume says this, he suggests that reason shows us that what we take to be knowledge is really just belief, since induction can never give us true knowledge. Reason, then, seems to be
associated with logic, and reasonableness with common sense. Since reason can never give us any real indubitable knowledge, as found in, or modeled on, logical deductions, we have to defer to belief, unreason, the passions.\(^2\) We can recall that Putnam has remarked that Hume said that he left his scepticism when he left his study. We can now understand that Hume left reason behind in his study,\(^x\) as to enter, what Putnam calls, "the real world" of "reasonableness".

I will define technological rationality, and point out the problem of foundational epistemology which this conception of reason gives birth to. Further, I will point out problems that arise out of the first set of problems by implication (idealism/relativism). Here I will be drawing upon Hacking's idea that there can be different "styles of reasoning", as an example of a relativism contingent upon the employment of an instrumental rationality. Basically, I will argue instrumental reason leads one to relativism/idealism.

(10.1) Method. Technological rationality has numerous features, which can be summed up by the word method: reason is method. It has been often remarked that method was the quintessential idea of the seventeenth century by historians of mathematics. For Hofstadter, logic and mathematics provide a paradigm of rationality:

The key idea is that there exists both a definite solution and a definite procedure for arriving at that
solution, and all who follow that procedure must arrive at the same result. Similarly, in the case of logic, an argument is either valid or invalid, and there are unequivocal procedures for assessing validity.1

What was it that was so intriguing about a method that captured the imagination of an epoch? To begin with, it was found impressive that in deductions, in long division, if one followed the correct procedure, method, one would achieve the correct answer. Also, different people could achieve the same answer, such that the answer would be free from subjective contamination, which always seemed to carry with it the spectre of relativism. A method led to universality; anyone who used method X would achieve answer Y. If one had a necessary truth (If P then Q, P, therefore Q), one could avoid subjectivism. The first characteristic of a method is universality, according to Brown. That is, a method allows a knowledge claim to be verified such that the knowledge yielded could be said to be not contingent on the subject (or so it was thought), because anyone using the method will achieve the same answer, regardless of age, sex, culture, and so forth. In this sense, the truths yielded by a method could be said to be objective. One can see, for example, that both Kant and the utilitarians have tried to develop a procedure, a method, that would lead to correct ethical answers. For example, Bentham went as far as constructing a hedonistic calculus that would completely assimilate decision making in ethics to decision making in arithmetic.4

Brown points out that the second feature of a method was
that it entailed necessity. If we, as in mathematics and logic, follow method X, we will all arrive at an answer, Y. Reason is taken to lead to necessary knowledge, as we see in both Hume and Locke. Recall, with Hume, the notion the sun will rise tomorrow is not necessary based on the fact it had risen in the past; thus, it is not rational to believe the sun will rise tomorrow: this is not necessary.

Brown's third characteristic of rationality is its inextricability from rules. As we find in mathematics and logic, an answer, X, is rationally acceptable, true, if it has conformed to the rules in achieving X. One, of course, can achieve an answer by guess work, yet, to construct a proof for an answer requires following certain rules. Brown remarks: "When we proceed from a starting point to a conclusion in accordance with a set of rules, we free ourselves from the arbitrariness that is characteristic of nonrational decisions." Even in science, how one achieves an hypothesis, imagination, inspiration, and so on, does not justify the hypothesis, which requires an appeal to method. In "rules" we find the essential features of method. As Brown says, rules are the heart of classical rationality. With a method one has both rules, universality, and necessity:

Thus rules are at the heart of our classical model of rationality: if we have universally applicable rules, then all who begin from the same information must indeed arrive at the same conclusion, and it is these rules that provide a necessary connection between our starting point and our conclusion.

The paragon of method is shown in algorithms. Venn
diagrams, truth tables for validity, and most computer programs are examples of algorithms which provide a mechanical procedure meeting all the characteristics of a method, which we have hitherto elucidated. Rationalists, such as Leibniz, went as far as to suggest that all questions may be reducible to numbers as to present a statistics such that rational evidence may be weighed.\textsuperscript{7} In other words, some have tried to reduce all problems to a form which admit of algorithmic calculation.

Rationality in the modern sense requires objectivity. That is, rationality asks what the world is like in-itself, apart from subjects. Nathanson calls this the "impersonal search for truth". We have seen how a method allows an escape from subjectivity. For instance, one plus one equals two, and this is true, for what it is worth, apart from subjects; it is true for everybody: a method leads to convergence. Nathanson writes:

Rationality, then, involves a striving to be objective, and objectivity involves the attempt to discount those features of ourselves or our situation that might influence our judgment but that are not relevant as evidence. The more rational we become, the freer we can be of our surroundings and the more control we can have over ourselves.\textsuperscript{8}

Not only does rationality, a method, achieve universality because it can be used by anyone, but it also yields evidence that would be accepted by any rational person. That is, if a method is associated with reason, then, to use that method, and what it accepts as evidence, is to be rational. The right
method, Nathanson claims, is supposed to give us God's eye view. He says: "The product of applying this method is a true theory that describes things adequately for any rational being and that, by virtue of discounting the influence of any particular being's contingent perspective, furnishes a picture of the universe from a cosmic or 'God's eye' point of view." Reason is said to lead to impartiality, objectivity. Nathanson also points out how the desire to achieve "objectivity" by a method shows itself in ethics, such as that of Kant and Rawls, where a method allows one to step out of one's shoes, as to see the world from beyond one's subjective, embodied perspective. Nathanson writes:

The moral person is often called upon to discount the fact that certain desires or interests are his own and to make a fair and impartial judgment of the legitimacy of different people's rights or needs. Moral reflection gives rise to the notion of a cosmic or God's eye point of view, to the concept of an ideal observer who is equally concerned about all persons. 

So, even in ethics, as in metaphysics, we see the idea that a method can achieve objective knowledge, knowledge which is true independent of minds. Feyerabend points out that the entire idea of scientific knowledge is to achieve "facts" which are independent of prejudice (personal or cultural) as to get at the objective, what is really there. 

Technological rationality can be called means-ends rationality. It shows one how to get from a starting point, X, to an end, Y. A method, a procedure, stipulates how to get from X to Y. As we have seen, an algorithm is a paragon of
procedure. With this type of instrumental rationality, we can find the best method to achieve Y, but we cannot justify Y itself. As with Hume, reason ultimately must be a slave of the passions. That is, we must ultimately choose our ends, which themselves cannot be justified by reason. Rescher sees decision theorists as taking means-ends rationality to its most extreme manifestation. Rescher says:

It is virtually a dogma that the correct approach to rational choice is represented by the orthodox programme of expected-value calculations which weigh alternatives through their respective utilities and likelihoods. To be rational, on such an approach, is to make one's choices via a balance of probabilities and utilities.  

First, we notice that when a choice is made on the basis of a method, a calculation, it already requires interpreting a situation in terms of quantifiable terms, utilities, which are weighed. If one was to follow this method one would end up with the same prescription of how to act in situation X, regardless of differences in individuality, the historical time, or the culture; in this way, method leads to universal prescriptions: it is true for everyone everywhere (in situation X, one should do Y).

The problem here is that moral situations are appraised by a cost-benefit type analysis. First, this analysis, this method, already presupposes certain values, and is, thus, far from being objective. Secondly, there are many things we do, not because they maximize a utility, but we do them because we think them the right thing to do. In short, there are moral events, like sacrifice, that do not admit of
calculation, which cannot be fully captured, or modeled, by methodological analysis. In summing up the suggestion, we can say that deductive methods do not entail objectivity (because they depend on values) and further, cannot even be applied to all domains of inquiry.

(10.2) The Critique. Technological rationality is problematic for numerous reasons, some of which have already been anticipated, and we shall expand upon some of them here, while postponing others. Brown understands that technological rationality is commensurate with foundationalist epistemology, where a failure to provide foundations for knowledge lead one down the slippery-slope of relativism. More precisely, even though method X can justify knowledge claim Y, it cannot justify itself from the outside, as it were. For example, induction may be able to justify knowledge claim Y, yet if we can find no justification for induction, this method is no more rational than any other method. And, although we may have methods to justify our methods, there is a point at which justification, of this kind, will come to a stop. At this point, we are forced to relive Hume's dilemma: we have to choose what method we want to employ (which will probably depend on what we want to know, our interests). In short, instrumental rationality lacks foundations outside of the human inter-subjective world. This means people can employ different methods to achieve different truths, and we cannot adjudicate between them, because, each is ground on the
preferences of a particular group of subjects.

Also, the modern notion of reason, sets us in a matrix where, on the one hand, we have universalism and objectivity, and on the other hand, relativism. The criterion for truth that this notion of reason demands is too restrictive, being based on necessary connections, as found in logical deductions, yet, where this type of rigour cannot be achieved we are left with belief (where no belief is "rationally" any better than any other belief). Brown thinks we need an alternative conception of rationality that will not leave us in the dilemma of infallible knowledge or arbitrary knowledge. As one can see, this is Hume's dilemma between rational knowledge and irrational (passionate) belief. We cannot achieve rational knowledge, because, as Hume noted in his own way, there is no deductive proof for induction. In other words, we have a criterion of rational acceptability that deems most of what we know as irrational; further, we do not have a criteria to assess the rationality of our methods, and they are grounded in human choices, evaluations.

Another problem with technological rationality, is that it cannot live up to its own criterion of objective knowledge. That is, it has been seen as a virtue of a method, to give us knowledge which is free from the prejudices of subjects. Knowledge is a matter of judgment in the modern world, and a method is supposed to help us judge what is true from what is false. For instance, Brown cites the instance of a game, where
a referee makes a judgment whether one has violated a rule or not, and how the referee must be able to make a judgement by appeal to rules. Further, in order to make a correct judgment one requires all the relevant information, which is also defined by the rules of the game. The point is that, to follow Brown's analogy, the rules allow a method so one can make an objective decision (e.g. one is either out of bounds or not); the method allows a judgement on a truth-candidate, by specifying what is rationally acceptable.

Regarding epistemic or epistemological structures, judgement can be seen to play a similar role. Here, a method defines what is rationally acceptable. The problem, however, is that we have to choose which method leads to truth. So, although a specific method may specify what is rationally acceptable, different methods may have a different criterion of what legitimates a knowledge claim; they may contain different conceptions of rational acceptability. Method X, may justify knowledge claim Y, yet, method X, may be unsound and this makes the conclusion it yields, Y, obsolete. To take a concrete example, the method of reading tea leaves (suppose there is a hand book of rules) may lead to knowledge, yet, if we question the methods that verify the knowledge claims, we come to doubt that brand of "knowledge" (knowledge based on reading tea leaves). A method or algorithm will justify Y, yet, the method per se does not seem to have a justification. That we choose some methods over others is an
evaluative choice grounded in the human intersubjective world.

The problem of technological rationality is to justify the choice of method. As with Hume, although a method can provide a means to an ends, it cannot justify what ends we should choose. The fact that we have to choose ends inevitably defeats all claims to objectivity, in that now a subjective evaluation has encroached upon knowledge claims, facts, which were to be justified such that they would qualify as objective. To reiterate, although a method can lead us to say that knowledge claim X is objective, it is only objectively true from within the perspective of the theory, the method, that allows its existence. So, one can be objectively "out of bounds", within the rules of a particular game, but one cannot just be "objectively out of bounds" (apart from any rules, game, and so on.) Similarly, something can be true from the perspective of a certain method, but not in-itself. The view entailed here is that knowledge is the construction of subjects' theories, methods and so forth, as opposed to revealing something that is recognition transcendent.

Some have, traditionally, wanted to take certain methods to be self-evident, and self-justifying; in other words, some have admitted a method as an axiom in a system of knowledge. For example, some have argued that induction is a self-evident method which occupies its own cognitive space,

Of course, this theoretical trick was far from
convincing. Yet, if we could accept a method as true, we could say the knowledge it yielded was metaphysically true. (10.3) Nihilism. The implications that fall out from the groundlessness of any one method are far reaching. Basically, if a method can legitimate a body of knowledge, by defining what is true, rationally acceptable, and we cannot privilege, justify, any particular method or set of methods, we may end up with different bodies of knowledge, each being justified according to its own criteria of rational acceptability. In other words, we may end up with relativism regarding truth. Here, there can be no one correct description of the world, merely different ways of conceiving the world, each with its own style of rationality. As one can see, when reason falls, truth falls since, what is true is rationally acceptable, and what this means may not be fixed. In other words, reason is not, according to Hacking, an ahistorical concept we can achieve by reflection upon pure consciousness. Such terms, says Hacking, are historical, not "Plato's friends". Further, he says, reason is an organizing concept that frames how we see the world; different canons of reason belong to different traditions which embody certain living values. When we lose a fixed notion of reason, objectivity and universalism embodied in metaphysical realism fall by the wayside, for Hacking."

Brown notes that since rationality cannot be identified with any one method, it seems to some that rationality is a
social phenomenon. In other words, some hold that what is rational (what methods we accept perhaps), is a matter of an agreement with one's peers; if we can all agree upon a method or set of methods as being rational, then, they are. According to Brown, both Kuhn and Wittgenstein hold a social conception of rationality, where what is rational is defined socially, by a social praxis of the practitioners of science (Kuhn) or by an entire culture, form of life (Wittgenstein). In both cases, what is taken to be rational and hence true is relative to collective agreement.\textsuperscript{15} Putnam, of course, has gone one step further in that truth is what is rationally acceptable, where rationality is trans-cultural. In other words, for Putnam, what is true, rational, is so for all human beings (under ideal epistemic conditions).

Brown worries that a social conception of reason, however, means relativism. That is, he says, if rationality is the judgment of the community, we may have to admit that groups we now see as irrational are rational (by their own standards). Further, what is rational not only differs from society to society, but also historically: what was rational in 1885, may be different than what is rational today. For example, certain evidence may have made X rational to believe, but new conceptions of rationality accept different evidence, as to make X irrational to believe.

Feyerabend seems to champion the position that reason is
not fixed, and thus, neither is truth. According to Feyerabend, "one man's reason is another man's insanity." He recognizes the two positions one is caught between: (1) reason is above practice and guides it, or (2) what is reasonable is relative, such that different conception of rational acceptability lead to different truths. Of course, he has no problems with affirming the latter option, that reason emerges out of a practice and is relative to a certain praxis. For Feyerabend, it is only a mistake, on our part, that we take truth to be a given, when it is contingent upon certain ideological and theoretical positions (which themselves are groundless). Feyerabend takes knowledge to be a political manoeuvre, a deferral to the authority of habit and socialization. As he says, in one of his infamous writings: "Where arguments do seem to have an effect, this is more often due to their physical repetition than their semantic content." Knowledge, for Feyerabend, merely indicates one brand of what has become rationally acceptable, due to a host of causes, such as socialization. In other words, we may have just come to think X was true because we were socialized to accept either this fact, X, or because we were socialized to accept a criterion of rational acceptability which will justify X.

(10.4) Case Studies. Those who recognize the implications of a changing conception of reason, that is, different types of methods, have set about tracing how they give birth to
different world-views. Here, however, we are still dealing with technological rationality. Ian Hacking introduces the notion of styles of reasoning which exemplify the type of relativism/idealism which, I contend, falls out from the employment of instrumental rationality. Hacking means style in a very technical sense, and not in the way one would usually think of style as "personal style." For example, he notes, we usually can characterize one's "style" of swimming or playing an instrument. Here, "style" is indefinable and represents an ambience that characterize an activity one does, one's style. His notion of style, on the contrary, is very specific (as we shall see). Hacking points out that reasoning in one style is self-legitimating because it sets out what counts as rationally acceptable, true. He says:

Each style has become what we think of as a rather timeless cannon of objectivity, a standard or model of what it is to be reasonable about this or that type of subject matter. We do not check to see whether mathematical proof or laboratory investigation or statistical 'studies' are the right way to reason: they have become (after fierce struggles) what is to reason rightly, to be reasonable in this or that domain. 20

A certain style of reason stipulates the criterion of what can count as knowledge; it may require a knowledge claim to pass certain tests. The rules that govern how a hypothesis becomes knowledge are embodied in a method (or set of methods), what Hacking calls a "style of reasoning". Thus, a knowledge claim can never be a fact in the metaphysical sense that implies a view from no-where, because, a fact is based on a perspective of a certain style of reasoning: different styles


of reasoning give birth to different facts. As Hacking says: "There simply do not exist true-or-false sentences of a given kind for us to discover the truth of, outside of the context of the appropriate style of reasoning."21 As we pointed out in our discussion on methods, a method legitimates facts, but itself is immune from justification. Similarly, Hacking says, styles of reasoning cannot be right or wrong; and, there exist different styles for biologists, physicists, the law profession, and so forth. Hacking writes: "Although styles may evolve or be abandoned, they are curiously immune to anything akin to refutation. There is no higher standard to which they directly answer."22

The claim has been put forward: different style of reasoning carry with them their own corpus of knowledge. To the virgin ears of a realist this may seem absurd. Let us, then, consider two examples of how styles of reasoning function in the manner Hacking has claimed; Barry Allen and Arnold Davidson have set out to further corroborate this thesis by presenting us with case studies to this effect. Allen considers demonology and Davidson diseases of sexuality. (i) Demonology. Allen begins by stating his thesis: "My claim is that contributions to this discourse [on demonology] operate within a unique style of reasoning, which disappears from the production of knowledge in the West with the cessation of the witch-trials in the latter seventeenth century."23 It is worth while paying attention to the
language Allen employs. He says knowledge is "produced", as opposed to "discovered", which suggests it was already there. Further, knowledge's production is contingent upon a style of reasoning. A style of reasoning sets out what can be true or false, by giving rise to a theoretical situation in which truth can be manifest. In other words, a style of reasoning, by stipulating certain rules which allow a judgment on a knowledge claim, allows the possibility of knowledge. Allen writes: "A truth-candidate is a sentence regarded by those committed to a certain style of reasoning as being determinately true-or-false." A style of reasoning allows a judgment on a truth candidate to be either true or false.

What is a style of reasoning? Drawing on Hacking, Allen itemizes the features which are constitutive of a style of reasoning:  

1. A new object (e.g. witches; perversions)
2. New evidence (e.g. witches cannot weep, a confession, curse laid, inability to recite lords prayer)
3. New sentences (new knowledge)
4. New type of law or new modality (e.g. criterion for being X)
5. New possibilities (e.g. new objects)
6. Finally, that the new knowledge remains stable and endures over a period of time

A style of reasoning sets a criterion of what is rationally acceptable, and thus justifies itself. In other words, a style of reasoning determines true knowledge, because it defines what counts as true knowledge. In short, a style of reasoning justifies itself in a tautologous manner: it provides true knowledge (which it defines to be such), and thus claims to be
the correct method for having provided true knowledge. Allen remarks: "Rather than being proved reasonable by a different standard, a style of reasoning assumes the position of a governing norm of reasonableness in a given field of truth-candidates. This presumption makes any practice of reasoning 'curiously self-authenticating.'" To follow Allen's example, there was developed a classificatory taxonomy that gave rise to new objects, the "heretic", the "witch", and there arose simultaneously methods for judging if X was a witch. This style of reasoning, Allen argues, fulfils all the criteria of a style of reasoning, and thus allows of a fact of the matter: either X was a witch or was not. The proposition could be true or false within the context of this style of reasoning. Yet, when this style of reasoning disappeared, so did this knowledge; Allen calls this lost knowledge. Also, no style is better than any other per se. Allen writes:

There is no one unified dimension of 'rationality' in respect of which the products (sentences) of different styles might be compared and ranked. Demonology is as reasonable for reasoning about demons and witches as experimental physics is for reasoning about photons and quarks...If one had to use a single word to describe the products of reasoning the best word would be knowledge. Styles of reasoning are techniques for producing knowledge."

One could go as far as to say that knowledge is a co-happening with a style of reasoning, in that, they exist in a symbiotic relationship. The point is this. Different styles of reasoning stipulate a different criterion of what is
rationally acceptable. Further, a style of reasoning even produces its objects. Atoms or witches are not real or true, but they can be posited as possibilities once the appropriate style of reasoning has come into existence. At this time, one can use a style of reasoning to make a judgement, either X is a Y, or not. To ask if there really are such things as atoms or witches is a non-starter, because truth and falsity only make sense, for Allen, based upon a criterion of rational acceptability embedded in a style of reasoning.

(ii) Perversions. Arnold Davidson carries out a different case study, in the same vein as Allen. Davidson says that his goal is to show that some claims only make sense under the auspices of a style of reasoning. He says:

I offer here an extended case study of the way in which the status of statements is relative to a body of knowledge, what I call a 'style of reasoning'. More specifically, I want to show that some claims cannot even be conceived with the development of a new style of reasoning. Thus the very possibility of conceiving of certain statements as part of the domain of scientific knowledge depends upon the historically specific formation of new concepts, and new forms of reasoning and argumentation. 28

Again, Davidson wants to offer a case study to elaborate a thesis first put forward by Hacking. 29 As Allen considered Demonology, Davidson considers how a new style of reasoning gave rise to perversions. Davidson notes that before the rise of psychiatric styles of reasoning, the etiology of diseases were always located in the body. "During this span of
time, no one really knew what it would mean to conceive of
diseases like perversion in purely functional terms. It would
be like admitting functions without organs, which, as
Bouillaud remind us, was a palpable absurdity. It was only
with the development of the notion of instinct that a disease
could be conceived of as being attributed to something other
than the physical. Davidson says: "The real break, the new
style of reasoning, is to be located at that point when the
sexual instinct and its functional diseases were introduced
together. Functional diseases were diseases of something - not
an organ, but an instinct." "To affirm explicitly that
sexual perversions or other mental diseases were functionally
autonomous from the brain would have been to pass from basic
truth to palpable absurdity, something beyond falsity," before the notion of instinct.

A new style of reasoning, claims Davidson, which he calls
the psychiatric style of reasoning, posited new objects, like
the instinct, perversions, and so on. Further, there was a
criterion of rational acceptability as to judge when a
perversion was present and when it was not; when it was true
that one was perverse, and false that this was not so. Yet, as
he emphasizes, the new taxonomy, the new corpus of knowledge,
could not be possible without a new style of reasoning (as we
have already defined it). Davidson remarks: "Once one offers
a functional characterization of the sexual instinct,
perversions become a natural class of diseases and without
this characterization there is really no conceptual room for this kind of disease. "^33 New styles of reasoning give rise to a new body of knowledge. Davidson shows that the emergence of psychiatric styles of reasoning were necessary in the production of a new corpus of knowledge. At one time, for example, perversion was a moral issue (under the eye of theological styles of reasoning), and then a medical/physical issue, and then a psychiatric issue. "The reassignment in regulating the perversions, from law/morality to medicine, was not simply a new institutional division of labour; it was to signal a fundamental transformation, and the inauguration of whole new ways of conceptualizing ourselves."^34 New styles of reasoning are necessary in the production of knowledge, which change, according to Davidson, how we see ourselves.

Again, we see a case where one wants to show how knowledge or facts are contingent upon, and produced by a certain style of reasoning. A truth-candidate can be true or false within a style of reasoning, such that the creation of a new category (e.g. the witch, the quark, the pervert) would allow a reckoning whether the truth candidate in question would qualify as fitting into that category. The end result is the same. Although one could mistakenly qualify a proposition as true, when it was not, by incorrectly employing a method, one cannot ask which methods or styles of reasoning are true. Since no style of reasoning is any more true than any other, no type of knowledge which an individual style of
reasoning produces is any more true than any other.

(10.5) Reason and Epistemology. Beginning by defining technological or instrumental rationality, that has held sway in modernity, we have seen that its essential feature is explicated by the meaning of "method". A method provides a means to an ends. Further, it provides a means to an end such that anyone who utilizes the method in question will arrive at the same end. Thus, method leads to universality, convergence. This is assuming, of course, that we all can accept the same method or set of methods. A method is aimed at achieving objectivity, by allowing a discernment of truth from falsity, regardless of the whims of the subject. A method allows impartiality, just as a method is used by a judge to render an impartial decision, innocent or guilty, we attempt to judge knowledge claims, truth-candidates as true or false. A method entails necessity, universality and objectivity.

The problem has been that even though a method can justify what is true and false, it, per se, does not have a justification. We do not have methods to justify our methods, and if we did, we would still be left with an infinite regress, so that ultimately, our methods would be without foundations. Modern, technological rationality, then, falls into Hume's dilemma. Namely, "reason is fated to be the slave to the passions.", because what method we choose to utilize (assuming we can consciously make the choice) remains evaluative, dependent on our interests. Here, we can see why
some gravitate towards a social conception of reason, where what is rational is what is in agreement with my peers, where the foundations of knowledge lie in the human intersubjective world(s).

The implication from the diversity of "reason" because of the failure of a foundationalist epistemology is the relativity of truth. Some, like Feyerabend, make a virtue out of the situation that we cannot find foundations for any one method; he calls for a plurality of (supposedly) incommensurable theories, ideas, and truths. Hacking, further, introduces the idea of styles of reasoning, which allow us to explore what it means to give up on a fixed ahistorical notion of rationality. As we have seen, different conceptions of reason, rational acceptability, entail different truths. For Hacking, new styles of reasoning embody a new corpus of knowledge. Allen and Davidson have presented us with two case studies, demonology and perversions, that show how a style of reasoning provides mechanisms for the production of knowledge. Indeed, they have argued that new knowledge is contingent upon new styles of reasoning; and, when these styles of reasoning disappear, so does the knowledge which they have manufactured. As goes without saying, they do not think knowledge can exist apart from a style of reasoning; they are not metaphysical realists.

What we have seen is how a new conception of reason, technological rationality, undermines itself, as Hume had
already anticipated. Yet, Hume could not find a way out of the dilemma between reason and the passions, given the notion of reason he was operating with. That is, he was forced to admit the limits of reason, in that, reason could show us a means to an end, but could not establish any knowledge about the world per se; thus, he had to fall back upon the passions, unreason. To follow the idea that reason has limits, we have seen how reason can show us the most expedient means to an end, but the ends themselves remained groundless; no end is any better than any other end, ultimately. Similarly, since any one method or style of reasoning cannot justify itself (from beyond itself, as to avoid a tautologous justification) no method or style of reasoning presents itself as, ultimately, any more rational than any other. In this way, instrumental rationality leads to relativism/idealism; no criterion of rational acceptability is any more rational or true than any other.

Further, it is technological rationality itself which demands justificatory foundations, a reason. Since, what is true has to be defined by a method, we need a method to verify our choice of method as the correct one. Put differently, since what is true is determined by a criterion of rational acceptability, we need a criterion of what canon rational acceptability is itself rationally acceptable. It is at this point in the acquisition of knowledge that we have to make choices, evaluations. Since no final foundations,
justification, is forthcoming, it has become hard to see any one method, or style of reasoning, as any more rational than any other, beyond that fact we may, choose, or prefer one to the other.

I have suggested that technological rationality led to foundationalist epistemology whose failure facilitated the relativism/idealism of thinkers such as Hacking, Allen, Davidson, and Feyerabend, where truth is justified by standards which per se are not justifiable in any substantial sense.

It has been our task to search back into the history of the idea of the word "reason", as to see how it was that reason came to be understood as a technique, a method, a procedure, a technology. That is to say, we asked how was it that in the age of technology that reason lost its experiential/intuitive element and became purely procedural, an idea which also had some roots in the ancient world in the Homeric association of reason with the ability to plan, yet where the experiential element reigned supreme.
Part 3

Final Remarks
Final Remarks

In these final remarks, there are a number of issues I need to address, and I should hope to deal with each in turn. First, I need to discuss the motivations for this investigation, that is, why should we inquiry into the history of reason? Secondly, I will elucidate what has been learned about reason. Lastly, I will want to come back to existential epistemology, so as to attempt to understand man's relationship to truth.

(11.1) The Crisis. The fact that philosophy is in a crisis is such an old idea now that the crisis confronts us less, today, as an urgency, than a darkness that one learns to live with. There has been many ways that people have reacted to this crisis, some trying to be experts, specialists, as if they were also scientists, contributing to progress. The fact that this text arose out of this crisis, the crisis of reason, does not suggest that the position that I hold is contingent upon any anxieties that exist amongst professional philosophers. In other words, my thinking could well have emerged out of engagement in thinking itself, which is not to say I am not influenced by the philosophical tradition in
which we find ourselves. According to Ortega, "man has begun not to know what do with his ideas".\(^2\) As he goes on to note, we think that the intellect is a wonderfully thing, and we do not just want to displace it. In order words, it is not that we are willing to throw up our hands and say "thinking is vain". He asks: "what is the role of the intellect"? We ourselves began by asking, in our own way, "what can reason achieve?", "what is it possible for us to do, as philosophers?"

According to Ortega, Philosophy has died and we have been left with a dead custom. There are very few who put forward metaphysical theories today, especially not of the scope of the ancients. Where philosophy is about truth, and has now abandoned its vocation, what is Philosophy? He writes:

Philosophy died a long time ago - although its mummy and its skeleton, for generations past, have been on display at certain regular hours in the Faculties of Philosophy. What was said in these Faculties was more or less clever, exact, pleasant; but, ultimately, it meant nothing to us. Sometimes it was better, sometimes worse...\(^3\)

(11.2) The Diagnosis. Philosophy is in crisis because it feels it can no longer achieve, in good faith, what it was supposed to, truth. Yet, if metaphysical realism and the correspondence theory of truth are no longer tenable, are we to fall into, what is traditionally called, idealism?

The problem of knowledge, modern epistemology, seemed to force us into a corner, scepticism. As Hume had demonstrated, quite convincingly, there was no deductive reason to believe many, if any, the things we take to be true. Even in Descartes' thought, we are asked what is the reason that we
believe there to be a world, or other minds. One of the motivations to investigate the history of the idea of reason is to see what type of conception of rationality is being employed here. Harold Brown notes that one of the motivations he, and others, like myself, want to posit a critique of modern rationality, is because it gives birth to the intractable problems of foundationalist epistemology. Brown says: "The need to break such justificatory regresses will be a major concern in our attempt to develop an alternative rationality."

When we first approached the question, "what is reason?", it was entirely obvious that very few who used the term were clear on what they, themselves, meant by it. Although many thinkers retain the idea that reason is something divine, and perhaps distinguishes us from the beasts, it was not clear what it, per se, was. Sometimes reason is associated with speech, as Max Muller thought: "No reason without speech and no speech without reason". On other occasions, reason meant discourse, logic or deductive processes in a technical sense, or just thinking in general. In fact, the *Oxford Etymological Dictionary* notes that reason derives from "reri" which means "to think". Now, this does not help one much, for it just postpones the question to "what is thinking"? Reason as thinking, also, does not shed any light on understanding how we should orient ourselves towards theories. Is metaphysics outside of thought (Kant)? Is truth a construction of thought,
idealism? Is metaphysical truth coextensive with thought (Parmenides)?

I have argued that the adoption of a technological or instrumental conception of rationality was found to be necessary for foundationalist epistemology to even get off the ground. With "reason" so understood, reason had an unquenchable thirst for a reason for everything, even itself. Since no reason was forthcoming, the dream of foundational epistemology ended with a lacuna, where at worst, the world became a dream, and we were stuck in the solipsistic hell of the "theatre of our own minds"; or at best, we ended up with a collective type of idealism or relativism. (e.g. Hacking).

Once, however, reason took on the meaning of technological reason, there was resistance to it. Instead of submitting to the authority of reason and ending up in a scepticism, like Hume, some dismissed, perhaps not openly, the value of logical reasoning. For, if one was to surrender oneself to logic, and to use it as a model of certitude, one would truly know very little. And, as it happens, much epistemology-philosophy of science, is merely an elaborate working out how closely scientific knowledge can measure up to the necessity, completeness, and so on, of the logicians.

Vis a vis technological rationality, it was asserted that reason could never grasp the truth, that a theory would always fall short of a total explanation (e.g. Jaspers, Bergson, Tolstoy, Heidegger, Zamyatin). There would remain
something elusive about nature, ourselves, and so on, that could never be captured by reason. As Heidegger said, there is something which cannot "be gotten around" something "inaccessible". Some were as candid as to merely assert that there will always remain mystery which remains outside of the purview of the gaze of reason. With the crisis of reason, many turned away from reason. But what did they turn to? Well, they turned back to their lives, back to the experience of the everyday.

Voltaire: "Let us set aside these novels called systems, and to raise ourselves up let us descend into ourselves." Here, we find the essence of scepticism regarding the limits of reason, a scepticism of a deep man that followed reason to its end. The idea of returning to our experience as a foundation, is an idea that resonates with Putnam, in his call for a naive realism. As Putnam says: "Without the constraint of trying to save the appearances, philosophy becomes a game in which anyone can — and as a rule does, say just about ANYTHING. Unless we take our intuitions seriously, we cannot do hard philosophy at all." Putnam has made the move, which he characterizes as, familiar to familiar. In other words, Putnam does not want to espouse a philosophy that thwarts his perceptions in the world as an intelligent person. Putnam, does not want to end up like Hume, where he has to leave his philosophy behind when he leaves his study. Putnam finds himself in the company of existential epistemology, the idea
that our lives have to be the foundation of our thought. Ortega makes much the same point that Putnam makes now, in regard to philosophical problems of idealism and realism. Ortega says: "An independent world or independent thought do not exist. They are merely two hypotheses, two theoretical constructions, and not reality. What is, primarily and in purest form, is the coexistence of man and world..." The fundamental reality is our being-in-the-world. It is only after the fact, that we can doubt the world, posit idealisms or realisms. Ortega says: "We began with what is unusually called - what each one calls - in sorrow and joy, in anguish and hopefulness, one's life. This is the fundamental reality. It is what we discover to be already there; not in a more or less theoretical, hypothetical way, not as mere supposition, but as what is always there, before any theory..."

(11.3) An Alternative. We have seen that reason in modernity is strongly associated with method. To be rational, is to employ a method that is said to lead to objectivity, impartiality, and so forth. The modern conception of reason, becomes irrational on its own grounds however, in that no one method can provide foundations for itself. Justification comes to an end, and this end is based on choices we make, what questions we ask, what interests we have. A method can stipulate what is the most efficient way to achieve X, from a list of options, but it cannot determine our
ends. Reason cannot rest on itself. Yet, if we were to ask how it was that we ended up with this conception of reason, we will see that we employed a particular conception of reason. It is a conception of reason which is set against the senses, experience, and intuition. With the loss of the experiential aspect of reason, different conceptions of rational acceptability, styles of reasoning, and so on, lead to different bodies of knowledge; truth becomes splintered, diversified, and relative: there are different truths that depend on different, and particular, conceptions of rational acceptability; ultimately, truth becomes dependent "on who you are". Against the relativism of reason, Putnam has tried to offer a normative account of rationality by grounding it in a conception of human nature, human flourishing; he thinks there are limits inherent in the human situation which delimit what can count as rational, and thus serve as a foundation for a normative account of rationally acceptable (for a given domain of inquiry). Hence, there are limits to what can count as true for human beings, according to Putnam. He, however, still abandons metaphysical truth.

(i) The Negative Argument. I have suggested two things, one negative and one positive. First, many people abandon metaphysical truth because they are operating with an instrumental type of rationality, which informs their choices, and hence fall prey to the ethos of their time which determined modern rationality as instrumental and
technological. If reason is going to put truth on trial, I have set out to understand and critique modern rationality. Basically, I want to question the primacy of metaphysics over epistemology. Truth is true, and has nothing to do with counting as such. I have argued that it is with the adoption of an instrumental rationality that epistemology was able to achieve a primacy over metaphysics.

What we have lost, and what some have tried, in their awkward way to recover, is the experiential aspect of reason. When reason is understood as intuitive, we lose our problems of foundations, since, knowledge, truth, is grasped by reason, and this is taken to be veridical. The truth of the world is grasped by reason, as understood in its more ancient manifestation. Truth, the reservoir of Being, is seen by intuition, by mind, which grasps what is, which is manifest in every changing thing, where all contradictions are reconciled, although not eliminated. With this conception of reason, we see the world with sympathy, what resembles an aesthetic sense.

(ii) The Positive Argument. One reason some people abandon truth is because they think it requires a denial of their world. That is, some think that to affirm a metaphysical truth requires recognizing the immanent world as illusory in favour of some transcendent world. I have argued in this respect that there are more sophisticated ways to deal with this criticism than to simply abandon truth, as evidenced by the
scholastic approach, which views the immanent world as a symbol for the divine.11

The question still remains, what is the right attitude to take towards philosophy? It is not that philosophical theories are made redundant either by scepticism (which is logical sophistry) or intuition. The theories we posit can be seen to merely point to what transcends them. In the same way as music or dance is a vehicle, so too, are philosophical theories; they are mere symbols that always indicate something beyond themselves. As we have learned from Aquinas, we can always move by analogy from what we are first confronted with in everyday experience, the world, to the divine. More precisely, philosophical theories indicate what is sacred and divine in the world, yet they are never true in the sense of the correspondence theory of truth (as understood in modernity). As a pointing, different expressions, theories are an expression of beauty. They are a reflection of what we think about our world, what we see.
NOTES
Notes for Preface

1. See the Monadology, #67

2. See Camus, The Plague Indeed, the title is itself revealing. The book is in the tradition of Voltaire.

3. This is published in Great Short Works, New York: Harper Row, 1968.

4. Ibid. p.729

5. Ibid. p.731

6. Ibid. p.732

7. Ibid. p.734

8. Ibid. p.735

9. Ibid. p.737

10. Ibid. p.738
Notes to Chapter 1

1. See first page of Hilary Putnam, The Meaning of the Concept of Probability in Application to Finite Sequences, Garland: London, 1990. This is a fairly technical work, yet, one can still gain insight into the over-all project and the ethos of the times by reading it. I will make this more obvious in considering Putnam's thought on rationality. (e.g. reason as method - induction).


3. Putnam is ambiguous on a definition of a description. It is important to note that a "true description" changes to a "correct description", and Putnam's argument depends on getting clear on which term he desires to use.

4. Of course, it is not necessary to lump things like this together. An idealist need not be a relativist, but, if one wants to see philosophy as consisting of three options, there is going to be a simplification. We can accept the simplification if it is illuminating.

5. See chapter five of this text for Putnam's comments on Aristotle.

6. Ibid. p.50

7. Ibid. p.54

8. Ibid. p.73

9. See chapter 23 of Words and Life

10. Recall, the positivists did this by declaring many (important) questions to be non-sense.

11. See p.66 in Realism with a Human Face

12. See Meaning and the Moral Sciences, p.29


2. Putnam is very clear in the third volume of his collected papers that scientific realism and metaphysical realism are interchangeable concepts for his general purpose, which is to critique metaphysical realism.

3. Hilary Putnam, "Why There Isn't A Ready-Made World", in *Realism and Reason*, V.3 of the Collected papers, p.211


6. Ibid. p.75

7. Ibid. *Meaning and the Moral Sciences*, p.76

8. Ibid. p.77

9. *Meaning and the moral Sciences*, p.92

10. A chapter in *Meaning and the Moral Sciences*.

11. Ibid. p.85

12. Ibid. p.89

13. Some have pointed out that science always impressed the English more than most Europeans.


15. Ibid. p.141

16. Ibid. p.162

17. See Putnam, *Representing and Reality*. In this text, he launches his attack on MIT Cognitive Science.


19. Ibid. p.58

20. See *Representation and Reality*, p.25
21. There are problems with making his thought on reference congruent with internal realism. Namely, his treatment of reference does not seem to take conceptual relativity seriously. He has to privilege a chemical definition of water over a phenomenal description to say "water" refers to H2O.

22. Ibid. p.71

23. Ibid. p.89

24. Ibid. p. 118-119. The allusion to phlogiston, is where he says can we just say that phlogiston was valance electrons? How far are we willing to say electrons are there, and we just describe them wrong? How wrong is wrong? See following page for comments in his text on Dummett and Derrida.

25. Hilary Putnam, Realism with a Human Face, p. 51
Notes to Chapter 3

1. This quotation is from The Many Faces of Realism, p. 4


3. See preface of Realism with a Human Face, 1990.

4. Hilary Putnam, Words and Life, p. 281

5. Hilary Putnam, Reason, Truth, and History, From the first page of the Preface.

6. See Reason, Truth, and History, p. x

7. Ibid. p. x

8. Ibid. p. xi

9. It is making a claim that cannot be verified by logic, that one says something of philosophical importance.

10. Ibid. p. 49

11. Ibid. p. 55

12. Ibid. p. 55

13. Hilary Putnam, Meaning and the Moral Sciences, p. 63

14. Hilary Putnam, Realism with a Human Face, p. viii

15. Ibid. p. ix

16. See p. 42 of Realism with a Human Face

17. Ibid. See p. 72


19. Ibid. p. 215
20. Putnam is careful to bring to the readers attention that we should not confuse this issue with the political question of freedom: This is a purely theoretical question; do we have human nature or only the emptiness of freedom (Sartre)?

21. Ibid. p.148

22. Hilary Putnam, Meaning and the Moral Sciences, p.56. Here Putnam makes the obvious point (that many philosopher's fail to see) that there is really no such thing as incommensurability among cultures. The fact we can compare them, to show they are different, would not be possible if they were "incommensurable." (the term was first used by mathematicians to describe incommensurable line magnitudes, and mis-appropriated by philosophers.)

23. Hilary Putnam, Realism with a Human Face, p.178

24. Hilary Putnam, Meaning and the Moral Sciences, p.93

25. Ibid. p.94

26. Realism with a Human Face, p.96

27. See p. 130, Meaning and the Moral Sciences

28. Realism with a Human Face, p.42

29. Hilary Putnam, Representation and Reality, p.115

30. In the case of theories we talk of greater explanatory power.

31. A term borrowed from Husserl.

32. By the way, for Putnam, the question of causation demonstrates a confusion of ontological status of relations, and an equivocation whether truth is mental or not.

33. See, "Why Reason Can't be Naturalized" in the collected papers, V.3, Realism and Reason p.247

34. See chapter 10 of this text.

35. Hilary Putnam, The Many Faces of Realism, p.17

36. Notice, Aristotle was even a "realist" about aesthetics (see the Poetics).
Notes for Chapter 4


2. As Aristotle pointed out, we reach out for Being, and as Heidegger noted, we are the custodians of Being. At any rate, Man is defined as a knower, the one that has a special relation to Truth.

3. See *Words and Life*, p.442

4. See *Reason, Truth, and History*, p.104

5. Ibid. p.106


7. Ibid. p.126

8. Ibid. p.180-181

9. Ibid. p.184

10. Ibid. p.187

11. We will deal with this in more detail, with the help of Heidegger.

12. Ibid. p.189

13. This is a debate in philosophy of science, I merely want to point out, with Putnam, that science, its supposed method, became a paradigm of rationality.

14. Ibid. p.200

15. See *Representation and Reality*


17. See "Why Reason can't be Naturalized", in V.3 of collected papers, *Realism and Reason*, p.233

18. *Reason, Truth and History*, p. 119

19. Ibid. p.163 and 164 respectively.

20. Hilary Putnam, *Representation and Reality*, p.120

Notes to Chapter 5

1. Whether Putnam is still committed to internal realism depends on how one defines it. In many ways he still is, yet, not as one committed to a certain doctrine, but rather to a certain approach to philosophy.

2. See Words and Life, p.306

3. In Renewing Philosophy, see the essay on "Wittgenstein on Religious Belief".

4. In Words and Life, p.291

5. See Realism with a Human Face

6. Realism with a Human Face, p.200

7. Consider Heidegger's discussion of wonder at the question "why are there things rather than not?". For Heidegger, wonder is felt when this question is authentically asked. The question is not a problem, as if there were a solution, but, rather, a vehicle which takes us to the limits of thinking.

8. See the "Dewey Lectures", in Journal of Philosophy, 9, Sept. 1994, p.452. On page 456 he says that he has not dropped internal realism completely: much is retained.

9. Words and Life, p.55

10. Ibid. p.517

11. Note, Rawls has re-interpreted his theory of justice. He no longer claims it to be foundational for values, but rather describes the logic behind what we already accept.

12. Words and Life, p.168

13. Ibid. p.169

14. By appealing, like Habermas, to a transcendental-pragmatic argument, Dewey thinks, democracy is a rational prerequisite for inquiry, according to Putnam.

15. See page 515 of Words and Life, here he draws on S. Cavell's connection between philosophy and art.

16. Hilary Putnam, Renewing Philosophy, p.141

17. Ibid. p.178

18. Words and Life, p.284
19. When he compares Rorty and Quine, he sees the former as linked to deconstruction/historicism/relativism and the later with scientism.


21. Ibid. p.86

22. Ibid. p.86
Notes to Chapter 6


2. This is the epigram from Owen Barfield's History, Guilt and Habit, Wesleyan Press: Connecticut, 1979.

3. Ibid. p. 86

4. Ibid. p. 93

5. Ibid. p. 99

6. From the introduction. p. 11

7. Ibid. p. 5

8. As with Aristotle, we have a proclivity towards Being; we reach out for it.

9. ST 1 2 1 ad 2

10. ST 1 2 1 ad 3

11. ST 1 2 2

12. ST 1 2 2 ad 3

13. ST 1 2 2

14. ST 1 2 2

15. ST 1 1 10 ad 2

16. ST 1 1 10

17. ST 1 13 1 ad 1

18. ST 1 13 1 ad 2

19. ST 1 13 1 ad 3

20. ST 1 13 2 ad 1

21. ST 1 13 2 ad 3
24. Again, in line with the ethos of Aristotelian doctrine, a good tree is not measured against God/Being but treehood, i.e. what a tree is.

29. Recall the staple Greek distinction between sophia and doxa.

33. Heidegger taught us we cannot easily separate the two since science is dependent on technology, technique, method and so forth.

34. A definition of science would require an enormous project. I merely want to assume there are certain features of science that allow a demarcation from non-science. Although, the distinction, in some cases may be a matter of degree.

35. I am willing to admit that understanding may be a necessary condition but not a sufficient condition for peace. For Dr. Griffin, this is also a political question. To say that those exploited find peace in metaphysical understanding could be seen as a mystification of injustice.

36. The final judgment of Marxism has not yet been given, except for those who have been impatient from the beginning to condemn what challenges their privilege.
Notes to Chapter 7

1. With Zamyatin, for example.

2. Owen Barfield, *Romanticism Comes of Age*, p.149

3. Quoted in Owen Barfield, *What Coleridge Thought*, p.114. One may want to consider Aquinas' hierarchy of Being, where there are spiritual beings, angels and God, who only have intellect; man, who has intellect, sense, and life; animals, who have life and sense; plant, which have life; and such things as rocks which have none of the above. Again, though, it is the intellect which is the spiritual element, where man is akin to God (pure mind).


5. Kurt von Fritz, *Philosophy and linguistics: expression in Democritus, Plato and Aristotle*, p.23. I will be drawing from the work of Von Fritz exclusively in this section, so I will only use citations to keep the reader aware of where to find more details which lie outside of my own ad hoc investigation.

6. Ibid. p.23

7. Ibid. p.24

8. Ibid. p.24

9. Ibid. p.26

10. Ibid. p.26

11. Ibid. p.26

12. Quoted in Von Fritz, p.31

13. Ibid. p.33

14. Ibid. p.33. Although it is pointed out that God does not use an organ to see or reason. In fact, he says, there is no connection between noos and a specific bodily organ anywhere in Greek thought before the second half of the fifth century.

15. Ibid.p.35

16. Ibid. p.38

17. Ibid. p.39

18. Ibid. p.40. Consider Plato's portrayal as leaving the darkness of the cave for the light of the sun. Again, we have a perceptual metaphor, a seeing.
19. Ibid. p.41

20. Ibid. p.41

21. "As long as we translate noos with 'thought' and noein with 'thinking', as most translators have done, and understand this to mean 'logical reasoning'. For reasoning can be correct or incorrect, can start from true or false premises, and therefore can lead to truth or error." p.45. This is why valid argument can be unsound.

22. Von Fritz points out, laestrygonians and Phaeacians think one can see the world differently (nooi), the truth is different for different people: there is a different order of things. p.44. In this respect, it is interesting to see the relation between reason and truth. When a normative conception of reason becomes diversified, so too does truth.

23. Ibid. p.52


25. Ibid. p.63

26. Ibid. p.63

27. Ibid. p.68

28. Ibid. p.80

29. e.g. Bergson and the romantic thinkers, for instance.

30. Metaphysics 1072b 18-24

31. For Hegel reason was manifest in history for example.

32. Hans-Georg Gadamer, Reason in the Age of Science, p.17-18. Even theoria, the essence of contemplation, is more like a real participation, being present, than a reflecting, thinking, about something disinterestedly.
Notes to Chapter 8

1. See the first chapter of Walsh's, Reason and Experience

2. Ryle thinks we can no longer distinguish man from the rest of creation based upon one quality, reason. Also, using a modern conception of reason, he does not think we can all be deemed rational, because some are more rational than others. Reason, he says, is something which is achieved like excellence. Of course, this only makes sense if we think of reason as a mastery of skills, such as logical thinking, and not as a faculty which grasps truth (the ancient conception). He see three qualities to reason: (1) we can cite a reason, justification for X, (2) we can draw inferences and make theories, (3) but, also, we think a man who is rational to be not petty, malicious, and impatient. This third notion of reason is a "practical reason". See Gilbert Ryle A Rational Animal. Basically, an elucidation of a modern conception of rationality, with very little insight into the historicity of reason.


4. Ibid. p.65. He calls this speculative reason.

5. Quoted in John Sallis, The Gathering of Reason, p.170. For Kant, there is reason and understanding, which relates things of experience. Whereas, reason affirms the transcendental ideas of the soul (psychology), the world (cosmology) and the origin/God (theology). See Whittaker, Reason: A philosophical Essay.

6. See Evan Simpson, "Principles and Customs in Moral Philosophy", (Metaphilosophy, 1993 V.24) and "The Development of Political Reasoning", (Human Development, 1987). In Kohlberg, and Habermas, it is a theory of human nature which is to stipulate a certain social organization. Today, it is not reason, but language which is said to separate us from the rest of creation. One can see, however, how it is part of the same Judeo-Christian prejudice.


9. See Aaron, Knowing and the Function of Reason, p.31


12. René Descartes, *Discourse on Method*, p.1

13. Ibid. p.1

14. Ibid. p.9

15. Ibid. p.12

16. Ibid. p.20

17. Of course, with Putnam's internal realism, if we can posit a conception of human nature, we can favour a certain domain of methods over others, because what methods we choose reflect our interests and these are stipulated by "what it is to be human". So, we end up with human interests, methods commensurate with these interests, and human knowledge. So, contrary to Hacking, Putnam would think some styles of reasoning are "better" than others (although he would not think we could prove one is "right" or "wrong".)

18. This is in line with Kant, where things-in-themselves are beyond reason.


21. Ibid. p.21

22. Ibid. p.52

23. Ibid. p.106.

24. Ibid. p.124


26. Henri Bergson, *Creative Evolution*, [From the introduction]

27. Ibid.p.195

28. Ibid. p.291-2

29. Leo Tolstoy, *Anna Karenin*, Penguin Books: New York, 1978. From the introduction. We can understand his preoccupation with the problem of death since he is a christian.

30. Ibid. p.300
43. What Max Weber called the dis-enchantment of the world. The idea is, of course, that once the world was enchanting, but somehow instrumental reason and the mechanistic worldview it supports and reveals, dis-enchants the world.

44. Ibid. p. 853

45. I use experience here metaphorically, and for lack of a better word, but, in the ancient conception, reason does become fully experiential. Or, to state the situation correctly, it is after the ancients that we lose the experiential element in reason (and with it truth).
1. Even though Heidegger is orthodox in the sense I have elucidated, he recognizes the "forgetfulness" of his age; thus, he is a heretic in the eyes of beings who have abandoned Being. Further, as far as philosophers being heretics, we can think of Wittgenstein's remark of how some philosophical questions "idle". Now, to "idle" in an age which judges, evaluates, by production, effect, and so on has, as the pragmatists say, and revealingly, no "cash value". See Heidegger's discussion of wonder in Introduction to Metaphysics, p.11


3. Ibid. p.4
4. Ibid. p.75
5. Ibid. p.135
6. Ibid. p.13
7. p.39
8. p.179-80
9. Ibid. p.61 and 115 respectively.
10. Ibid. p.213
11. Ibid. p.230
13. Ibid. p.5. I should note that my elucidation of Heidegger is used for our purpose concerning "reason", thus, I do not deal with Heidegger's question of Being, as it is shown by technology.
14. Ibid. p.6
15. Ibid. p.14. This contention is accepted by everyone, I have ever read on technology, and with good reason, but we cannot expand on it here. See Lewis Mumford, Technics and Civilization for an introduction.
16. Ibid. p.15
17. Ibid. p.19 and 24 respectively.
18. Ibid. p.23. Again, recall Husserl's remark on the mathematization of nature and Galileo. Putnam also utilizes these insights in The Many Faces of Realism.
19. Ibid p.27


21. Ibid. p.117

22. Ibid. p.119

23. Ibid. p.135

24. Ibid. p.152. Heidegger notes that even we now think of ourselves as "researchers", the "man of research", as opposed to scholars. When did philosopher start doing "research"? And see p.125

25. Ibid. p.167

26. Ibid. p.118 Heidegger, in my opinion, not only a master philosopher, but a good philosopher of science.

27. Ibid. p.169

28. See p. 163 where he discusses the Greek meaning of "contemplation"

29. Ibid. p.173

30. Ibid. p.174

31. Ibid. p.175

32. Ibid. p.175

33. Ibid. p.175

34. Ibid. p.176
Notes for chapter 10


2. Even Russell, the ultimate rationalist, in thought (if not lifestyle), says: "Life has to be lived, and there is no time to test rationally all the beliefs by which our conduct is regulated. Without a certain wholesome rashness, one could long survive." This passage speaks for itself: life has to be lived, reason notwithstanding. Quoted in Nathanson's *The Ideal of Rationality*, p.83


4. Ibid. p.6

5. Ibid. p.17

6. Ibid. p.19. Again, think of long division, where rules guide one from the starting point to the conclusion.

7. See Boyer's *A History of Mathematics*


9. Ibid. p.10

10. Ibid. p.11. He anticipates the main problem of technological rationality, with the analogy of Buriden's ass. Here the donkey starves to death because it is between to piles of hay and has no more reason to eat one rather than the other. I should make a point here even about some existentialists who did not free themselves from technological rationality. If they ask what is the reason for living, and conclude life is absurd, without reason, they ask for a answer to the question "what purpose does life serve?". This is means-ends rationality (X>Y), and cannot understand the inherent value of being alive. Here, X, life does not have value because it serves some instrumental purpose, but has inherent value. This is a metaphysical notion, ontological meaning, which is no longer recognized, unless one reads Aristotle.

11. See Paul Feyerabend, *Against Method*, p.11

12. As Russell said, "reason consists of just adaptation of means to ends". Quoted in Nathanson's *The Ideal of Rationality*, where it appears as an epigram.


15. Recall, it was Putnam's task to avoid this kind of conclusion, thus, he posited internal realism, as to hold there was something universal about human beings that allowed a human conception of reason and truth.

Also see Paul Feyerabend, *Farewell to Reason*. For Feyerabend, the demise of reason is a moral imperative because he holds standards and norms lead to mediocrity, uniformity, and cultural murder (since we try to impose our reason on others - the white man's burden etc.) I think Feyerabend's thesis is flawed (yet harder to disprove than one would think prima facie.) His premise is from an interpretation of the history of science: (1) an environment where there is a chaos of competing theories leads to progress, (2) political diversity of opinions allow human flourishing. So (3) liberalism and science support each other. I think one has to argue, to defeat him, (1) science operates in a restrictive way, which has nothing to do with the political issue of freedom: he runs together two different issues; and, (2) one has to contest his reading of the history of science, that diversity of views led to progress (this is a very vague claim, and there is much room between diversity and chaos).

17. Ibid. p.223-224

18. Ibid. p.16

19. Ibid. p.15. He may be right about the use of arguments. Consider what sort arguments certain groups of philosophers consider absurd. According to Feyerabend, many things influence scientific progress, such as the sex lives of the scientists. Also, he thinks all institutions, like prostitution and science, have their own cannons of rationality (e.g. what counts as success, rules of behaviour, etc.).


21. Ibid. p.13

22. Ibid. p.13

24. Ibid. p.96

25. Ibid. p.97 This is a paraphrase on my part.

26. Ibid. p.98

27. Ibid. p.117


29. Of course, the essence of the thesis goes to Foucault, and all the authors recognize their debt in this regard.

30. Ibid. Davidson, p.298

31. Ibid. p.298

32. Ibid. p.304

33. Ibid. p.307

34. Ibid. p.316, Surprisingly, Davidson ends on a moral note, yet, Allen is careful not to do this.
Notes to Chapter 11


3. Ibid. p.193

4. Harold Brown, Rationality, p.vii

5. Since reason is splintered into many different usages, one has to see how each one developed. In Aristotle, the reason, or "why" of something is answered by the telos, the final or formal cause. The why, ultimately, is inherent in each substance.

6. I would like to thank Gary Madison for his kind translation of this quotation from the French. Here is also an idea that "one's soul" cannot be fully understood by reason. Heraclitus: "you could not find the limits of the soul though you are travelling every way, so deep is its logos."

7. Hilary Putnam, The many faces of Realism, p.28

8. Ortega, Historical Reason, p.52

9. Ibid. p.69

10. Last words of Barry Allen's paper on Demonology.

11. A more radical move, which I will pursue in another project, perhaps with the help of Heidegger's thought, is to locate the transcendent in the immanent world.
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