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Pascal and Wittgenstein:
Common Epistemological Elements in the *Pensées*
and *On Certainty*

Student:
Patrick Moran of the University of Ottawa
Student Number: 061995
Degree Sought: M.A.
Supervisor:
Prof. Keith Arnold
Student Address:
175 Irvine
St. Lambert, Qué.
J4R 1W7
(514) 672-7427

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0-612-20940-7
Abstract

The guiding intuition behind this disquisition is that Blaise Pascal and Ludwig Wittgenstein are similar philosophers with similar philosophies. This intuition is not argued in its entirety here. Instead, the author seeks to establish a limited version of this intuition as his thesis; viz., that Wittgenstein and Pascal share six elements of their theories of knowledge. The author executes a demonstration of this thesis by contrasting Wittgenstein's epistemology with G.E. Moore's and contrasting Pascal's epistemology with René Descartes'. By showing that Wittgenstein's epistemology contrasts with G.E. Moore's in the same way that Pascal's epistemology contrasts with Descartes', the author is able to conclude that Wittgenstein's theory of knowledge is indeed similar to Pascal's with respect to the six elements mentioned above.
Dedication

To James W., Judith J., Sarah E.J., and Nicholas J.

sine qua non

and to

David W. Fortier

because the truly great man does not draw attention to his own greatness.
Acknowledgements

I would like to thank Professors Keith Arnold and Mathieu Marion for having read and made comments on an early draft of this disquisition. I would further like to thank Professor Arnold for having overseen this project since its inception. Professors Graeme Hunter and Vance Mendenhall are also to be thanked for their helpful remarks on the thesis of this disquisition over the course of its development.

Finally I would like to thank Derrick Farnham and Tim Krahn for their support.
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Author's Note Regarding References

There are two distinct reference systems in this disquisition. The first is the conventional system of referring to endnotes. A number by itself in square brackets (e.g. [1]) refers to an endnote of the same number at the end of the section in which it appears. The second system refers the reader directly to either a paragraph in Pascal's Pensées or a passage in Wittgenstein's On Certainty. A number in square brackets preceded by the words "Lafuma '52" (e.g. [Lafuma '52, #343]) refers to paragraph #343 in the Pensées, (New York: Harper & Row, Publishers, 1962). A number in square brackets preceded by the words "Lafuma '63" (e.g. [Lafuma '63, #443]) refers to paragraph #443 in Oeuvres Complètes, (Paris: Les Editions du Seuil, 1963). A number in square brackets preceded by the word "OC" (e.g. [OC #341]) refers to passage #341 in On Certainty, (Toronto: Harper & Row, Publishers, 1972). Where there is call for additional commentary on a passage in either On Certainty or the Pensées, a number in square brackets will follow the direct reference to the Pensées or On Certainty (e.g. [OC #341] [2]). The second number in square brackets refers to an endnote of the same number at the end of the section in which it appears.
Part One -- Introduction

Statement of Thesis Procedure and Preliminary Questions
Statement of Thesis

The underlying intuition of the following disquisition is that Blaise Pascal and Ludwig Wittgenstein are very similar philosophers with very similar philosophies. I do not pretend nor do I wish to defend this intuition in its fullness in this disquisition -- that would really be enough work for several weighty treatises. Instead, I look to advance a more limited version of this intuition here. For the moment (by which I mean for the duration of this text) I content myself to maintain that a part of Wittgenstein's philosophy is similar to a part of Pascal's philosophy. Deciding whether their respective philosophies are similar as wholes is so great an endeavour I should be happy were I to have a successful start making out a similarity between two isolated segments of these wholes.

I mean to make myself clear at once. The two isolated philosophical segments I intend to show are similar are segments which can stand alone in the work of any important thinker. When I say that I will show that a part of Wittgenstein's philosophy and a part of Pascal's philosophy are similar I refer to the epistemological parts of their philosophies. Thus the point of this disquisition is to show that Pascal and Wittgenstein have similar epistemologies. The similarity of which I speak is not a concept equivalent to "are like each other". When I say that Pascal and
Wittgenstein have similar epistemologies I mean that several elements of their epistemologies are the same. I can even go so far as to say which elements of their epistemologies are the same [ 1 ]. Pascal and Wittgenstein share 6 epistemological theses, which I list below. They both think that:

( 1 ) Knowledge rests on foundations that are not knowledge. It is not possible to use reason to argue for, justify, or demonstrate the foundations of knowledge. Consequently, it is impossible to know the foundations of knowledge. [ 2 ]

( 2 ) Is is not always possible for someone to justify all the propositions he knows.

( 3 ) The type of justification a proposition requires is determined relative to the type of proposition for which justification is sought.

( 4 ) The foundations of knowledge are identified with certainty. What is certain is constituted, at least in part, by banal physical facts.

( 5 ) It is nonsensical to argue for certainties. It is also nonsensical to doubt certainties.

( 6 ) Certainty does not imply truth.

The statement of my thesis can therefore be put into rather definite language: With respect to the 6 theses named above, Pascal and Wittgenstein have epistemologies that are the same.

I can think of at least 2 reasons why mine is a thesis worth defending. Permit me to list these reasons now and go on to explain myself afterwards.

(1) Establishing similarities between the two epistemologies effectively strengthens the arsenal of arguments to be
made against the epistemology of Descartes. Because Pascal and Wittgenstein are anti-Cartesian in their epistemologies, Wittgenstein's arguments against Descartes can be used to amplify and clarify Pascal's own arguments against him and vice versa.

(2) Pascal's significance for this century has been underestimated and the originality of Wittgenstein's philosophical work has been over-estimated.

A word about the second of these reasons for advancing this thesis. To put the matter bluntly, the attention paid to the philosophical work of Blaise Pascal has been slight. In the whole of his famous *History of Western Philosophy*, Bertrand Russell makes but five mentions of Pascal's name, and never says anything of him that is longer than a sentence [3]. Interest in the Wager argument (as the cluster of arguments that constitute the much-talked-about Wager have come to be known) has very nearly eclipsed all other interest in Pascal's philosophical writing. Only in the last decade has the significance of the bulk of Pascal's philosophical work begun to be recognized. It has been pointed out, for example, that the theory of knowledge propounded in Robert Nozick's *Philosophical Explanations* bears an important likeness to a theory of knowledge Pascal advanced in 1657 in the *Art of Persuasion* [4]. It is my contention that the indebtedness of 20th century philosophy to the philosophical work of Blaise Pascal extends beyond even this. If the significance of Pascal's philosophical work has been largely ignored in the last hundred years, Ludwig
Wittgenstein's philosophical work has been impossible to overlook. Without denying the importance of Wittgenstein's work, I want to suggest that its value has on occasion been estimated at well beyond its worth. Take, for example, the overly-flattering things that Norman Malcolm, one of Wittgenstein's students, had to say about the work of his master,

"... the astonishing depth and originality of his [ Wittgenstein's ] thinking was strikingly evident to me ... it was very unlikely that anyone in his classes should think of something of which he had not already thought." [ 5 ]

The classes of which Malcolm spoke were regularly attended by G.E. Moore; i.e., they were attended by the very person from whom Wittgenstein borrowed much in the development of his own epistemological ideas. Nevertheless the star-struck Malcolm persisted in praising Wittgenstein's unparalleled originality. Malcolm's blandishments do nothing to diminish the true value of Wittgenstein's work; they do do something to disguise it. Unless the historical roots of Wittgenstein's thoughts be known, the task of understanding those thoughts becomes intractable. Pascal and Wittgenstein share elements of their epistemologies and that fact, hitherto buried in Wittgenstein's fame and Pascal's near anonymity, has to be exposed.

Now that I have said something about the second of these
reasons (viz., this thesis reveals the true importance of Pascal for 20th century philosophy), let me say something about what I consider the first importance of my thesis. The first importance of my thesis is its power to unite forces against the Cartesian. Consider this passage from the Pensees in which Pascal examines Descartes' dream scenario worries:

"What then shall man do in such a state of affairs? Will he doubt everything? Will he doubt whether he is awake; if someone pinches or burns him? Will he doubt whether he doubts?" [Lafuma '52, #246]

The Wittgenstein of On Certainty can complete the passage. Wittgenstein writes,

"The Argument 'I may be dreaming' is senseless for this reason: if I am dreaming, this remark is being dreamed as well -- and indeed it is also being dreamed that these words have any meaning." [OC #383]

It seems to me that in these two passages Wittgenstein and Pascal are lending each other a helping hand as it were in defusing Descartes. Pascal questions the credibility of the doubts (if someone pinches or burns you, do you really stop to doubt your pain?) and their self-consistency (will the doubter doubt that he's engaged in doubt?); Wittgenstein questions the linguistic sense of the doubts (maybe the words "I may be dreaming" are devoid of sense). If Wittgenstein's epistemology and Pascal's share common elements in the way that I will describe them here, then there are yet to be uncovered instances where Wittgenstein's and Pascal's theories of knowledge can be made
to help each other [6]. Should my thesis come to fruition, Wittgensteinians could look on Pascal's work as a mine for attacks on Descartes. Naturally, the reverse would be true as well (i.e., Pascalians could look on Wittgenstein's work as a mine for attacks on Descartes).
Endnotes for the Statement of Thesis

(1) For the purpose of this disquisition I will treat the terms "shared elements", "common elements", and "the same elements" as though they were synonyms.

(2) For the purpose of this disquisition I will treat the terms "argue for", "demonstrate", and "justify" as though they were synonyms. Where necessary, I will remind the reader of this peculiar treatment by putting one of these synonyms in parentheses next to a word mentioned in the text. This footnote may seem paradoxical when considered together with the second common epistemological thesis stated here. The reader should be assured however that this paradox shows itself to be resolved over the course of the rest of this disquisition.

Another subject: the reader may find it unusual to speak of Wittgenstein and Pascal in connection with foundations of knowledge. The reader should be advised that I do not use the word "foundation" to imply foundationalism. I merely mean that Pascal and Wittgenstein think that there is something (a foundation) that underlies knowledge (hinge propositions in Wittgenstein's case, and what is known by the heart in Pascal's case). If this makes Pascal and Wittgenstein "foundationalists", then it also significantly distends the meaning of "foundationalism".

(3) Russell, B., History of Western Philosophy, (London: George Allen & Unwin Ltd., 1967) pages 511, 666n, 733, and 735. Pascal's name is mentioned twice on page 735. Perhaps it would be more accurate to say that Pascal has been nearly ignored in English language philosophy (and possibly German language philosophy too). Still it seems to me that even in French philosophical circles, where Pascal is more widely discussed, attention paid to Pascal is an homage rather than a going concern.


(6) For the purpose of this disquisition I will treat the words "epistemology" and "theory of knowledge" as though they were synonyms.
**Procedure**

I have already said something about what this disquisition will be about and why I think it is something worth writing. I would like now to say something about how it is that I intend to execute an argument for the thesis of this disquisition.

I am sure I have impressed upon the reader the limited nature of the thesis statement of this disquisition -- I will not argue for the broad intuition I have about the similarity of Pascal and Wittgenstein, only a narrow similarity between their epistemologies. I will not even interpret this "similarity" broadly; I have limited what I will attempt to argue to showing that their two epistemologies have the 6 common elements listed above. I wish to narrow the scope of this disquisition further still and in a way that gives the first inkling of how I propose to argue my thesis.

The philosophical writings of Pascal and Wittgenstein taken singly are sizable; taken together they are vast. I cannot imagine what it would be like to comb the complete works of either Pascal or Wittgenstein searching for epistemological references. As a consequence, I will avoid trying to carry out in practice what I cannot even produce in imagination. I will therefore constrain my research into the epistemologies of Pascal and Wittgenstein to two sources: Pascal's *Pensees* and Wittgenstein's *On Certainty*. I feel
fully justified in so doing, not only on account of the sheer bulk of their complete works, but also because the mass of both their remarks on epistemology is concentrated in these two works. This should assure the reader that by mostly ignoring the rest of the complete works of these two philosophers, I am not doing their epistemologies a disservice. Their theories of knowledge are amply represented by the contents of these two books, the *Pensees* and *On Certainty*. So well represented are they in fact, I can think of only one occasion where I will have recourse to another of their works to clarify a particular point \(1\).

Focusing my attention to these two sources opens up a way of arguing the thesis of this disquisition. I know that it is an overworked cliche to say that no philosophical work was ever written without an historical context. Cliche though it may be, this principle has here a novel application. The *Pensees* and *On Certainty* were indeed written within historical contexts, or, more precisely, they were both written within contemporary philosophical contexts. It is not simply that Pascal wrote the *Pensees* in the 17th Century or that Wittgenstein wrote *On Certainty* in the 20th; both men wrote against philosophical backdrops peculiar to their times. Pascal wrote the *Pensees* as the philosophical landscape was becoming increasingly remodeled after the fashion of Rene Descartes; Wittgenstein wrote *On Certainty*
only after G.E. Moore had tried to change epistemology with his *Defense of Common Sense* and *Proof of the External World*. And both Pascal and Wittgenstein wrote under the philosophically omnipresent shadow of epistemological scepticism (as did Moore and Descartes). Since that is so, it should be possible to describe both the *Pensées* and *On Certainty* as responses to these two epistemological environments. I believe the fact that it is possible to describe both Pascal's and Wittgenstein's epistemologies as reactions to the philosophical pressures of Descartes and Moore (and to a lesser degree, scepticism) gives us a way of arguing for the existence of the 6 common elements listed above.

It was in his disagreement with Moore that Wittgenstein came to propose the epistemological theses that constitute *On Certainty*. Since Moore's epistemology followed in much the same spirit as the whole history of epistemology (by which I mean it took more or less the same tack against scepticism as had just about every anti-sceptic since Descartes) his was a representative sample of what might be termed the Cartesian-type response to scepticism. Thus when Wittgenstein took to disagreeing with Moore, he was *ipso facto* taking issue with the Cartesian-type response to scepticism. But Wittgenstein was also not making the typical epistemological move of interpreting his disagreement with the Cartesian-type
response to scepticism as a defense of scepticism. By simultaneously rejecting scepticism on the one hand and the Cartesian-type response to scepticism on the other, Wittgenstein was effectively putting himself into exactly the same epistemological space that Pascal had taken up in an effort to contest the work of Descartes. In other words I believe that, in the manner in which he was inclined to dispute Moore's epistemology, Wittgenstein was driven to re-invent a philosophical space that Pascal had first opened up in the 17th Century. As Pascal fought Descartes, so Wittgenstein fought Moore: the common points of their epistemologies that I have listed emerge, I hypothesize, out of the parallel circumstances of their respective origins. Neither Pascal nor Wittgenstein were willing to accept scepticism; neither Pascal nor Wittgenstein were willing to accept the Cartesian-type response to scepticism. As a result, both were caused to occupy the same epistemological position. I maintain that it is as a consequence of that shared position, that both men came to share as many of the elements of their epistemologies as they do.

Such is my way of explaining the commonalities of these two theories of knowledge. But it assumes rather a lot. It assumes primarily that Pascal's epistemology conflicts with Descartes' and that Wittgenstein's epistemology conflicts with Moore's. Furthermore it assumes that Pascal's
epistemology conflicts with Descartes' epistemology in much the same way that Wittgenstein's epistemology conflicts with Moore's epistemology. Finally it assumes that Moore's epistemology is similar to Descartes' epistemology. Having assumed so much, the reader is liable to ask what there is left to prove. Why not just assume moreover that Pascal and Wittgenstein do indeed share the 6 epistemological elements mentioned here and be done with it!

I do not think there's any need to be as pre-emptive as all that. I for one am convinced that it is possible to move beyond assuming these things and actually show that they are true. I venture to make this demonstration in the following way: I intend to consider the positions of these 4 men on 2 broad subjects of epistemology (justification and the foundations of knowledge; and truth and certainty). If at the end of these considerations it turns out that Pascal and Wittgenstein are not saying substantially the same thing on each point, I will surrender my claim that they share 6 elements of their epistemologies. If it turns out that Pascal and Wittgenstein do not disagree with Descartes and Moore, or if it turns out that Pascal and Wittgenstein do not disagree with Descartes and Moore in the same way, I will surrender my claim that they share an epistemological position. And finally, if it turns out that Descartes and Moore do not share with each other such elements of their epistemologies
as I have selected to contrast with elements of Pascal's and Wittgenstein's epistemologies, I will surrender my claim that Pascal and Wittgenstein share an epistemological position. By putting my claim to such a strenuous test (or more importantly, I suppose, by my claim surviving such a strenuous test) I hope to be able to establish that Pascal and Wittgenstein do share an epistemological position and so move beyond assuming that they do.

In this paper there are three parts. Part One (the part in which this discussion is located) is devoted entirely to introductory matters (statement of thesis, procedure, preliminary questions). In Part Two, I intend to argue my thesis as stated above. I propose to divide the task of arguing this thesis into 2 chapters. As I said above, each chapter will treat of a particular epistemological subject (justification and the foundations of knowledge; truth and certainty). These 2 chapters will in turn be divided into 6 sections. The first section of each chapter will introduce the epistemological subjects to be addressed in the chapter and state the positions of each of the philosophers to be named therein. The second section of every chapter will speak to Descartes' thoughts about that chapter's particular subject; thus, Part Two, Chapter One, Section Two shall be a discussion of Descartes' thoughts on justification and the foundations of knowledge. The third section of every chapter
will address Pascal's thoughts about that chapter's subject; thus, Part Two, Chapter One, Section Three, shall be a discussion of Pascal's thoughts on justification and the foundations of knowledge. By placing a discussion of Pascal's view of the matter at hand immediately after a discussion of Descartes' view we will be better able to appreciate how Pascal's position contrasts with Descartes' (the same is true of the placement of a Wittgenstein section after a section on Moore). Sections 4 and 5 of every chapter will treat of G.E. Moore and Wittgenstein, respectively, on that chapter's subject; Sections Four and Five of Part Two, Chapter One, will deal with Moore on justification and the foundations of knowledge (in Section Four) and Wittgenstein on justification and the foundations of knowledge (in Section Five). In Section Six of every chapter we will move to draw a conclusion about Pascal's relatedness to Wittgenstein vis à vis the chapter's subject. The general argument implicit in each chapter should look something like this: In the same way that Pascal opposed Descartes on the subject at hand, Wittgenstein opposed Moore. The sixth section of every chapter should make the conclusion of that argument explicit: the analogy between Pascal's opposition to Descartes and Wittgenstein's opposition to Moore show that, with respect to the chapter's subject, Wittgenstein and Pascal share common epistemological ideas.
I will use this concluding sixth section to state which ideas those are. By the end of the second chapter of Part Two (i.e., by the repeated application of this argument to the chapter subjects), Wittgenstein's commonality with Pascal on the epistemological points named in this thesis should be abundantly clear.

I began the introductory part of this paper with a short list. The list consisted of the consequences of demonstrating the epistemological similarities that exist in *On Certainty* and the *Pensées* (e.g. showing that Pascal has been ignored while Wittgenstein has been celebrated). By the end of Part Two of this paper I will have succeeded in arguing for the similarity which, for the moment, I can only suggest exists between Pascal's and Wittgenstein's theories of knowledge. Naturally, that success will entail the consequences listed in this introduction. The reader may be surprised to learn that I will not use the third and final Part of this disquisition to speculate about the significance of having engendered these consequences. I believe it best to let such conclusions as I draw from the argument of this disquisition speak for themselves. I will not, however, avoid stating and summarizing those conclusions. I have, therefore, set aside the third and final part of this paper for that purpose. Should the statement of the conclusions of my argument match the 6 listed elements of commonality between
Pascal's and Wittgenstein's epistemologies that appear as a part of my thesis statement, I would have discovered this disquisition's most natural end.
Endnotes for Procedure

(1) I will have occasion to refer to Wittgenstein's *Philosophical Investigations*, (Oxford: Basil Blackwell, 1958) #411 and #67 in the section on Wittgenstein, Justification and the Foundation of Knowledge.
Preliminary Questions

Before I execute the argument outlined above, I would like to deal with two preliminary questions about the disquisition as I have thus far envisioned it unfolding.

I begin with a question about whether the 6 elements of epistemological commonality are shared uniquely by Pascal and Wittgenstein. One might wonder whether anyone else in either Pascal's day or Wittgenstein's had exactly the same 6 elements in his epistemology. This is a significant query because it suggests that if there were anyone else who did have an epistemology that contained these 6 elements, whatever comparison I should make between Pascal and Wittgenstein would be quite uninteresting. After all, the intimation of this question goes, how informative can it be to say that Pascal and Wittgenstein were similar with regard to these 6 elements if just about everyone in the 17th Century had an epistemology which contained them?

What's especially important about my comparison between the epistemologies of Pascal and Wittgenstein is not so much the individual elements they share as the fact that both epistemologies share a package of elements. I do not intend to argue that none of Pascal's predecessors or contemporaries held 1 or 2 of the 6 epistemological elements also present in Wittgenstein's theory of knowledge. I think that a claim to the contrary would be false. It is obvious that Pascal drew
on the likes of Montaigne, Descartes, and Epictetus, for the elements of his epistemology -- only a fool would be surprised to find this or that element of Pascal's epistemology in the work of one of his sources [1]. That said, I do not think that all 6 of the epistemological elements that I named in the introduction can be found in any one of either Pascal's or Wittgenstein's contemporaries.

Let us begin by considering Pascal's sources. Let us take Epictetus the Stoic for example. Epictetus was no sceptic about banal physical facts. There's no sign he ever called the fact of his existence, the existence of others, or the existence of the external world into question. In that way, I suppose, one could say that he was like Pascal. He differs from Pascal, however, inasmuch as he is willing to give reason a foundational role in his theory of knowledge. According to Epictetus' Discourses, the gods gave men reason in order to be able to judge the validity of every other faculty [2]. This would not necessarily differentiate Epictetus and Pascal had it not also been Epictetus' belief that reason is the only faculty capable of judging itself (indeed that is why Epictetus says that the gods gave it a foundational role among the faculties) [3]. In other words, unlike Pascal, Epictetus believed that there was a foundation of knowledge (a foundation of the faculties, after Epictetus' manner of speaking) that was capable of
justifying itself. This means that Epictetus differed with Pascal with respect to the first of the epistemological elements named as being common to both Wittgenstein and Pascal.

Montaigne was another of Pascal's sources. He was also a sceptic who called everything into doubt [4]. That means that he could not have shared Pascal's epistemological view that some things are certain; i.e. that some things are fully exempt from doubt.

Descartes shared a few interesting points with Pascal. Unfortunately, none of these points are epistemological. Descartes thought that it was possible to justify even the foundations of knowledge; that thesis alone is sufficient to separate his theory of knowledge from Pascal's. But it needn't be the only point of difference. Descartes also thought it was possible to offer proofs for the banal physical beliefs that Pascal thinks are absolutely certain and exempt from doubt. Said another way, this point of difference may be stated like so: Descartes thought the sceptic's position makes sense, but is false as a matter of fact; Pascal just thinks the sceptic's position is nonsensical [5].

It is an even easier task to show that none of Wittgenstein's contemporary sources shared the package of epistemological theses he shared with Pascal.
Russell strongly distrusted statements of banal physical fact (he preferred to think his sense-data world was more reliable) [6]. He doubted where Wittgenstein would not, and therewith distinguished himself from both Wittgenstein and Pascal.

Moore, Wittgenstein's other contemporary epistemological source, was similar to Descartes in a number of ways that make him dissimilar to Wittgenstein. Primarily, Moore thought that it was possible to come up with cogent, sceptic-dispelling arguments for propositions of banal physical fact (e.g. there is an external world). Since Moore thought that such propositions of banal physical fact were the foundations of knowledge, it follows that Moore thought that it was possible to argue for the foundations of knowledge. This distinguishes him from Wittgenstein in a second regard.

I believe that the fact that these 6 elements are shared uniquely by Wittgenstein and Pascal constitutes the whole explanation for their selection. That Wittgenstein shares all six of these elements of his epistemology with none of his contemporary sources is a simple matter of fact. That Pascal shares just these six elements with none of his sources is also a simple matter of fact. But that Wittgenstein shares all 6 of these elements of his theory of knowledge with Pascal has to be thought a remarkable fact. It is remarkable that Wittgenstein and Pascal share as much of
their theories of knowledge as they do (6 shared elements for 3 centuries of tumultuous philosophy strikes me as rather a lot). These 6 elements therefore form a package of ideas that set Wittgenstein and Pascal off from a significant number of rival philosophers.

The second preliminary question presses this first question further: apart from the history of epistemology, is there any reason to have chosen just these 6 elements as points of commonality between Pascal and Wittgenstein? Is there, for example, any epistemological reason to find the fact that Pascal and Wittgenstein share these 6 elements interesting?

The 6 elements named here form a package, not simply with respect to their power to set Wittgenstein and Pascal apart from their contemporaries, but also with respect to the traditional contents of epistemology. Consider the traditional account of knowledge. According to the traditional account of knowledge, a person, S, may claim to know some proposition, p, if and only if: (1) p is true; (2) S believes that p; (3) S is justified in believing that p [7]. The 6 elements of epistemology I have listed as common to both Pascal and Wittgenstein cover the traditional account of knowledge as I have described it here. The first three elements listed refer to justification—these elements speak to the third criterion of the traditional account of
knowledge. The fourth, fifth and sixth elements listed refer to **certainty** --they speak to the second criterion of the traditional account of knowledge inasmuch as **belief** is certain (and to the mind of the Wittgenstein of *On Certainty*, belief is certain) ([OC # 141, #142 and #144](#)). Finally, the sixth element listed refers to **truth** -- this speaks to the first criterion of the traditional account of knowledge in that it addresses whether p is true or not. In the end, then, there is an epistemological reason to find the 6 epistemological elements that Pascal and Wittgenstein share interesting: these 6 elements refer to the oldest epistemological themes. That Pascal and Wittgenstein are united on just these oldest themes must be epistemologically interesting.

Having dispatched with these two preliminary questions, I move without further delay to execute the argument of my thesis.
Endnotes for the Preliminary Questions

(1) If I had to name one of Pascal's sources to whose philosophy Pascal's philosophy most closely approximates, I would name St. Augustine. In his conversation with DeSaci, Pascal reveals that he counts Augustine, along with Montaigne and Epictetus, as his greatest influences. See Pascal, B., Thoughts and Minor Works, (L. Brunschvicg ed.), (New York: P.F. Collier & Son Co., 1938) pages 387-400. Does Pascal's similarity to Augustine invalidate the special nature of Pascal's similarity to Wittgenstein? It would, if I did not think that Wittgenstein's philosophy also has a special similarity to Augustine's philosophy. Were it possible, I would expand the purpose of this disquisition to show that Augustine, Pascal, and Wittgenstein share epistemological theses. Sadly, there is not the room for that in this disquisition.

(2) Epictetus, Discourses, (New York: The Heritage Press, 1968) Book One, Chapter One, page 1

(3) Ibid.


(5) We will have other occasions to discuss the differences between Pascal and Descartes in Part Two of this disquisition (and occasions to discuss the differences between Moore and Wittgenstein then as well).


(7) See Plato's dialogue the Meno for the oldest record of the traditional account of knowledge. There Socrates distinguishes right opinion from knowledge by saying that the latter only exists where there is justification for what is believed. Knowledge, says Socrates, is always right; right opinion is only sometimes right. Cairns, H. & Hamilton, E., (eds.), Plato: Collected Dialogues, (New Jersey: Princeton University Press, 1987) 97a-98b.
Part Two -- The Argument

Chapter One

Descartes, Pascal, Moore, and Wittgenstein
on Justification
and the Foundation of Knowledge
Introduction to Justification and the Foundation of Knowledge

In this chapter we will investigate the epistemological connections that exist between Pascal and Wittgenstein by exploring the differences that exist between them and Descartes and Moore. As we will see, Descartes is of the conviction that it is simultaneously possible to discover a foundation of knowledge and to justify it with argument. Moore has much the same conviction. He too believes it is possible to justify whatever it is he considers the foundations of knowledge. Pascal, on the other hand, believes that whatever it is that acts as the foundations of knowledge is impossible to know by reason, and hence impossible to justify. In exactly the same way as Pascal's thoughts on this point diverge from Descartes', so Wittgenstein's thoughts on this point diverge from Moore's. Wittgenstein insists that the foundations of knowledge are unknowable and that, as a consequence of their being unknowable, the foundations of knowledge cannot be justified.

Discussion of the justification of the foundation of knowledge leads in every section of this chapter to a discussion of the theories of justification of each of the philosophers named in it. Descartes, we will see, thinks that it is possible to justify all true things, that the possibility of this universal justification is available to everyone at all times, and that there exists at least one
method by which this universal justification may be accomplished. Though a bit less enthusiastic about these notions than is Descartes, Moore is committed to much the same theory of justification. Pascal, however, is thoroughly opposed to Descartes' theory of justification, mostly because of his know by the heart/know by reason distinction. The heart has its reasons which reason does not, and as we shall see, cannot know -- this principle of Pascal's ruins the possibility of universal justification, the universal availability of this universal justification, and the possibility of a universal justificatory method. In the same way, it is Wittgenstein's thoughts about the nature of the foundations of knowledge that lead him to reject Moore's theory of justification.
Descartes on Justification and the Foundations of Knowledge

The acknowledged foundation of the entire Cartesian philosophical system is the Cogito. When, in the second Meditation, Descartes looks for the one proposition which he cannot doubt, Descartes finds the Cogito. No matter what doubts overcome me, writes Descartes, no matter the illusions with which I am affected, that I (Descartes) am overcome with doubts, that I (again Descartes) am affected with illusions is indisputable [1]. Descartes discovers that even were he to doubt or disbelieve his own existence, there would nevertheless always have to be someone to do this doubting or disbelieving. Descartes generalizes from "doubting" and "disbelieving" : were there any affirming, imagining, sensing, believing, knowing, denying, or doubting; in a word, were there any thinking being done there would have to exist someone, some I, to do it [2]. Descartes reduces this indisputable truth to the Cogito : Cogito, ergo sum -- I think, therefore I am.

Descartes plainly chooses the Cogito as the foundation of his philosophical system. Scholarly opinion has corroborated Descartes' choice -- the Cogito is the agreed foundation of Descartes' system. Scholarly opinions diverge, however, when another matter is raised : is the Cogito a logical
inference, the conclusion of a logical inference, or a somehow deficient logical inference? Or is it, as Jaako Hintikka has suggested, something that isn't supposed to be taken as a logical inference at all [3]? It is important for my purpose that it be possible to interpret the *Cogito* as an inference. I want to draw a contrast between Pascal and Descartes. To my mind, Pascal differs from Descartes because Pascal holds it impossible to know the foundations of knowledge by reason ("The heart has its reasons which reason cannot know"). Descartes, on the other hand, does believe it possible to know by reason (i.e., argue for) the foundations upon which all knowledge claims rest. If what I say about this difference between Pascal and Descartes is true, then it has to be possible for Descartes to offer an argument for what he takes as the foundation of knowledge. Said another way, the difference I impute between Pascal and Descartes hinges on the possibility of understanding the *Cogito* as an inference. If it is not possible to read the *Cogito* as an inference, then it is not possible to see Descartes as someone who believes that the foundations of knowledge are something for which one can argue. If it is impossible to see Descartes this way, then it becomes impossible to contrast him with Pascal on this point (the point of the foundations of knowledge).

Concern about whether the *Cogito* is an inference or not
amounts to a concern about whether or not Descartes has an argument for his existence. The case that can be made against reading the Cogito as an inference is well supported by textual evidence. Jaako Hintikka sums this case up nicely:

"According to Descartes ... by saying cogito, ergo sum he does not logically (syllogistically) deduce sum from cogito but rather perceives intuitively ('by a simple act of mental vision') the self-evidence of sum. Similarly, Descartes occasionally says that one's own existence is intuitively obvious without bringing in cogito as a premise ... Once [Descartes] formulates the cogito principle as ego cogitans existo without using the word ergo [a word suggestive of an inference] at all." [4]

But there are problems awaiting those who would refuse to read the Cogito as an inference. First of all, there is textual evidence that would confirm the hypothesis that the Cogito is inferential. Descartes repeatedly mentions the Cogito as though it were an inference: he calls his Cogito "a reasoning (ratiocinium), refer[s] to expressing it as inferring (inferre), and call[s] sum a conclusion (conclusio)." [5]. But that's not all. Were the Cogito not an inference, it would be impossible for Descartes to defend his claim to existence in the way that he not uncommonly does. By this I mean that Descartes often responds to challenges to his Cogito with something like the following argument: "If I am right in thinking that I exist", would say Descartes, "then of course I exist. If I err in thinking
that I exist or if I as much as doubt whether I exist, then I must likewise exist, for no one can err or doubt without existing. In any case "Descartes would conclude, "I must therefore exist: ergo sum" [6]. That such an argument is obviously fallacious (it begs the question) is beside the point [7]. What force such an argument has would have to derive from its pretense to be an argument [8]. That Descartes deploys this argument (invalid though it may be) in defense of his Cogito is evidence enough that he takes the Cogito as something for which it is possible to argue. Since Descartes holds the Cogito to be the foundation of knowledge, then by what we have seen, Descartes must hold it possible to argue for the foundation of knowledge. Since Descartes holds it possible to argue for the foundation of knowledge, and since Pascal does not share Descartes' belief in this possibility, it is right to contrast Pascal and Descartes on just this point -- Pascal claims that it is impossible to know the foundations of knowledge by reason, while Descartes, by arguing for his Cogito, proclaims the contrary [9].

It is possible to use the foregoing discussion of Descartes' thoughts about the foundation of knowledge to deduce parts of his theory of justification. The first thing that can be deduced is Descartes' position on the question of universal justification. Since Descartes thinks that it is possible to justify the very thing that gives all knowledge
its foundation, it stands to reason that Descartes thinks that everything that the foundation of knowledge supports can also be justified. If the foundations of a house rest on solid ground, then it follows that every other part of the house rests on solid ground. To Descartes' mind, the same is true of knowledge: if it is possible to justify the foundation of knowledge (set it on solid ground), then it is possible to justify everything that rests on that foundation.

Our deduction on this point of Descartes' theory of justification is corroborated by textual evidence. In the Discourse on Method Descartes plainly says that he will not recognize anything as knowledge which he cannot justify ("introduce by means of reason") and furthermore that he does not think that this criterion will prevent him from knowing anything. Descartes writes,

"I did not wish to set about the final rejection of any single opinion which might formerly have crept into my beliefs without having been introduced there by means of reason ... Those long chains of reasoning, simple and easy as they are, of which geometers make use in order to arrive at the most difficult demonstrations, had caused me to imagine that all those things that fall under the cognizance of man might very well be mutually related in the same fashion; and that ... there can be nothing so remote that we cannot reach it [with the chain of reasoning]..." [10]

The chain of reasoning of which Descartes speaks is composed of demonstrative links, each subsequent link
receiving its justification from its antecedent, and every link connected through the mediation of its neighbour links to the *Cogito*. This is Descartes' plain metaphor for his belief that every true thing can be justified according to reason. The *Cogito* and everything besides can be justified; ergo, everything can be justified.

An additional point of Descartes' theory of justification can be deduced with the help of one of the suppressed premises of the *Discourse on Method* and the *Meditations*. In both the *Discourse on Method* and the *Meditations* Descartes speaks in the first person singular. He is not, however, suggesting that the conclusions of these works apply only to himself. When Descartes says that such-and-such is possible for or true of himself, he means that it is possible for and true of everybody. Consider what Descartes says in his address to the Most Wise and Illustrious Men at the start of the *Meditations*:

"...[I]t is quite enough for us faithful ones to accept by means of faith the fact that the human soul does not perish with the body, and that God exists, [ but ] it certainly does not seem possible to persuade infidels of [ any thing ], unless, to begin with, we prove these two facts by means of the natural reason. ...I have ventured in this treatise to undertake this task. ...[W]hen this is done ... I do not doubt, I say, that henceforward all errors and false opinions which have ever existed regarding these two questions will soon be effaced from the minds of men. " [11]"

Here we see Descartes expressing his view that what
proofs he gives in the Meditations he gives in the belief that they apply to the reasonings of many more people than himself ( viz., the " infidels "). Descartes assumes ( perhaps rightly ) that what is demonstrably true of himself is true of anybody else as well. Thus when we hear Descartes say that it is possible for him to justify every true thing through the concatenation of a chain of reasoning, he means that everybody ( " every thinking ego " in the language of Descartes' philosophy ) is capable of justifying everything. And so, in Descartes' opinion, everyone has it in his power to justify everything that's true.

This leads us to our last point about Descartes' theory of justification. Descartes is clear about how he thinks anybody and everybody can justify everything: he believes that his famous Method ( the one outlined in the Discourse on Method ) can be used to justify anything that's true. When Descartes writes in the Address to the Most Wise and Illustrious Men at the beginning of the Meditations that he has " cultivated a certain Method for the resolution of difficulties of every kind in the Sciences " he does not mean to limit the scope of his Method at all [ 12 ]. Rather he believes that with this Method he can be " certain by its means of exercising his reason in all things " [ 13 ]. Descartes admits that he is unsure whether he will be able to use this Method to its full capacity in all things, and he
makes it clear elsewhere that he does not think that his Method is the only method capable of producing the kinds of proofs he intends to effect, but he is nevertheless wholly confident about his particular Method [14]. He believes that, through its use, anybody and everybody will be able to justify every true belief they have. This is consistent with everything else we have said in this section about Descartes' theory of justification. Descartes thinks that everybody can justify everything they know. Since Descartes also thinks that his Method is a way to justify everything that counts as knowledge, it follows that Descartes thinks that everybody can use his Method to justify everything they know.

As we shall soon see, both Descartes' thoughts about the foundation of knowledge and the elements of his theory of justification named here link him with the epistemology of G.E. Moore and serve to distinguish him from Pascal and Wittgenstein.
Endnotes for Descartes on Justification and the Foundation of Knowledge

(1) Wilson, M.D., (ed.), *The Essential Descartes*, (Scarborough: New American Library of Canada Ltd., 1969) p. 171, Meditation II. or in Oeuvres Philosophiques de Descartes, F. Alquié (ed.), (Paris: Éditions Garnier Frères, 1967) p. 183 of Volume II. I will try to cite this Alquié collection where I can for the convenience of those checking Descartes' French. I will use the letters OPD to indicate a reference to this collection.


(4) Ibid. page 51.

(5) conclusio can be found in the *Principles of Philosophy*, I, 9, or *The Essential Descartes*, loc. cit., p. 311 or OPD, p. 96 of Volume III; ratiocinium can be found in the *Recherche de la Vérité par la Lumière Naturelle*, OPD, p. 135 of Volume II; inferre in the *Responses Quintae*, OPD, p. 796 of Volume II; see Hintikka's paper in *Meta-Meditations*, p. 51 and notes for further references.

(6) Ibid. p. 55. Hintikka puts these words in Descartes' mouth. Still, I defer to Hintikka's authority.

(7) Ibid. It begs the question in the same way that this argument begs the question: Homer was either a Greek or a barbarian. Were he a barbarian he would have to have existed. Were he a Greek he would have to have existed. Either way, he would have to have existed. Therefore, Homer existed.

(8) it is also besides the point that this argument is specious because I make no claim to want to defend either Descartes or the *Cogito*. All I want to say is that Descartes can be understood as arguing for the *Cogito*. Whether such arguments as I understand him to make are valid or not is another, and for my purpose irrelevant, question.
(9) That Descartes holds it possible to argue for everything ties in with what both Alvin Plantinga (Warrant: The Current Debate, (New York: Oxford University Press, 1993) chapters 1 & 2) and Ian Hacking ("Leibniz and Descartes: Proof and Eternal Truths", Proceedings of the British Academy, LIX, (1973)) say about Descartes; viz., that he thinks it possible for any prospective knower to find an argument for any proposition known by him, but that it is not necessary for him to do so.

(10) from the Discourse on Method, part II, in The Essential Descartes, loc. cit., pages 117-118, or in OPD, pages 584 and 587-588 of Volume I

(11) Ibid. pages 154-155 and 158 or in OPD pages 384-386 and 388-389 of Volume II. From the introduction to the Meditations entitled "To the Most Wise and Illustrious Men: The Deans and Doctors of the Sacred Faculty of Theology in Paris".

(12) Ibid. page 156. Again from the introduction to the Meditations.

(13) from the Discourse on Method, Ibid. page 120 or in OPD p. 590 of Volume I underlining mine

(14) Ibid. page 115
Pascal on Justification and the Foundation of Knowledge

In the last section we saw that Descartes holds to three positions. These were: (i) the foundation of knowledge itself is susceptible of proof; (ii) it is possible to justify everything one knows; and (iii) there can be such a thing as a universal justificatory method. In this section we will see that Pascal rejects all three of the positions held by Descartes.

For Pascal, what is known by the heart counts as the foundation of knowledge. Pascal maintains that a "knowledge of first principles" is not rational knowledge but a knowledge "by the heart", a kind of instinctive or intuitive knowledge "which reason must trust" and upon which reason "must base all its arguments" ([Lafuma '52, #214]). However, the fact that reason must base its arguments on "knowledge by the heart" is not enough to show that Pascal thinks that this "knowledge by the heart" does indeed constitute the foundation of knowledge. It could be quite possible that there exists some other kind of knowledge subsisting without the support of either kind of knowledge (knowledge by the heart or reason). If that were the case, it could very well be that reason has "knowledge by the heart" as its foundation while this unnamed kind of knowledge has something else for a foundation. In that case, "knowledge by the heart" would count as the foundation of
some knowledge, though not all of it. Or knowledge of the heart might count as the foundation of still less knowledge: Suppose Pascal considered "knowledge of first principles", intuitive/instinctive knowledge, and "knowledge by the heart" three separate things. Were that so, it might be Pascal's view that reason must base its arguments on one of these three (in the passage cited Pascal's exact words pick out instinctive knowledge as the base of all reason's arguments) but not on the other two [1]. "Knowledge by the heart" might act as the foundation of some other kind of knowledge, or possibly even act as the foundation for nothing. Because the know by the heart/know by reason distinction is critical to Pascal's epistemology, I will respond to these objections here in this section. By doing so, I hope to clarify what the terms of this distinction mean.

To speak to these objections, it is Pascal's conviction that knowledge by the heart is the foundation for reason and his additional conviction that all knowledge must be identified as either knowledge by the heart or knowledge by reason. Pascal writes,

"... [R]eason would like to be the judge of everything... as though reason alone were capable of providing us with instruction. Would to God, on the contrary, that we never needed it, and that we knew everything by intuition and instinct! But nature has refused this gift; so much so that it has only provided us with a very little knowledge of this kind [instinctive
knowledge; all the other forms of knowledge can be acquired only by reasoning. " [ Ibid. ] [ 2 ]

Pascal's classification of knowledge in the passage at hand squarely answers the above objections. In it Pascal says that he thinks that there is a kind of knowledge which might be called instinctive or intuitive; all other kinds of knowledge, adds Pascal, reduce to one thing, namely reason. This goes so far as to show that Pascal does not think there are as or yet unnamed kinds of knowledge that do not have knowledge by the heart (or anything else for that matter) as their foundation. By Pascal's reckoning, if something is to count as knowledge, it must either derive from reason or be known instinctively/intuitively. And if it is not known instinctively/intuitively ("by the heart"); i.e., if it is known by reason, it nevertheless has this instinctive/intuitive knowledge as its foundation. The significance of this is simply stated: for Pascal, intuitive/instinctive knowledge (knowledge by the heart) is the one and only foundation of knowledge. He does not think there are any others.

The fact that Pascal thinks this intuitive/instinctive knowledge is the one and only foundation of knowledge has the effect of unifying the terms "instinctive knowledge", "knowledge of first principles", and "knowledge by the heart". If any of these three terms refers to something
other than the foundation of knowledge upon which "reason must base all its arguments" it does in fact refer to no foundation of knowledge since, according to Pascal, no other foundation of knowledge exists. But still that does not rule out the possibility that Pascal believes these three terms refer to three separate things (it would just mean that he thinks two of the three separate things to which the terms refer are not the foundation of knowledge). But Pascal's usage suggests otherwise -- "We come to know truth ... by our heart; it is through this ...that we know first principles" and "the knowledge of first principles is just as solid as anything produced by reasoning. And reasoning must trust this instinctive knowledge." [Ibid.]. The first sentence links "knowledge by the heart" to "knowledge of first principles". The second sentence equates "knowledge of first principles" with "instinctive knowledge". Together, these two sentences demonstrate that in Pascal's mind these three terms are bound up in each other. Another remark of Pascal's ("Heart, instinct, principles") confirms the view that knowledge by the heart, knowledge of first principles, and instinctive knowledge are all synonyms for the same thing; viz., the foundations of knowledge [Lafuma '52, #331]. What Pascal says of any one of these three terms therefore holds true of the other two. And so when Pascal says that reason must base all its of its arguments upon "this instinctive
knowledge " he means that reason must base all its arguments on knowledge by the heart.

Relevant to our purpose in this section is Pascal's claim that reason must base all its arguments on the heart. Were Pascal to have said that everything must base its arguments on reason, it would have followed that knowledge by the heart too must be based on rational argument. This would have made Pascal's position the twin of Descartes' position; it would have entailed that Pascal, like Descartes, thinks it possible to argue for the foundations of knowledge. Pascal's rejection of this idea is vehement: "[I]t is ... useless and ... ridiculous for reason to demand of the heart proofs of its first principles ... " [Lafortune '52, #214]. To Pascal, the Cartesian belief that the foundation of knowledge (knowledge by the heart) is susceptible of proof is wholly preposterous. Phrased in the words of the celebrated epigram, "Le coeur a ses raisons que la raison ne connait point" [Lafortune '52, #224 or Lafortune '63, #423].

Thus far we have seen: (i) that Pascal holds there to be two types of knowledge (knowledge by the heart and knowledge by reason); (ii) that he believes that knowledge by the heart is the foundation for knowledge by reason (i.e. he believes it is the foundation of knowledge); and (iii) that he believes that the foundation or knowledge (a.k.a. knowledge by the heart) is
not susceptible of proof. This goes some ways to establishing that Pascal's epistemology is formed in part out of his rejection of Descartes' epistemology (in particular it shows that he rejected Descartes' idea that the foundation of knowledge is rationally demonstrable). In what other ways is Pascal's epistemology a rejection of Descartes'?

A couple of things follow from what we have already said in this section. First of all, if it is the case that there can be no arguments for the foundations of knowledge (knowledge by the heart), then it must be the case that there exist some things for which one cannot argue. And if one is willing to accept that justification comes only through argumentation, it follows that any thing for which one cannot argue is something which one cannot justify. Together, these two conclusions do well to distinguish Pascal from Descartes. For if it is the case that there exist some things for which one cannot argue, and if it is also the case that anything for which one cannot argue is something which one cannot justify (a conclusion to which I think natural language draws us; "argue" and "justify" are common synonyms), then it must be the case that there exist some things which one cannot justify. This last conclusion taken in conjunction with Pascal's belief that the things for which one cannot argue (provide rational justification) are themselves a kind of knowledge (a knowledge by the heart)
generates the additional conclusion that not all the things one knows can be justified ( meaning "it is impossible to argue for knowledge by the heart" ). In other words, Pascal not only rejects Descartes' idea that the foundations of knowledge are susceptible of proof, he rejects the idea that it is possible to justify everything one knows.

The knowledge by the heart/knowledge by reason distinction has another consequence. It implies the impossibility of a universal justificatory method, such as the Method Descartes proposes in the Discourse on Method. Pascal says that the very idea of demanding rational justification ( proof ) from the heart is preposterous: the heart has its reasons which are unknown to reason [ Lafuma '52, #214 & #224 ]. Said another way, though knowledge by the heart cannot be justified by reason, by argumentation, it is nevertheless warranted to do what it does [ 3 ]. Warranted by what, the reader might ask, warranted by what if not by reason? It would seem that something is either justified by reason or goes without justification. But that is not what Pascal says. According to the epigram, the heart does have its reasons which reason does not know. And yet Pascal does not go on to say ( not in any obvious way ) by what knowledge by the heart might be justified if not by reason. His reticence changes nothing, however. The fact remains that Pascal does not think that everything which it is possible to
justify can be justified in the same way. Some things (read "knowledge by the heart") have their own manner of justification ("reasons"). More to the point: Pascal does not think there could be such a thing as a universal justificatory method because that would entail that the heart does not have reasons unknown to reason.
Endnotes for Pascal on Justification and the Foundation of Knowledge

(1) The exact words are "reason must trust this instinctive knowledge and base all its arguments upon it". Lafuma '52, #214

(2) I have adjusted M. Turnell's translation of the French word sentiment, which he translates as "reasoning". I translate it in this passage as "intuition".

(3) This idea has its clearer expression in OC # 235: "And that something stands fast for me is not grounded in my stupidity or credulity". I take Pascal and Wittgenstein to mean that although a person may have no expressible reason (or no reason at all) for doing such and such, he is not therefore a fool for doing it.
Moore on Justification and the Foundation of Knowledge

"Here is a hand", argues Moore, "and here is another. Therefore there is an external world." [1]. Moore's thoughts about the foundations of knowledge can be summed up in this one sentence. Moore thinks that something as basic as the existence of the external world can be deduced from the existence of his two hands. There can be no doubting that this is a bizarre argument, one indeed for which Moore suffered much criticism at Wittgenstein's hands [2]. But assessing its merit is not our purpose. All we need recognize about this argument is that it expresses Moore's belief that the existence of the external world can be justified by (an admittedly bizarre) argument. If the thesis of this disquisition is correct and Wittgenstein's opposition to Moore mirrors Pascal's opposition to Descartes, then Moore's philosophy (and his epistemology in particular) must in be analogous to Descartes'. We saw in the last section that, at times, Descartes believes the foundation of knowledge, his Cogito, is a kind of inference. So far in this section all we have said is that Moore takes the sentence "there is an external world" to be defensible by a kind of inference; viz., "here is a hand". This says nothing about what Moore understands the status of the proposition, "there is an external world" to be.

It is fairly clear from the content of another of Moore's
papers, *A Defense of Common Sense*, that Moore sees the sort of proposition that is "There is an external world" as foundational. Consider the following excerpt from that paper:

"There exists at present a living human body, which is my body... Ever since it was born, it has either been in contact with or not far from the surface of the earth; and at every moment since it was born, there have also existed many other things... But the earth had existed for many years before my body was born; and for many of these years, also large numbers of human bodies had, at every moment, been alive upon it; and many of these bodies had died and ceased to exist before it was born." [4]

Moore says all of this by way of enumerating "a set of propositions, every one of which... I [Moore] know, with certainty, to be true." [5]. This set of propositions, the "Propositions of Common Sense" (not limited, Moore is careful to say, to what's on his list), is the indisputable foundation of all knowledge. Moore says that philosophers who deny these "Propositions of Common Sense" are constantly falling into the inconsistencies attendant on the impossibility of making the denials they do [6]. The impossibility of denying these "common sense" propositions identifies Moore's list of "common sense" propositions as foundational. Relevant to our purpose, though, is the mention Moore makes in this list of his body, the bodies of other people, and the earth. Here Moore states the independence of the earth and the bodies of other people from my body rather explicitly: "The earth had existed for many years before my
body was born; and for many of these years [ before my body was born ], large numbers of human bodies had ... been alive upon it. " This is naught other than to say that the existence of the world ( and the people on it ) is independent of my existence ( an even stronger claim, I think, than the claim that the world is external to my body ). It is precisely this claim that Moore seeks to prove by the argument ( " Here is a hand ... " etc. ) in Proof of the External World. Since this is just the sort of claim that Moore takes to be foundational, I can only conclude that Moore thinks that it is possible to support some foundational claims by argument.

This conclusion bears on Moore's theory of justification. If, as we have established, Moore believes that it is possible to justify by argument some of the " Propositions of Common Sense ", then it is not clear at all what limits Moore would have us put on the possibility of justification. To phrase this point as a rhetorical question, what could possibly be beyond the power of argument to justify, if it is possible to justify the fundamental grounds of knowledge? That Moore would like to restrict the justificatory power of argument is undeniable; in Proof of the External World he stipulates that the premises of the argument he uses to establish the existence of the external world ( " Here is one hand " and " Here is another " ) are themselves not
susceptible of proof [7]. But why just these "propositions of common sense" are indemonstrable while others (viz., "there is an external world") are demonstrable is not at all obvious.

I submit that, on this point, Moore is driven to a Cartesian kind of theory of justification despite his best intentions. Moore wants to be able to put an end to the sceptical challenge that has haunted philosophy almost from its beginning, that "scandal to philosophy" which asserts "that the existence of things outside us ... must be accepted merely on faith" and cannot be turned back "by any satisfactory proof" [8]. To do this, Moore sets out the three line proof we see in Proof of the External World. On the other hand, Moore wants not to have to face the sceptical challenges such foundational proofs invite. To accomplish this, Moore bases his proof of the existence of the external world on premises drawn from the "Propositions of Common Sense" which, as we have seen, are supposed to be immune to sceptical attack. Unluckily for Moore, the existence of the external world is itself one of the "propositions of common sense", and so either one of two things must follow from his attempt to prove it: (i) it is impossible to answer the sceptical challenge to prove the existence of the external world. Moore's own attempt to do so is a failure, or; (ii) it is possible offer a proof for
any true proposition. Moore's belief that some true propositions (even obviously true ones) cannot be justified by argument (e.g. "Here is a hand") is incorrect. Since Moore would find the former consequence (i.e. unanswered scepticism) totally unacceptable (something which may be gathered from just about everything he ever says about scepticism), Moore would be driven to the latter consequence. He would be forced to accept that it is possible to offer a proof for; i.e., justify, any true proposition (no matter how obvious, no matter how certain) one could claim to know. This we recognize as the position Descartes defends in his own theory of justification [9].

It is not a far cry from this Cartesian point of Moore's theory of justification to another: Does Moore think that any prospective knower could justify any true proposition known? In the light of the strange and self-contradictory things that Moore has to say about the possibility of producing a proof for any true proposition, it's difficult to say what the answer to this question should be. Having reached the conclusion that Moore believes it possible to justify any true proposition, it seems absurd to say that any prospective knower could be barred from justifying anything he knows. What else could the proposition "it is possible to justify any true proposition" mean except that it is possible for someone (someone, anyone) to justify any true
proposition? In what other sense could it be possible to justify any true proposition? [10]

Thus far we have said that Moore's theory of justification is remarkably like Descartes' (whether Moore likes it or not). One final point. Is Moore prepared to accept the possibility of a universal method (not necessarily the same one as Descartes has) by which all true propositions may be justified? The short answer to this is that Moore certainly does not rule this possibility out. This is an apparently weak answer, but I think it comes to the same thing as saying that Moore was open to that possibility in a way that Wittgenstein, say, was not. On the one occasion where Moore does address the possibility of there being an universal philosophical method (to be distinguished from a universal method simpliciter) Moore expresses doubt that at the moment there exists such a thing [11]. Moore's sentiment is negative (he writes that he "doubts if there is any one method"), but cautious [12]. Notice that Moore does not say that he's sure that there's no one method and that he does not deny the possibility that there ever could be such a thing. This is admittedly a less resounding endorsement of the possibility of a universal justificatory method than we may find in Descartes. On the other hand, it poses no significant challenge to the Cartesian belief that such a method may yet be discovered. Moore's failure to
reject the possibility of a Cartesian Method transmits by
default the notion of that possibility to the philosophical
context in which Wittgenstein is writing. Said more plainly,
because Moore did not outright reject the possibility of a
universal justificatory method, it was left for Wittgenstein
to do so. When Wittgenstein rejects the universal
justificatory Method he does so in contrast to Moore's
passive transmission of what is initially Descartes' idea.
Endnotes for Moore on Justification and the Foundation of Knowledge


(2) That's what On Certainty is about, after all.

(3) Here it is worth confessing to one obvious difference between Descartes and Moore. It is this: Moore does not think that any one proposition can be called the foundation of knowledge in the way that Descartes does. In his Defense of Common Sense Moore is quite happy to list reams of propositions which he thinks count equally as foundational. Thus in Moore's case, it is improper to speak of a proposition which is the foundation of knowledge; rather, for Moore, all of the propositions of common sense constitute the foundations (note the plural) of knowledge. Since Moore is unwilling to grant that any "proposition of common sense" is more or less foundational than any other "proposition of common sense", he is therefore also unwilling to admit that the denial of any one of these propositions could be less of a challenge to the foundations of knowledge than the denial of any other.

(4) Ibid., page 33

(5) Ibid., page 32

(6) Ibid., pages 40-41

(7) Ibid., pages 149-150

(8) Ibid. page 127. Moore is quoting from the Second Edition of the Critique of Pure Reason, B xxxix

(9) I cite A. Stroll's Moore and Wittgenstein on Certainty, (Toronto: Oxford University Press, 1994) by way of scholarly corroboration. Page 100 reads:

"Thus, the major oddity that struck Wittgenstein when he reflected on the relationship between "A Defense of Common Sense" and "Proof of an External World" is that in 1939 Moore should have given a proof at all. Here, after all, was the philosopher par excellence [sic] of common sense asserting in one paper that it was obvious there was an external world, and yet feeling the need in another paper to prove the obvious. All of Moore's intuitions and his best philosophical
judgement should have militated against such a move — a move that by Moore's own criteria is at best unnecessary and at worst absurd. Many of the comments in On Certainty are directed at trying to understand what could have motivated Moore in this way. The answer, put broadly, is that it was the Cartesian model, working its magic on Moore, that ultimately convinced him of the need to prove we could get outside the circle of our own ideas.

(10) Here it might be objected that there is a distinction to be made between "any proposition he knows" and "any true proposition he knows". By the standards of the traditional account of knowledge, though, knowledge is only knowledge if it is knowledge of what's true (S knows that p if and only if: (i) p is true). So by the standards of Moore's day (i.e. by the standards of the traditional account of knowledge) it is possible to use "any true proposition he knows" as a substitute for "any proposition he knows".


(12) Ibid.
Wittgenstein on Justification and the Foundation of Knowledge

In the last section we saw that Moore believes that it is possible to argue for the foundations of knowledge. Moore claims that a proposition like "there is an external world" is a foundational proposition (a "proposition of Common Sense") and Moore claims that it is possible to offer a three line argument in its defense ("Here is a hand; here is another; therefore there is an external world"). We also saw that, following from these two claims, Moore is driven to a surprisingly Cartesian theory of justification. For example, we were able to show that Moore believes it possible to justify every proposition one claims to know. Finally we saw that, while reluctant to do so, Moore passively accepts (or more precisely, declines to reject) the possibility of there being such a thing as a universal justificatory method.

In this section we shall witness Wittgenstein's direct and wholehearted rejection of Moore's view of the foundations of knowledge and his theory of justification. Since we previously linked Moore's thoughts on the foundations of knowledge and his theory of justification to Descartes' epistemology, showing that Wittgenstein's thoughts on these subjects oppose Moore's will go to show that Wittgenstein's thoughts also oppose corresponding thoughts in Descartes' epistemology. Beyond that, we have also shown in a previous
section that Pascal opposes both Descartes' theory of justification and his view of the foundation of knowledge. So by showing that Wittgenstein opposes Moore, we show that he also opposes Descartes; and by showing that he opposes Descartes, we also come some ways to showing that Wittgenstein and Pascal have something in common; viz., their opposition of Descartes. If it can also be established that Pascal and Wittgenstein come to the same conclusions in their opposition of Descartes, we will have begun to show that Pascal and Wittgenstein share the common elements of their epistemologies named in the thesis statement of this disquisition [1]. But let us not get ahead of ourselves. I should first say something about Wittgenstein's thoughts on the foundations of knowledge.

Wittgenstein does not merely reject the idea that there are arguments with which one can justify the foundations of knowledge (such as Moore's "here is a hand" argument for the existence of the external world). Wittgenstein goes further: he rejects the very possibility of justifying (arguing for) the foundations of knowledge.

In Wittgenstein's mouth (the Wittgenstein of On Certainty, remember) the word knowledge has a precise meaning: it refers to a proposition or to propositions one accepts as true on the basis of some criterion or criteria. As Wittgenstein would say, "'I know' often means: I have
the proper grounds for my statement ... One says 'I know' when one is ready to give compelling grounds. 'I know' relates to a possibility of demonstrating the truth" [OC #18 and #243]. So knowledge claims must be based on justification of some kind. If I want to say that I know it's 10:30 a.m. and stay faithful to Wittgenstein's analysis of the word "know", I would have to justify my assertion about the time in some way. I could, for example, base a knowledge claim I want to make about the present time on a calculation about the last time I looked at the clock and the amount of time that has lapsed since then. I could not claim to know the time in Wittgenstein's sense if I simply blurted the sentence "It's 10:30 a.m." out of nowhere. This gives us an easy example of something Wittgenstein might count as knowledge: Someone asks me the time. I look at my watch and say "It's 10:30 a.m." In the technical sense of "know" which Wittgenstein introduces in On Certainty, I do indeed know the time because I base what I accept as true (viz., that it's 10:30 a.m.) on a definite criterion (viz., what my watch tells me). I can justify my claim to knowing the time (i.e. I am able to demonstrate its truth by showing my interlocutor my watch face), and so, by Wittgenstein's analysis of "know", I can be properly said to know that it's 10:30 a.m.

But the fact that I am wearing a watch in this example
would not count as something Wittgenstein would call knowledge, not because I do not hold it to be true, but rather because I hold it to be true on the basis of no criterion. Nevertheless, that fact was critical to my determining the time -- I assumed its truth in order to check the time (i.e. apply a criterion). Though it was itself based on nothing, it was something upon which I based my statement about the time. To Wittgenstein's mind, that means that it is a foundation of my knowledge claim about the time. Said a little differently, the foundations of my knowledge that it's 10:30 a.m. consist in part of the assumption that I'm wearing a watch. Wittgenstein compares such a foundation of knowledge to a hinge upon which a door turns: "... the questions that we raise ... depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those [questions] turn." [OC #341]. These foundations of knowledge upon which our questions (and presumably our means of answering them) turn are called hinge propositions. Where in Pascal the fundamental epistemological distinction is a distinction between knowledge by the heart and knowledge by reason, in Wittgenstein the fundamental epistemological distinction is the distinction between knowledge claims and hinge propositions. Hinge propositions are the grounds upon which all knowledge claims are based.
The question about whether Wittgenstein believes it is possible to argue for the foundations of knowledge or not is thus a question about whether Wittgenstein believes it is possible to justify the hinge propositions according to some criterion or criteria. To cast this question in the metaphor of the above example, we might ask whether it is possible to justify my belief that I am wearing a watch when I move to determine the time by checking my watch. Now indeed we could conceive of another example where someone asks me whether I am wearing my watch or not (say I am in the habit of forgetting to put it on) before they ask me to check the time. What's more, I could conceive of a criterion by which I could check whether or not I am wearing my watch (I could look at my wrist to see if it's there). But the fact that I can develop a criterion by which I can determine whether or not I'm wearing a watch in this second example is not to say that that second criterion (the criterion in the second example) is at work in the first example. It's not as though the course of events in the first example runs like this: Someone asks me the time. Before I look at my watch to gather the time, I first check my wrist to see that I'm wearing my watch. Once I've settled that I am indeed wearing my watch, I proceed to look at my watch and then announce "it's 10:30 a.m.". This is not how things work in the first example at all. In the first example, it is not the case that
look at my wrist to see if my watch is on my arm before I look at my watch to gather the time. I move straight from the question ("Do you have the time?") to applying the criterion (checking my watch) to my answer ("It's 10:30 a.m.") without relying on the second criterion at all. My belief that I am wearing a watch acts as a hinge upon which my investigation into the correct time turns. In the second example, that belief itself becomes questionable and another belief (e.g., that I have eyes and can see) becomes the hinge upon which my application of the second criterion turns. But the fact that I can conceive of other examples in which different things are at issue and different criteria and different beliefs are used to decide matters does not entail that it is necessary to justify every proposition I accept as true before I can begin making this or that investigation.

Imagine what would happen if I had to justify every proposition I accept as true according to some criterion before I could make a determination about the truth of a new proposition. Let us return to the metaphor of the first example: Had I to rely on a second criterion (checking my wrist to see that I was wearing my watch) before I could move to the first criterion, I would have to rely on a third criterion (e.g., checking my eyes to see if they're able to see whether my watch is on my arm or not) before I could
move to checking on the basis of the second criterion. But if that were so, I would have to rely on a fourth criterion before I could proceed to checking on the basis of a third criterion. And then that fourth criterion would have to be based on a fifth, and the fifth on a sixth, and then the sixth on a seventh ... and so on *ad infinitum*. Again, this is not what happens in the first example; I am not caused to fall back into an infinite regress of criteria in order to give someone the time. I do not have to figure out an infinite number of different ways of justifying my claim to knowing the time before I can properly claim to know it. What saves me from an infinite regress are the hinge propositions that underlie my knowledge claim. This means that it is the hinge proposition which is not justified according to any criterion that supports the knowledge claim which is always justified according to some criterion. As Wittgenstein puts it: "At the foundation of well-founded belief lies belief that is not founded" [*OC* #253]. Put a bit differently, Wittgenstein does not think that there are arguments that justify the foundations of knowledge (the hinge propositions). "[J]ustification comes to an end" and its end is the hinge propositions which act as the "rock bottom of my convictions" [*OC* #192 and #248] [2].

But this only goes so far as to show that Wittgenstein believes that the foundations of knowledge are something for
which there are no arguments. It does not show that he thinks there can be no arguments for them. Wittgenstein writes:

"If someone is taught to calculate, is he also taught that he can rely on a calculation of his teacher's? But these explanations [ read "justifications"] must after all sometime come to an end. Will he also be taught that he can trust his senses -- since he is indeed told in many cases that in such and such a special case you cannot trust them?

... Admittedly, if you are obeying the order 'Bring me a book', you may have to check whether the thing you see over there is really a book, but then you do at least know what people mean by 'book'; and if you don't you can look it up, -- but then you must know what some other word means. And the fact that a word means such-and-such, is used in such-and-such a way, is in turn an empirical fact, like the fact that what you see over there is a book.

Therefore, in order for you to be able to carry out an order there must be some empirical fact about which you are not in doubt. Doubt itself rests only on what is beyond doubt." [ OC #34 and #519 ] [ 3 ]

Relevant to the purpose of showing that Wittgenstein thinks that the foundations of knowledge are things for which one cannot argue is his use of the word "must" in the above extract. In its third paragraph, Wittgenstein says quite clearly that in order for one to carry out an order such as "bring me a book" ( or "Tell me the time" ) there must be something one does not doubt ( read "demand justification of " ). That is, there must be some things of which one cannot demand justification. Presumably, these are the hinge propositions Wittgenstein mentions earlier on [ OC #341-343 ] [ 4 ]. In the first paragraph Wittgenstein not only says that explaining ( giving reasons for ; i.e. justifying ) must
come to an end, he suggests why he thinks that it must end: he suggests that were it possible to justify everything, it would lapse into the kind of infinite regress delineated above. Then no one would get anything done:

"[Imagine a pupil cast doubt on the uniformity of nature, that is to say on the justification of inductive arguments.-- The teacher would feel that this was only holding them up, that this way the pupil would only get stuck and make no progress -- And he would be right."

OC #315

This advances us so far as to be able to say that Wittgenstein rejects the possibility of arguing for the foundations of knowledge, the hinge propositions. What is more, it enables us to say that Wittgenstein does not think that the foundations of knowledge can be known. For, according to Wittgenstein, knowledge is only possible where justification is possible. Since it is impossible to justify the hinge propositions, it must be impossible to know them. And since the hinge propositions are the foundations of knowledge, it must therefore be impossible to know the hinge propositions.

In fact two additional consequences proceed from what we have said thus far: the first is that Wittgenstein must reject the possibility of universal justification. This simply follows from the fact that Wittgenstein thinks it is impossible to justify the hinge propositions. Since universal justification implies the possibility of justifying
everything one accepts as true, and since one must accept the truth of hinge propositions without being able to justify them, it must be the case that universal justification is incompatible with the hinge propositions [5]. Wittgenstein must therefore reject universal justification.

The second consequence borne out of this section thus far is Wittgenstein's opposition to the possibility of a universal justificatory method. We saw above that different criteria are used to investigate different questions. If someone asks me the time, I check my watch to gather the time; if someone asks me if I am wearing a watch, I don't look at my watch to see if I'm wearing it or not -- that wouldn't make any sense (Imagine me saying "My watch tells me that it's 10:30 a.m., so I must be wearing my watch "). Rather, I look at my wrist to see if I'm wearing it. Or imagine another case: Someone asks me if it is raining outside or not. I say that I think it is and I base my assertion on having looked out the window. What is there in common between the way in which I justify my claim that it's 10:30 a.m. in the first example and the way in which I justify my claim that it's raining outside in this last example? Nothing obvious springs to mind, and what does spring to mind after a little reflection seems incredibly trivial (e.g. both examples of justification involve looking -- I looked at my watch and I looked out the
window). Wittgenstein's rejection of the possibility of a universal justificatory method is bound up with his theory of language games and is something Wittgenstein does not discuss in depth in On Certainty. What he does say about it in another work, the Philosophical Investigations is fairly explicit:

"Consider how the following questions can be applied, and how settled:
(1) 'Are these books my books?'
(2) 'Is this foot my foot?'
(3) 'Is this body my body?'
(4) 'Is this sensation my sensation?'
...
But if someone wished to say: 'There is something common to all these constructions -- namely the disjunction of all their common properties' -- I should reply: Now you are only playing with words."

Attempts to find a universal justificatory method are in vain. At best they yield verbal trickery. It is for that reason that Wittgenstein rejects their possibility.

One last point remains to fully contrast the Wittgenstein or this section with the Moore of the last section:
Wittgenstein's thoughts on the possibility of justifying everything one knows.

Wittgenstein might be easily mistaken for someone who thinks that it is possible to justify everything one knows. His analysis of the word "know" is particularly misleading. By saving that knowledge is only possible where there is the possibility of justifying what one claims to know,
Wittgenstein gives the impression that he thinks that justification is always possible wherever there is knowledge. But it is rather more appropriate to say that Wittgenstein thinks that justification is a necessary condition for knowledge. "One says 'I know' when one is ready to give compelling grounds." [OC #243]. Wittgenstein does not think that justification is always possible wherever there is knowledge; he thinks that, if there is knowledge, justification is already there.

But even that is only a partially true description of Wittgenstein's position. Like Pascal, Wittgenstein too believes that one cannot guarantee that one will always have a chance to justify what one knows. Sometimes, Wittgenstein acknowledges, we use the word "know" where it couldn't be justified [7]. For example, were I to say "I know that this is my foot", I would have just as much difficulty saying something about why I know that this is my foot, as I would trying to find evidence against it [OC #360]. In fact, Wittgenstein suggests that in some circumstances it would be nonsensical for someone to ask me to justify something I know. Suppose, says Wittgenstein, you are leading a blind man by the hand and as you take his arm you say "This is my hand". If he were to then ask you how you know this is your hand with which you are grasping his, "it would take very special circumstances for that to make sense."
So either way Wittgenstein disagrees with Descartes and Moore. Even when he is willing to admit that knowledge is related to justification, he insists that Descartes is wrong to make justification only an optional criterion for knowledge. Sometimes though, he admits, it is impossible to justify what one knows.
**Annotations for Wittgenstein on Justification and the Foundation of Knowledge**

(1) I say "I will have begun to show " because there is another chapter (with additional epistemological topics in it) to follow this one. The completion of this chapter will only bring us one half of the way to completing the whole argument of this disquisition.

(2) Justification comes to an end when I reach the hinge propositions that underlie a given knowledge claim. In the case of the first example, my justification of the claim "It's 10:30 a.m." can go no further than the criterion by which I determined the time; **viz.**, checking my watch. That is, were my interlocutor to suddenly ask me to tell him how it was that I had determined the time when he had plainly seen me check my watch, I wouldn't know exactly how to respond. Didn't he see me look at my watch? --perhaps he is blind. Suppose he is not blind: what then? Doesn't he understand that a watch is a device used to tell the time? Suppose I ask him if that is how he understands the word watch and he says yes: now what? I suppose I might try pointing to my watch and saying "This is a watch. It is a device used to tell time." Notice that this is not to go so far as to introduce new criteria to justify my method of telling the time -- I'm merely describing to my interlocutor how my language works. I'm not further justifying my watch-checking behaviour. It is as Wittgenstein says "At some point one has to pass from explanation to mere description." **OC** #189.

(3) Throughout *On Certainty* Wittgenstein hints that he believes that knowledge and doubt are somehow connected. Both knowledge and doubt require grounds, according to Wittgenstein. This sets them apart from the foundational belief that is the hinge propositions, which as we know require no grounds (they are the grounds). Perhaps it is for this reason that it is not uncommon for Wittgenstein to switch naturally from talk about doubt to talk about knowledge. E.g. **OC** #187-188.

(4) Here they are called empirical facts, but they seem to have the same function as the hinges upon which doubts turn.

(5) Doesn't Wittgenstein write "If the true is what is grounded, then the ground is not true, nor yet false"? Yes; this remark appears at **OC** #205. It does not,
however, invalidate my claim about what one accepts as true. Accepting something as true is what certainty is, and that defines the groundless hinge propositions:
"
Sure evidence is what we accept as sure, it is evidence that we go by in acting surely, acting without any doubt... My life consists in being content to accept many things [the hinge propositions]" OC #196 and #344. It is perfectly possible to speak of accepting the truth of the groundless hinge propositions, provided one distinguishes accepting as true from determining is true (the latter implies the possibility of being false).


(7) The reader will recall that at the start of this section Wittgenstein's analysis of "know" left room for instances where knowledge has no (or can have no) justification. Wittgenstein's exact words at OC #18 are: "'I know' often means: I have the proper grounds for my statement" (underlining mine). Wittgenstein is careful not to say that "I know" always means I have the proper grounds for my statement.
Conclusion to Justification and the Foundation of Knowledge

Over the course of the last four sections we have been able to establish that Wittgenstein and Pascal share several epistemological tenets.

Against Descartes and Moore we saw that Pascal and Wittgenstein maintain the following theses:

(1) Knowledge rests on foundations that are not knowledge; Pascal believes that knowledge by reason rests on the foundations of knowledge by the heart and Wittgenstein believes that knowledge claims rely on hinge propositions.

(2) It is not possible to use reason to argue for, justify, or demonstrate the foundations of knowledge.

(3) Since both Pascal and Wittgenstein think that it is not possible to argue for the foundations of knowledge, and since both share a belief that to know something means to argue for it, neither thinks it is possible to know the foundations of knowledge. Pascal does not think that knowledge by the heart can be known by reason and Wittgenstein thinks that one cannot know (in his sense of "know") the hinge propositions.

(4) It is impossible to justify all the propositions one knows.

(5) The type of justification a proposition requires is determined relative to the type of proposition for which justification is sought.
Wittgenstein thinks that what counts as justification of a proposition cannot be set out for all propositions and Pascal thinks that the heart has its own system of justification which reason does not know. A universal method of justification is rejected.

Notice that throughout this list of five common epistemological elements there is not a trace of scepticism. Let us take an example: Pascal and Wittgenstein say that there is no knowledge of the foundations of knowledge and no way of supporting them with argument either. But they do not go so far as to say there is no such thing as knowledge or a foundation of knowledge. Another example: They both reject the possibility of a universal justificatory method, but neither Pascal nor Wittgenstein says that that impossibility entails the impossibility of every kind of justification. Pascal and Wittgenstein develop these shared ideas in contrast to Descartes and Moore. Descartes and Moore develop their ideas as a way of answering scepticism. What is remarkable here is that Pascal and Wittgenstein manage to reject the work of their contemporary anti-sceptics without becoming sceptics themselves. Both thinkers thus avoid the trap into which most people fall:

"[W]hat usually happens is that not being capable of perceiving the relation between two opposing truths and believing that the admission of one implies the rejection of the other, they accept one and reject the other, and think that we do the opposite." [Lafuma '52, #462].
Chapter Two

Descartes, Pascal, Moore, and Wittgenstein
on Truth and Certainty
**Introduction to Truth and Certainty**

As we saw in the last chapter, Pascal and Wittgenstein jointly reject the idea that knowledge has foundations that can be justified. We saw that they reached that position in marked contradistinction to the position of their respective contemporaries, Descartes and Moore.

The progression of our disquisition now leads us to consider what it is that these 4 philosophers take to be certain and state what the relationship between truth and certainty is.

It is Descartes' view that it is possible to both sensibly doubt and demonstrate certainties, including those certainties we might call certainties of banal physical fact (such as "The material world exists"). Furthermore it is Descartes' view that the concepts of truth and certainty are so deeply connected that the words "truth" and "certainty" are synonymous. Pascal, on the other hand, denies that one can either sensibly doubt or prove certainties, particularly those certainties expressed by statements of banal physical fact. In addition, Pascal grants that there can be some overlap of the concepts truth and certainty, but balks at treating certainty as though it implies truth. Like Descartes, Moore also subscribes to the view that one can sensibly doubt and demonstrate certainties, even those banal physical facts one takes for certain. He
also believes ( much like Descartes ) that the certainty of a proposition implies its truth. Wittgenstein disagrees with Moore after the same fashion that Pascal disagrees with Descartes: Wittgenstein ridicules the possibility of sensibly doubting certainties and rejects the possibility of demonstrating them. Finally, with Pascal he too disbelieves that the certainty of a proposition implies its truth ( but again like Pascal, he does not mean to say that truth and certainty are mutually exclusive ).
Descartes on Truth and Certainty

One of the most striking contrasts between Pascal and Descartes is their disagreement over the kind of thing we call certain. In diametric opposition to Pascal, Descartes gives voice to the idea that it is sensible to be uncertain about all ordinary, purely physical facts. Descartes takes this opposition a step further: he thinks that it is possible to demonstrate by reason some things that are taken for certain. To twist Pascal's epigram to Descartes' purpose, if the heart can know things unknowable to reason, then the heart can fail to know some certain things. Alternately, in the idiom of On Certainty, Descartes thinks that it's sensible to be uncertain about some basic beliefs we all hold.

It is easy to establish that Descartes thinks it makes sense to be supremely suspicious of banal physical facts. At the very outset of the 1st Meditation, Descartes asks himself a question:

" [ How could I doubt that ] ... I am here sitting by the fire, wearing a dressing gown, with this paper in my hands, and so on [ ? ] How could I deny that these hands and this body are mine? " [ 1 ]

Descartes' question asks us to ask ourselves how we could doubt some very ordinary (and true) assertions he makes about himself [ 2 ]. As stated, the idea sounds preposterous, and Descartes knows it. These are not the
sort of claims that most people dispute. For the most part, people argue about things that have nothing to do with what they immediately perceive. People argue about politics, money, social status, etc. They take what they immediately perceive for granted. When they do have cause to argue about what they perceive, it is usually under special or contrived circumstances; e.g., a dispute can easily arise about what the nature of an object seen at a great distance is; a fight can follow on what a drunken man claims to have seen in his stupid. Normally, the truth of what is seen, heard, tasted, felt, etc., is assumed.

The normality of this assumption is insufficient to convince the sceptic of its truth. Descartes can see the sense of the sceptic's point: assuming the truth of what we perceive under normal circumstances is a rather arbitrary assumption. Descartes confesses to knowing of a not so special and contrived circumstance which could cause people to doubt everything their senses tell them. It is this: dreaming. As it turns out, Descartes has a ready answer to the questions he has put himself. The fact that we all dream gives him a fairly simple way to make sense of denying the banal physical facts which we immediately perceive. Descartes compares denying these basic things (location, attire, position) to the delusions of madmen, and then writes,
"...[ But ] I am a man, and therefore in the habit of sleeping, and ... I imagine the same things in my dreams as these madmen imagine when they are awake or sometimes even more absurd things. How often have I dreamed that I was here, fully dressed and sitting by the fire, when I was actually undressed and lying in bed! " [3]

By asking himself one straightforward question -- Is such and such true, or am I just dreaming it? -- Descartes is able to see the sense in casting doubt on almost any experience. The hypothesis that dreaming "x is true" is identical to "x is true" can be used to devastating effect. Gone is the solidity and certainty of immediate perception! When faced with the same propositions he formerly held beyond question (e.g. These hands and this body are mine), Descartes is now hesitant. Descartes understands the sceptic's question: could he be dreaming that those hands and that body are his? He realizes that whether he is dreaming or not is besides the point. It is enough for the sceptic's purpose that he could be dreaming it to render all banal physical facts dubitable and uncertain. "It may be raise that these are my hands" -- the possibility of the sceptic sensibly asking Descartes this question can (and does) cause Descartes to withhold his assent from the entire class of statements of banal physical fact [4].

This goes to show that Descartes thinks it sensible to doubt all ordinary, purely physical facts. That Descartes also thinks that it is possible to demonstrate any of the
certainties we know follows directly from the fact (discussed last chapter) that Descartes holds it possible to justify anything one knows. If one can know certainties (and there is every indication in Descartes that one can. The Cogito is one such certainty, as we will see), it should be possible to offer rational demonstration for all of them.

Descartes and Pascal can also be distinguished with respect to another point of their theories of certainty. For Descartes a certain belief is a true as well as a potentially demonstrable belief.

"I noticed that while I wished to think all things false, it was absolutely essential that the 'I' who thought this should be somewhat, and remarking that this truth 'I think, therefore I am' was so certain and so assured that all the most extravagant suppositions brought forward by the sceptics were incapable of shaking it, I came to the conclusion that I could receive it without scruple as the first principle of the Philosophy for which I was seeking.

... After this I considered generally what in a proposition is requisite in order to be true and certain; for since I had just discovered one which I knew to be such, I thought I ought also to know in what this certainty consisted. And having remarked that there is nothing at all in the statement 'I think, therefore I am' which assures me of having hereby made a true assertion, excepting that I see very clearly that to think it is necessary to be, I came to the conclusion that I might assume, as a general rule, that the things which we conceive very clearly and distinctly are all true..." [6]

Notice how Descartes relates truth and certainty in this passage. At first Descartes talks as though truth and certainty were not somehow deeply connected to each other:
he says that the *Cogito* is a truth which also happens to be "so certain and so assured ", suggesting that there are some truths which just so happen not to be so certain and assured. But soon Descartes subtly adjusts his talk. He says that the discovery of a proposition that is both true and certain makes him curious to know what is required in general to guarantee these two predicates of any proposition. This is still not to say that Descartes thinks that truth and certainty are somehow importantly related. It is what Descartes says next that suggests that this is exactly what he thinks. He says that the *Cogito* itself gives him a way to investigate that feature of propositions in general which make them both true and certain; but these are not his exact words. His exact words are "I thought I ought also to know in what the certainty consisted" [7]. Descartes' reference in this passage is clearly to both truth and certainty, but Descartes obviously feels that the two predicates are sufficiently synonymous that he can use one of the two words to designate both words. And Descartes is not particular about which of the two words he uses to refer to both words. Having said he wants to look into that in which the certainty of the *Cogito* consists, Descartes proceeds to speak about in what it is that the truth of the *Cogito* consists: He concludes his brief inquiry into what makes the *Cogito* certain by saying "...I came to the conclusion that I might
assume as a general rule, that the things which we conceive very clearly and distinctly are all true. " [ 8 ]. So according to Descartes the relationship between truth and certainty is not a one-way relationship. It is not as though " certainty " may be used to designate both truth and certainty, while " truth " may only be used to designate " truth ". We can see quite plainly in the above passage that Descartes uses " truth " to refer to both truth and certainty as well as use " certainty " to refer to both truth and certainty. That Descartes uses these terms as though they were interchangeable is a strong indication that he thinks that the concepts to which they refer are somehow deeply connected to each other. It is also significant that this conflation of terms occurs here in this passage where Descartes is trying to discern the general character of a proposition that is both true and certain. Had this passage merely borne on the Cogito, it might have been possible to explain Descartes' synonymous treatment of these two concepts as a consequence of the special status of the Cogito as the foundation of knowledge ( as in " The synonymous treatment of these two words is only possible when speaking of the Cogito, for in the foundational Cogito the concepts of truth and certainty are bound together in a way in which they are bound together in no other non-foundational proposition " ). But as it is Descartes is using his
examination of truth and certainty in the *Cogito* to create a standard by which he may judge propositions *in general*. In that context, it would hard for someone to say that what Descartes says here about truth and certainty (particularly the relationship between truth and certainty) is not meant to have any bearing on any other proposition.
Endnotes for Descartes on Truth and Certainty

(1) from Meditation I in The Essential Descartes, loc. cit., p. 166 or OPD p. 405-406 Volume II

(2) Clearly Descartes' questions are directed at an audience wider than Descartes himself. We are all supposed to ask ourselves how we could doubt similarly ordinary assertions we might make about our present physical condition, whereabouts, posture, etc. Such is the implication of all 6 Meditations; they're not just about Descartes.


(4) Meditations I and II, passim (e.g. the dream scenario or the wax example)

(5) from the Discourse on Method in The Essential Descartes loc. cit., p. 127 or OPD, p. 613 of Volume I

(6) Ibid. p.127-128 or OPD, p. 613-616 of Volume I

(7) Ibid. underlining mine

(8) Ibid. p. 128 underlining mine
Pascal on Truth and Certainty

In the last section we saw that Descartes believes (i) that it can be sensible to doubt things that are certain, such as banal physical facts; (ii) that it is possible to demonstrate all certain things (inasmuch as they are knowable); and (iii) that the certainty of a proposition implies its truth. In this section we will see that Pascal rejects all three of Descartes' beliefs about certainty.

The first thing to be said is that Pascal claims that the foundations of knowledge are certain. In the last chapter we saw that Pascal alternately calls the foundations of knowledge "knowledge of first principles", "instinctive knowledge", "intuitive knowledge", and "knowledge by the heart". Of these foundations he writes,

"The heart is aware instinctively that space has three dimensions, and that numbers are infinite; and then reason demonstrates that there are not two square numbers, one of which is double the other. Principles are perceived by intuition; propositions are proved and both methods lead to certainty though by different routes." [Lafuma '52, #214]

In this passage Pascal clearly says that the "principles" which one knows by intuition lead to certainty. Because Pascal uses "knowledge of first principles" and "intuitive knowledge" as synonyms for "knowledge by the heart", I will take this reference to "perceiving principles by intuition" as a fairly clear declaration that Pascal means that knowledge by the heart
( and all its equivalents ) is certain knowledge [ 1 ].

Pascal is not as charitable as Descartes when he considers the sceptic's attempts to call this certain knowledge into doubt. Pascal is not at all willing to grant that it can be sensible to doubt what is known by the heart [ 2 ]. Pascal writes,

"... it is through [ the heart ] that we know first principles, and reason, which has no part in it, tries in vain to undermine them. The Pyrrhonists [ i.e. the sceptics ], whose only object it is, toil away at it fruitlessly. " [ Lafuma '52, #214 ]

The Pyrrhonian sceptic's whole sceptical project is to cast doubt on everything. By doubting everything the Pyrrhonian sceptic ( or Pyrrhonist, as Pascal calls him ) hopes to achieve a state of detachment, or *epoche*, from the world [ 3 ]. In order to doubt everything, the Pyrrhonian sceptic has to doubt even the most basic and certain beliefs that he has, beliefs that Pascal would identify as things known by the heart. For example, the Pyrrhonian sceptic has to call into doubt such simple things as his belief that he is awake rather than asleep, that he occupies three dimensional space, and that time passes and that things move:

"We know that we are not dreaming; however powerless we may be to prove it by means of reason, our powerlessness demonstrates nothing except the feebleness of our reason and not, as they [ the Pyrrhonian sceptics ] maintain, the uncertainty of the whole of our knowledge. For the knowledge of first principles, such as the existence of space, time, movement, number,
According to Pascal, it is completely "vain" and "fruitless" to try to doubt the sort of things mentioned in this passage. This establishes that Pascal does indeed reject Descartes' belief that it can be sensible to doubt certain things, things such as these banal physical facts. It doesn't make any sense to try to doubt certainties because such doubts are "vain" and "fruitless".

Pascal says that the fact that we are unable to prove those simple and concrete things which we take for certain does nothing to diminish their certainty. Rather, it only goes to show that reason has its limits -- something we have already heard Pascal say in the last chapter: Pascal considers it "ridiculous ... to demand of the heart proofs" for the things it regards as true. The knowledge exemplified by these banal physical beliefs is knowledge by the heart. The certainty that knowledge by the heart provides is provided without proof. Hence, the certain knowledge one has by the heart is indemonstrable by reason.

This demonstrates that Pascal does reject Descartes' other belief about certainties; viz., that it is possible to use reason to demonstrate all the certain things one knows. It also explains why Pascal rejects Descartes' belief that this is possible. At least some of the things one knows for
certain are known by the heart, and on principle Pascal rules out the possibility of using reason to prove what is known by the heart. But why then is the Pyrrhonian sceptic's project of casting doubt on the things we take as certain "vain" and "fruitless"? Casting doubt on certainties is the very opposite of trying to use reason to prove certainties.

In like manner, shouldn't the sceptic's project be the very opposite of "vain" and "fruitless"? Why does Pascal reject the project of casting doubt on certainties?

Pascal gives no direct answer to this question in this passage. However, I assume that Pascal's answer would be consistent with something else he says against the sceptics. In another passage Pascal tries to envision what it would be like for a man to immerse himself in a state of radical doubt.

"What then shall a man do in such a state of affairs? Will he doubt everything? Will he doubt whether he is awake, if someone pinches or burns him? Will he doubt whether he doubts? Will he doubt whether he exists? It is impossible to come to such a pass as that, and I take it as axiomatic that there has never been a completely dyed-in-the-wool sceptic." [Lafuma '52, §246]

The man immersed in the Pyrrhonian project of casting doubt on everything is required to doubt things which everyone else without deliberation accepts as true and certain (e.g. the fact that he is awake rather than asleep). But doubting everything necessitates doubting the
very act of doubting (and the very existence of the doubter, for that matter). This leads to the strange situation where the man immersed in sceptical doubt has to wonder whether he is indeed immersed in sceptical doubt (perhaps he is only dreaming that he's immersed in sceptical doubt). I.e., it leads to the strange situation where the doubter has to question the premise upon which he bases his doubts. Since the doubter knows, ex hypothesi, that it is true that he is immersed in doubts, it becomes impossible for him to say that he does not know whether he doubts or not: he does know it; it is the assumption upon which his whole project of radical doubt is founded. His project of radical doubt demands that he doubt everything. At the same time, the demands of that project demand that he not doubt the fact that he is required to doubt everything. It were as though the Pyrrhonian sceptic were trying to haul himself along in a wagon in which he is firmly seated--the source of all the energy that could be used to pull the wagon is the very thing that prevents the wagon from moving. In the language of this metaphor now, Pascal might say that it is the Pyrrhonian sceptic's insistence on universal doubt that is the very thing that makes the sceptic's project impossible. I submit that it is for this reason that Pascal believes that the project of casting doubt on the things we take for certain is "vain" and "fruitless". Pascal thinks it is impossible for the
sceptic to have doubts about the certainties known by the heart. Consequently, Pascal thinks it is "vain" and "fruitless" to cast doubts on certainties. It is for that reason that Pascal rejects Descartes' belief that it can be sensible to doubt certain things such as banal physical facts.

Finally, there is Pascal's opposition to Descartes' belief that certainty implies truth. In the last section we saw that Descartes treats the words "certainty" and "truth" as though they were synonymous. In this section we will see that Pascal believes that the two words cannot be used synonymously because certainty does not imply truth.

There is one passage in the *Pensees* that is key to describing Pascal's view of the connection between truth and certainty. In this passage, Pascal discusses how it is that we come to have certain knowledge:

"For we must not harbour illusions about ourselves: we are as much machines as minds; that is why the faculty which produces conviction is not the only method of demonstration. How few things there are which can be proved! Proofs only convince the mind. Habit provides us with our most effective and most widely accepted proofs; it bends the machine which carries the mind without our thinking about it. Who has ever been able to prove that tomorrow will come, and that we shall die? And what could be more generally believed? It is therefore habit which convinces us of the fact; habit which makes so many people Christians; habit which makes Turks, pagans, traders, soldiers, etc. " [Lafuma '52, #7]
We saw in the last chapter that, as Pascal understands it, there are only two ways by which someone can come to accept something as true: they can come to know it by the heart or they can come to know it by reason (i.e., prove it or argue for it). The language of this passage contrasts proof with something that is produced by habit, something that is "not the only method of demonstration". Knowing as we do that Pascal believes the only other method of demonstration besides reason to be the heart ("the heart has its reasons..."), it is safe to assume that which is produced by habit in this passage is what Pascal elsewhere calls "knowledge by the heart". Moreover, Pascal identifies the product of habit in this passage with certain knowledge and banal physical beliefs: he calls it "our most effective and widely accepted proof" (what could be more effective than certainty?) and links it to such beliefs as the belief that tomorrow will come and that all men are mortal. What Pascal has to say about this product of habit is therefore germane to the certain knowledge of the type we have already discussed in this section.

And what Pascal has to say about this product of habit in the above passage is quite useful. Pascal says that the product of habit (which we have identified with certain knowledge) is what makes people Christians. We know that Pascal believes that the Christian religion is the true
religion: "The history of the [Christian] Church should, properly speaking, be described as the history of truth:" [Lafuma '52, #562. Also Lafuma '52, #419]. Since Pascal believes that the certain knowledge that habit provides can lead to Christianity, and since he also identifies Christianity with truth, it follows that Pascal believes that certain knowledge can lead to the truth. But in the above passage Pascal also says that the certain knowledge provided by habit can also lead to paganism, something which we know Pascal rejects as false [Lafuma '52, #389 and #409]. From this it follows that Pascal also believes that the certain knowledge provided by habit can equally lead to falsity. Together these two of Pascal's beliefs entitle us to draw the conclusion that the certain knowledge that habit provides does not necessarily lead to the truth. It may lead to the truth (as where it leads to the Christian religion), but it may not. This in turn enables us to draw the conclusion that, for Pascal, the relationship between truth and certainty is best described as a disjunctive relationship. Where Descartes thinks truth and certainty are somehow interchangeable, Pascal thinks that certainty does not imply truth.
Endnotes for Pascal on Truth and Certainty

(1) Pascal mentions another route to certainty in this passage; proof. I suggest he is speaking of the certainty provided by the kind of probability reasoning that he uses in the Wager argument [Lafuma '52, #343]. See the Appendix to this disquisition for a further discussion of the probability reasoning involved in the Wager.

It is strange to hear Pascal speak of reasoning one's way to certainty. Elsewhere [Lafuma '52, #63] Pascal says that reason is a poor foundation for anything (his exact words are "Anything that is founded on reason is very ill-founded"). I can only assume that the kind of proof that leads to certainty (probability reasoning, the kind involved in the Wager) is of a different kind than the reason upon which anything would be very ill-founded.

(2) Notice that Pascal says nothing in this passage about the futility or absurdity of attempting to undermine the kind of certainty obtained through proof. According to this passage, only trying to undermine the certainty provided by "knowledge of first principles" counts as "vain" and "fruitless".


The Pyrrhonian sceptic wishes to achieve this detachment from the world so that he can finally arrive at a state of ataraxia, or peace of mind.
Moore on Truth and Certainty

What needs to be said about Moore's ideas about what can be certain and how its certainty can be established calls for some detailed discussion. We discovered in our examination of Moore on the foundations of knowledge that Moore takes the so-called propositions of common sense to be the foundations of knowledge. The example we considered in that section was the proposition "there is an external world". What we quoted Moore as saying about just that proposition is worth repeating for our purpose in this section. Moore says that that proposition ("There is an external world") belongs to "a set of propositions, every one of which ... I [Moore] know, with certainty, to be true." [1]. Moore is glad to call a proposition such as "There is an external world" certain. And, as we saw earlier, Moore is also willing to say that "There is an external world" is a proposition that can be proved. [2]

This advances us so far as to be able to say that Moore, unlike Wittgenstein, thinks that some certain things are demonstrable. It does not, however, advance us so far as to be able to say that for Moore demonstrable truth is demonstrable certainty. Luckily, it is in fact Moore's view that the truth and certainty of a proposition are importantly connected. Having said that the propositions of common sense
are propositions known with certainty, Moore goes on to say that the fact that such-and-such a proposition is a proposition of common sense entails its truth. As Moore puts it:

"if they [ propositions of common sense ] are features in the Common Sense view of the world ... it follows that they are true " [ 3 ]

Thus, to Moore's mind, the certainty of a proposition (i.e., its belonging to the list of propositions of common sense that compose the Common Sense view of the world) implies its truth. This is just the sort of connection between certainty and truth which Wittgenstein opposes and Descartes defends. [ 4 ]

One final point. Like Descartes, and unlike Wittgenstein, Moore believes that the sceptic's position is a sensible but untenable one. To Moore, the sceptic is not speaking nonsense; he is just plainly wrong. The sceptic's claims are false, and their falsity betrays itself in a number of different ways.

Moore's response to those who would deny his "Propositions of Common Sense" is a case in point. He divides these philosophers (really sceptics) into 2 classes: those who would negate the propositions of common sense, and those who would merely withhold judgement about them [ 5 ]. The former, Moore says, are in plain violation of the propositions of common sense; since the propositions of
common sense are all true, this type of sceptic makes a
career out of denying the truth; i.e., accepting what's
false [6]. The latter, says Moore, are self-refuting.
Withholding judgement about the propositions of common sense
leads this kind of sceptic to make two mutually exclusive
claims. By saying that no man knows any given proposition of
common sense (e.g. there are other people) the "withholds
judgement" sceptic blazons the fact that he knows that there
are other people. His behaviour betrays his certain knowledge
or the "common sense propositions" and yet he denies them
vocally. His position is, in Moore's eyes, hopelessly self-
contradictory [7].

Moore says all this, and yet he does not say that either
type of philosopher is speaking nonsense. According to Moore,
the first kind of sceptic espouses falsehoods -- Moore does
not say that he speaks gibberish. The second kind of sceptic
is self-contradictory, but Moore never uses this to accuse
him of being unintelligible [8]. More than that: Moore
reels that these sceptical philosophers are worthy of
refutation. Hence Moore's papers against the sceptical
philosophers: A Defence of Common Sense, Proof of the
External World, and Certainty. Moore sees his work as having
a sense opposite that of the sceptic's. He does not consider,
as Wittgenstein does, that the sceptic's work doesn't even
have a sense to oppose.
The application that Moore's attitude towards the sceptic has for our purpose in this chapter is this: Moore does not think it nonsensical to have doubts about propositions like "there is an external world". Admittedly Moore thinks that doubts of this kind are totally false; on the other hand, he does not declare that the sort of people (namely, sceptics) who entertain such doubts are talking utter gibberish. The reader will notice the similarity this view of Moore's has to the position that Descartes expounds: we saw in the first section of this chapter that Descartes believes that it sensible to doubt all ordinary, purely physical facts. Moore is expressing exactly the same view when he refrains from condemning as nonsensical the universal époché of the "withholds judgement" sceptic (9). In the end, then, Moore believes it can be sensible to be uncertain about all ordinary and purely physical facts. Since he counts these as certainties, Moore must think it sensible to doubt certainties.
Endnotes for Moore on Truth and Certainty

(1) *Philosophical Papers*, loc. cit., page 32

(2) This likens him to Descartes. As we saw in the first section of this chapter, Descartes is driven to say that certain truths (by which I mean truths that are certain) are demonstrable. Indeed, Descartes too thinks that the existence of the external, material world is both certain and demonstrable. Meditation VI contains a proof for the existence of the material world and Meditation I begins with Descartes saying that he's certain that the material world exists.

(3) Ibid. page 45

(4) Although in Descartes' case the connection is deeper. For Descartes, truth and certainty have a biconditional relationship (one implies the other and *vice versa*). Moore only thinks there is a conditional relationship between them (certainty implies truth).

(5) Ibid. pages 38-42

(6) Ibid., page 42

(7) Ibid.

(8) Perhaps Moore is thinking of the truth table evaluation of a self-contradictory proposition. A self-contradictory proposition is merely necessarily false on a truth table—there is no mention of it being nonsense.

(9) Moore is more cautious than Descartes, perhaps, but the failure to reject the sceptic comes to the same thing in Moore as it does in Descartes; *viz.*, the belief that it can make sense to doubt certainties.
Wittgenstein on Truth and Certainty

When we looked at Moore on truth and certainty we discovered three things. First of all we discovered that Moore believes that it can be sensible to demonstrate some certain things, such as the banal physical fact that there is an external world. Secondly we saw that Moore also believes that the certainty of a proposition automatically entails its truth. The fact that there is an external world is not only something Moore considers demonstrably certain but apparently he considers it demonstrably true as well. Finally we encountered Moore's relative respect for the doubts of the sceptic. Doubts about such certain things as the existence of the external world are not nonsensical to Moore's understanding. Instead, Moore considers them simply false, and worthy of refutation at that.

Wittgenstein's rejection of Moore's ideas about truth and certainty couldn't be more straightforward -- a function, I suppose, of the historical fact that the better part of Wittgenstein's whole point in *On Certainty* is the repudiation of what Moore says about certainty and truth. Wittgenstein not only rejects Moore's association of truth and certainty, he positively ridicules the notion that the certainties the like of which Moore speaks can be either sensibly doubted or demonstrated.

In order to see how Wittgenstein conducts his opposition
of Moore we have first to uncover what it is that
Wittgenstein takes to be certain. In a word, it is the hinge
propositions that Wittgenstein takes to be certain, the same
hinge propositions which we saw last chapter act as the
foundations of knowledge in Wittgenstein's epistemology. The
very passage in which Wittgenstein introduces the hinge
propositions indicates that he regards them as certain. He
writes,

"...[T]he questions we raise and our doubts depend on
the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn.
That is to say, it belongs to the logic of our
scientific investigations that certain things [daB
Gevisses] are in deed not doubted." [OC #341-#342]

The hinge propositions which are exempt from doubt and on
which our doubts turn in the first paragraph of this passage
are identified as the certain things that are not doubted in
its second paragraph [1]. In other words, the hinge
propositions are certain.

Hinge propositions are certain, but how do we know that
Wittgenstein and Moore aren't talking past each other?
Perhaps the kind of proposition Moore calls certain differs
from the kind of proposition Wittgenstein calls
certain. But Moore and Wittgenstein happen to be speaking
about exactly the same kind of proposition when the one says
certainties are demonstrable and the other says they aren't.
Both Moore and Wittgenstein identify statements of banal
physical fact as the kind of thing they regard as certain. In chapter one of this disquisition the reader had a chance to peruse a list of the kind of thing Moore called the "Propositions of Common Sense". That list included such propositions as "there exists at present a living human body, which is my body" and "the earth had existed for many years before my body was born" [2]. In the last section of this second chapter the reader saw that Moore is prepared to call such statements of banal physical fact certain. Wittgenstein calls precisely the same kind of proposition certain. Wittgenstein lists such statements of banal physical fact as "This is a hand" and "I have never been to the moon" as examples of the kind of thing one knows for certain [OC #40 and #111]. Moore and Wittgenstein are speaking of the same kind of proposition (banal physical facts) when they speak of certainties; it is not the case that they are talking past each other. What Wittgenstein has to say about the certainty and demonstrability of the hinge propositions bears directly on what Moore says about the propositions of Common Sense.

Having established that Wittgenstein identifies the hinge propositions with certainty and that Wittgenstein is speaking directly to Moore's conception of certitude, we are now in a position to describe Wittgenstein's rejection of Moore's conception of certitude.
We saw in the last chapter that Wittgenstein deems it nonsensical to try to argue for, demonstrate or otherwise justify the hinge propositions. It follows as a logical consequence of that belief and the identification of certainty and the hinge propositions that Wittgenstein regards it as nonsensical to try to argue for, demonstrate, or justify certainties. One would assume therefore that Wittgenstein's explanation for his rejection of the demonstrability of certainties (to coin a barbarous phrase) would be the same as his explanation for rejecting the demonstrability of the hinge propositions (viz., it leads to an infinite regress). Since the former is a logical consequence of the latter I suppose that to some extent the explanations are the same. Strangely though, Wittgenstein has a further insight into why it makes no sense to try to justify certainties. It is this: what justification one can think to endorse a certainty can be no more certain than what one seeks to endorse. It thus becomes rather pointless to try to re-inforce what one takes for certain. [e.g. *OC* #125].

Wittgenstein is still more direct in his rejection of Moore's failure to denounce doubts about certainties such as the sceptic is used to encouraging. Wittgenstein writes,

"If Moore were to pronounce the opposite of those propositions which he regards as certain [i.e. the propositions of Common Sense], we should not just not share his opinion: we should regard him as demented. ... If someone said to me that he doubted whether he
had a body I should take him to be a half-wit... "

In these passages Wittgenstein imagines what would happen if he met a "dyed-in-the-wool" sceptic on the street. He imagines the sceptic saying all the things he quite commonly says in the course of a philosophical conversation only now in the course of a casual conversation. Doubting whether one has a body is something rather easily done in the midst of philosophical debate — otherwise it sounds quite peculiar (imagine saying it, out of the blue, at the end of a business transaction. Imagine leaning into the cashier's ear just as she hands you the receipt and saying "I'm not sure I have a body"). It sounds so peculiar in fact that Wittgenstein goes so far as to call it "demented" and compare it to the gibberish of a "half-wit". Wittgenstein's point here reaches beyond ridiculing the sceptic as demented and half-witted. His point is really that we do not simply consider it false to doubt certainties such as "I have a body": we consider it nonsensical. Moore is wrong to think it sensible to doubt such certain things.

Finally we come to Wittgenstein's rejection of the connection between truth and certainty.

Early on in On Certainty, before he gives the analysis of "know" with which he works for the rest of the book, Wittgenstein tries an alternate analysis of the word. He
simply identifies it with "being certain". He writes,

"The difference between the concept of 'knowing' and the concept of 'being certain' isn't of any great importance at all ... In a law-court, for example, 'I am certain' could replace 'I know' in every piece of testimony."
[OC #8]

He then goes on to say what he thinks the relationship of the word "know" is to truth.

"-- For 'I know' seems to describe a state of affairs which guarantees what is known, guarantees it as a fact. One always forgot the expression 'I thought I knew'. For it is not as though the proposition 'It is so' could be inferred from someone else's utterance: 'I know it is so'. Nor from the utterance together with its not being lie."
[OC #12-#13]

Bearing in mind that at this stage Wittgenstein is using the word "know" to mean "be certain", this passage tells the whole story of Wittgenstein's rejection of the connection between truth and certainty. At first Wittgenstein sees the special temptation of certainty: one is certain about something when one feels sure that it is true. This sensation tempts us to assume that the certainty of a belief implies its truth. But the fact that I can say "I thought I was certain" means that it is perfectly possible to have been certain and yet have been totally wrong.

We might even change things a little and imagine someone telling us of his certainty that such and such is the case. Even that, says Wittgenstein, is not good enough. Though it may be true that the informant is certain of what he tells us, that is not enough to make what he says true.
Wittgenstein suggests that deducing the truth of what the informant says from his certainty would be akin to our having to believe anyone who says "I can't be wrong" -- an absurdity which Wittgenstein calls "remarkable" (OC #22).
Endnotes for Wittgenstein on Truth and Certainty

(1) I assume that "certain things" here means things that are certain and not "some things". I believe that this is the meaning of the German in this passage: daB Gewisses is capitalized, so it refers to a noun; viz., the things that are certain. See OC # 330 in German and in English for a comparable case. Because Wittgenstein links the hinge propositions to certainty by referring to them as the "certain things" I am inclined to believe that he thinks that the hinge propositions are the only things that are certain. The certainty of a proposition would imply that it is a hinge proposition and vice versa. Since earlier we identified the hinge propositions with the foundations of knowledge, a reciprocal link between them and certainty would have this significance: it would mean that anything that is certain is a foundation of knowledge, not simply the other way around.

(2) Philosophical Papers, loc. cit., page 33
**Conclusion to Truth and Certainty**

The foregoing chapter serves to show that Pascal and Wittgenstein share yet more epistemological tenets.

Against Descartes and Moore we witnessed Pascal and Wittgenstein holding the following theses:

1. The foundations of knowledge are identified with certainty.
2. It is nonsensical to argue for certainties.
3. It is nonsensical to doubt certainties.
4. What is certain is constituted, at least in part, by banal physical facts.
5. Certainty does not imply truth.

Observe that what Wittgenstein and Pascal say together here sets them apart from Descartes and Moore without turning them into sceptics. They reject the idea that it is possible to argue for certainties, and yet they do not say that there are no certain things. In fact, it is because the reject the possibility of arguing for certainties that they believe that there are certain things. On the other hand, they also reject the possibility of doubting certainties; with that they reject scepticism.
Part Three -- Conclusion

Conclusion
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Bibliography
Conclusion

The assertion I made at the outset of this disquisition was that Pascal and Wittgenstein are very similar philosophers. This was a very general claim which I recognized could only be proven a little bit at a time. The contribution I make towards proving it with this disquisition is this: Pascal and Wittgenstein share several epistemological theses. The last part of this disquisition was devoted to drawing out exactly which theses Pascal and Wittgenstein do share. These are:

(1) Knowledge rests on foundations that are not knowledge; Pascal believes that knowledge by reason rests on the foundations of knowledge by the heart and Wittgenstein believes that knowledge claims rely on hinge propositions.

(2) It is not possible to use reason to argue for, justify, or demonstrate the foundations of knowledge.

(3) Since both Pascal and Wittgenstein think that it is not possible to argue for the foundations of knowledge, and since both share a belief that to know something means to argue for it, neither thinks it is possible to know the foundations of knowledge. Pascal does not think that knowledge by the heart can be known by reason and Wittgenstein thinks that one cannot know (in his sense of "know") the hinge propositions.

(4) It is impossible to justify all the propositions one
knows.

(5) The type of justification a proposition requires is determined relative to the type of proposition for which justification is sought. Wittgenstein thinks that what counts as justification of a proposition cannot be set out for all propositions and Pascal thinks that the heart has its own system of justification which reason does not know.

(6) The foundations of knowledge are identified with certainty.

(7) It is nonsensical to argue for certainties.

(8) It is nonsensical to doubt certainties.

(9) What is certain is constituted, at least in part, by banal physical facts.

(10) Certainty does not imply truth.

Some of these theses are made obviously redundant by overlapping with other theses. Condensed, we might list the theses Pascal and Wittgenstein share this way:

(1) Knowledge rests on foundations that are not knowledge. It is not possible to use reason to argue for, justify, or demonstrate the foundations of knowledge. Consequently, it is impossible to know the foundations of knowledge.

(2) It is not always possible for someone to justify all the propositions he knows.

(3) The type of justification a proposition requires is determined relative to the type of proposition for which
justification is sought.

(4) The foundations of knowledge are identified with certainty. What is certain is constituted, at least in part, by banal physical facts.

(5) It is nonsensical to argue for certainties. It is also nonsensical to doubt certainties.

(6) Certainty does not imply truth.

The reader will recall that this condensed list is the same list as I presented when I first laid out what it was I hoped to prove over the course of this disquisition. Since I have now proven what I set out to prove, I can now draw the conclusion I could merely proclaim at the beginning: Pascal and Wittgenstein share several epistemological theses.

This conclusion is itself a part of a larger project: viz., showing that Pascal and Wittgenstein are very similar philosophers. Inasmuch as the epistemological work of Pascal and Wittgenstein is representative of their philosophies as a whole, I suppose the conclusion I have drawn here demonstrates that Pascal and Wittgenstein are indeed similar philosophers. Inasmuch as their epistemological work is but a part of their philosophies as wholes, however, the conclusion I have drawn here is but a part of a more general conclusion I would like to draw right away but cannot. The Q.E.D. I write is warranted, and yet it has to be written as it were in lower case letters.
Appendix

A Further Connection: Wittgenstein, Pascal, and Degrees of Certainty

Wittgenstein makes his thoughts about the possibility of degrees of certainty clear in two passages in On Certainty. In the first, Wittgenstein asks and answers his own rhetorical question: "... [A]re we to say that certainty is merely a constructed point to which some things approximate more, some less closely?". "No.", comes Wittgenstein's firm reply (OC #56). To this he adds the sentence "Doubt gradually loses its sense" by way of explanation. Certainty doesn't come in degrees; unlike doubting (or knowing for that matter), it is either there or it isn't. Doubting, not being certain, gradually loses its sense. In the second passage Wittgenstein considers the case of someone checking a multiplication:

"Perhaps I shall do a multiplication twice to make sure, or perhaps get someone else to work it over. But shall I work it over again twenty times, or get twenty people to go over it? And is that some sort of negligence? Would the certainty really be greater for being checked twenty times?" (OC #77)

Here Wittgenstein doesn't bother to answer his own rhetorical question. Still, what reply he would make seems sufficiently obvious. The person who checks and re-checks his own mathematical procedures is not making any progress towards certainty. If anything, the fact that that person
goes over his work so many times is a sign that he's uncertain about its validity [1]. His verification procedures are useless for the purpose of making him certain about the validity of his calculations; we can imagine Wittgenstein asking the man who checks his calculations obsessively whether his verification procedures are valid or not [OC #459]. Either the man is certain or he isn't, and if he isn't, then no amount of checking will ease him into certainty.

Wittgenstein's thoughts about degrees of certainty appear unequivocal: there is no asymptote to certainty [2]. Pascal, on the other hand, looks more ambivalent about the possibility of there being degrees of certainty. The locus classicus for those of Pascal's remarks tending to establish his belief in degrees of certainty is a passage from the famous Waager argument.

"[E]very gambler risks something which is certain in the hope of winning something which is uncertain; and nevertheless he risks a finite certainty in order to win a finite uncertainty without committing a sin against reason. There is not a infinite distance between the certainty of the risk and the certainty of the win; that is untrue. There is to be sure an infinite distance between the certainty of winning and the certainty of losing. But the uncertainty of winning is proportionate to the certainty or what we risk, depending on the proportion between the chances of gain and loss. Thus if there are as many chances on one side as on the other, the odds are equal; and then the certainty of the stake is equal to the uncertainty of the prize; it is far from being true that the distance between them is infinite." [Lafuma '52, #343]
The context of this passage is well-known. Pascal has asked his reader to consider betting on the existence of God. The stakes are high: not believing in God could cost the wagerer his immortal soul; believing in God could pay off in (what Pascal likes to style) infinite rewards. But to place his bet the wagerer must ante up his profligacy and assume the activities of a God-fearing person. Pascal has his reader object: perhaps giving up sin and devoting oneself to God (which for Pascal means going to church, praying, etc.), are too much to bet on such a long shot as the existence of God. The passage cited above forms a part of Pascal's response to this objection. Pascal answers by first pointing out that when one bets 5 dollars to win 100 (which to us sounds like a perfectly reasonable bet) one is risking the proverbial bird in the hand in the hope of winning two in the bush. We don't think it's crazy to make this sort of bet when the ante is 5 dollars and the possible winnings are 100 dollars. We would find it even more reasonable to bet 5 dollars to win 1000 or 1 000 000 dollars. Indeed, we would find it increasingly reasonable to bet as the difference between the ante and the possible reward increased (assuming, of course, that the percentage chance of winning stayed constant as this difference grew). Pascal implies that, were the reward of a possible finite bet to increase to infinity, it would become overwhelmingly reasonable to wager.
Since the possible reward for believing (or should I say betting?) that God exists is heaven, and since the value of heaven is (in Pascal's estimation) infinite, it becomes overwhelmingly reasonable to believe that God exists [3]. This aspect of Pascal's response interests us because of the continuum Pascal supposes exists between finite and infinite possible rewards. For Pascal's response to be effective, he has to assume that the reasonableness of the wager increases as the possible reward-to-ante ratio increases. What's telling in this passage is that Pascal pairs talk about the uncertainty of winning versus the certainty of what we risk with talk about the finitude of the ante versus the infinity of the reward. The suggestion of this paireing is that there exists a continuum between certainty and uncertainty, in much the same way that there exists a continuum between the finite and the infinite. This suggestion fits well with Pascal's response to his objector. "[I]t is by behaving as though [you] did believe," writes Pascal, "[t]hat will naturally make you inclined to believe" [Lafuma '52, #343]. In other words, just as the reasonableness of betting increases as the ante-to-reward ratio increases, so one's certainty that there is a God increases the more one acts as though certain that there is a God. By persistently behaving as though there were a God, Pascal tells us, one can end by being certain that there is one.
"...with every step you take along this path [ behaving as though there were a God ], you will see such certainty of gain and so much of the worthlessness of what you risk, that you will have gambled on something that is certain, infinite and has cost you nothing. " [ Ibid. ]

Certainty thus seems to be an incremental quantity for Pascal. One can have more or less of it in much the same way as one can have a better or worse wager. This looks like just the opposite of what Wittgenstein says about certainty.

But Pascal is more complicated than that. In the passage quoted above, Pascal says that "[t]here is not an infinite distance between the certainty of the risk and the uncertainty of a win." [ Ibid. ]. Is Pascal trying to say that the certainty of the risk is different in kind from the certainty of a win? "No matter how far your uncertainty of a win runs it will never equal the certainty of what you risk?" -- is that what Pascal intends here? If so, he would be on Wittgenstein's side, affirming that uncertainty and certainty are not only different, they're categorically different [4]. Together with what I said earlier about Pascal assuming a continuum between certainty and uncertainty, though, this makes his position in this debate ambivalent at best. I believe the Wager argument testifies to a deep ambivalence in Pascal about the nature of certainty [5].

It would seem that we have come to a substantial gap in
comparing Wittgenstein's epistemology to Pascal's. *On Certainty* shows that Wittgenstein believes that certainty does not admit of degrees; at most, Pascal's *Penseés* tells of his ambivalence on this question. Wittgenstein's definite ideas on the nature of certainty versus Pascal's ambivalent ones -- a plain contrast!

This is, I think, too hasty a conclusion. I maintain that Pascal and Wittgenstein are as similar as ever, even on this point. I think that the two competing notions about certainty we have met here are to be found in Wittgenstein's use of the word as well as in Pascal's. Said a little differently, I believe that the ambivalence we have spotted in Pascal's use of the word "certainty" is also Wittgenstein's ambivalence. The key to identifying the similar ambivalence here is some notes Norman Malcolm made in the summer of 1950, when Wittgenstein was visiting Malcolm in Ithaca, New York. Malcolm's notes were a sort of rough record of conversations he had with Wittgenstein earlier that same summer. The subject of these conversations was none other than 2 papers by G.E. Moore, *Proof of an External World*, and *A Defense of Common Sense*. Of course these are exactly the two papers with which Wittgenstein is most concerned in *On Certainty*. Malcolm's notes constitute a kind of proto-type or rough draft of *On Certainty*, in other words. Wittgenstein spoke to Malcolm about *Proof of the External World* and *A Defense of*
Common Sense; Malcolm recorded what Wittgenstein said; a few months later, Wittgenstein recorded his thoughts for himself in what has become On Certainty. These notes are, therefore, an important insight into Wittgenstein's thoughts about Moore's 2 papers. It is particularly revealing for us and our purpose that these notes reveal that Wittgenstein vacillates about the existence of degrees of certainty.

Relating a spoken remark of Wittgenstein's, Malcolm writes,

"Mental states, such as anxiety and pain, have degrees. Certainty also has degrees, e.g. 'How certain are you?"" [6]

This passage makes one thing patently clear: during the summer of 1950, Wittgenstein was attracted to just that definition of certainty that attracted Pascal; viz., the definition that admits of degrees of certainty. From this passage, then, we can conclude that Wittgenstein too is ambivalent about the possibility of degrees of certainty. He says that there are degrees of certainty when he's speaking to Norman Malcolm; he says the contrary in paragraphs #56 and #77 of On Certainty. This contradiction is easily explained: Wittgenstein feels ambivalently about the meaning of the word "certain". Wittgenstein, like Pascal, knows the pull of both senses of the word "certainty". He can see that people sometimes use that word in such a way as to suppose the existence of a sliding scale of certainty; e.g. "I'm fairly certain, just not 100% certain". He can equally
see that "certainty" is used to express finality, decisiveness, closure to all verification and debate; e.g. "I'm certain of it, and that's it. Period.". Since Wittgenstein expresses both senses of "certainty" (once in his conversations with Malcolm, and then again in On Certainty), and since the expression of two competing senses of a word can be called ambivalence about its meaning, Wittgenstein can be called ambivalent about the meaning of the word "certainty" (at least with respect to its admitting of degrees). Since Pascal also expresses the two senses of certainty discussed here, Pascal may also be called ambivalent about the meaning of that word. And since Pascal and Wittgenstein are both ambivalent about "certainty" and whether or not it admits of degrees, the accusation that Pascal and Wittgenstein differ over the possibility of degrees of certainty is manifestly false [7].
Endnotes for the Appendix: Pascal, Wittgenstein, and Degrees of Certainty

(1) One might even say that the more he goes over it, the deeper that uncertainty runs in him.

(2) This is McGill Philosophy professor Paul Pietroski's pithy way of describing Wittgenstein on the question of degrees of certainty.

(3) The reader will wonder at the odds of winning such a bet. Pascal invented the concept of mathematical expectation and used it to great effect in this argument. It works like this: mathematical expectation = % chance of winning x the maximum possible reward. Thus, if I have a 50% chance of winning 200 dollars, my mathematical expectation is to win 100 dollars. It is always foolish to bet more on something than one can mathematically expect to win. On the other hand, it is always wise to bet as much as or less than one mathematically expects to win. Applied to the matter at hand, mathematical expectation works like this: suppose the chance of winning entrance to heaven were as low as could be, say, 1 over infinity. Since Pascal puts the value of winning entrance into heaven at infinity, and since the chance of winning is 1 over infinity, the mathematical expectation of this wager is 1 (1 over infinity times infinity). Pascal understands this result to mean that one should be willing to bet any finite thing to have a chance to get into heaven, no matter how low that chance may be.

(4) I do not forget the possibility that this is not what Pascal intends here. It is quite possible that what Pascal means is that it is only a matter of distance (and a finite distance, at that) that separates certainty and uncertainty. But this would make the sentence after it, "There is, to be sure, an infinite distance between the certainty of winning and the certainty of losing ", problematic. If to be infinitely different is to differ only by degrees, presumably being infinitely different means to differ in kind. Would we take this second sentence to mean that certainties about different things differ from one another in kind? True, it may mean that losing and winning differ in kind, but that would render the word "certainty" in this second sentence superfluous. So, it's not that I forget this alternate interpretation, I discount it on the grounds that it would make this passage intractable.
(5) I do not discount the possibility that ambivalence about the existence of degrees of certainty may be inherent in the language in which Pascal wrote, and perhaps in our language, too. The French words certitude and sûr and their English equivalents may simply be embedded in 2 different language games, one in which degrees of "certitude" are possible and one in which they are not.


(7) Surely it could be said that Wittgenstein was not ambivalent about the definition of certainty, but that he changed his mind about it after speaking to Malcolm. Yes, this would be another way to understand what Wittgenstein was doing. But I cannot see that it couldn't also be a way to understand what Pascal was doing -- maybe he too just changed his mind about the meaning of "certainty". This interpretive possibility does nothing to weaken the strength of the Wittgenstein/Pascal comparison in this Appendix.
Bibliography

Descartes


Dicker, G., Descartes ; An Analytical and Historical Introduction, (New York : Oxford University Press, 1993)


Hacking, I., "Leibniz and Descartes : Proof and Eternal Truths", Proceedings of the British Academy, LIX, 1973


Menn, S., "The Problem of the Third Meditation", American Catholic Philosophical Quarterly, Volume LXVII, No.4, p.537-559


Moore


*Philosophical Papers*, (London: George Allen & Unwin Ltd., 1959)

*Philosophical Studies*, (New York: Harcourt & Brace & Co., 1922)


**Pascal**


Brunschvicg, L., *Descartes et Pascal. Lecteurs de Montaigne*, (New York: Brentano's, 1944)


McCarthy, J.C., "Pascal on Certainty and Utility", *Interpretation*, 22 (2), Winter 94-95, p.247-269


Moore, W., "Pascal and the Nature of Belief", *Hibbert Journal*, 44, p.353-357


Yhap, J., "Pascal and Descartes on First Ideas", *American Catholic Philosophical Quarterly*, Volume LXIX, No.1, p.39-50

Wittgenstein


--------, "Wittgenstein's 'Scepticism' in On Certainty", *Inquiry*, 31, p.277-293


----------, *Philosophical Occasions*, (Indianapolis: Hackett, 1993)