Two of the main problems of philosophy are the manner in which knowledge is acquired and the method or methods by which such knowledge is ultimately justified. The former inquires into forms of cognition such as sense perception, logical inference, and immediate intuition; whereas the latter raises the question of the validity of believing and accepting as true what is so variously disclosed to the mind. This cluster of problems is the core of what is referred to as the quest for certainty, a quest which originates because knowledge seems to be beset by doubt, deficiency, and error. The solution of the problem, then, often turns out to be the starting point which determines, or at least significantly influences, the formulation of a philosophical system. The following discussion will attempt to expound the ways in which the problem of doubt is tackled and to suggest their ramifications in two rather divergent philosophies.

The answer to the problem of doubt is one of the underlying motives of the thinking of al-Ghazālī and of Descartes. The distance which separates al-Ghazālī (1058-1111) from Descartes (1596-1650) is not merely temporal; it is cultural and perhaps temperamental as well. Although each of them encountered the problem of skepticism, they differed in the uses which they made of it. I do not wish to argue that al-Ghazālī influenced the thinking of Descartes (a matter for which I have no evidence). But I will argue (a) that the two cases of dealing with the problem of doubt are profoundly comparable, and more significantly, (b) that the solution of the problem of doubt is essentially the same, whatever divergent metaphysical conclusions are derived from it.

al-Ghazālī’s skepticism was occasioned by a number of factors which beset his search for truth and certainty. In his Deliverance from Error, he reports...
that he was disturbed by the endless disagreements among theologians and among philosophers. His mind was unsettled also because of an acute awareness that certainty in knowledge is not attainable through the senses or through reason. His intellectual dissatisfaction was indeed so intense and extensive that it led him into an emotional-physical crisis which, he says, lasted almost two months.2

He begins an apparently autobiographical account of his skepticism by noting that what he was “looking for is knowledge of what things really are.”3 But before he could reach this far, he had to “find what knowledge really is.”4 In formulating the answer al-Ghazālī wrote, “It was plain to me that sure and certain knowledge is that knowledge in which the object is disclosed in such a fashion that no doubt remains along with it, that no possibility of error or illusion accompanies it, and that the mind cannot even entertain such a supposition.”5 Certain knowledge must be infallible; that is, it must be completely secure from error or deception, no matter how it is challenged.

Is such certain and infallible knowledge possible? To answer this question, al-Ghazālī points out, we have to examine the common sources of knowledge. These he divides into sense perception and necessary truths or truths of reason, and he sets out to determine whether the characteristics of infallibility and indubitability can be found in them. He reports, “I proceeded therefore with extreme earnestness to reflect on sense-perception and on necessary truths, to see whether I could make myself doubt them. The outcome of this protracted effort to induce doubt was that I could no longer trust sense-perception either.”6 His grounds for the distrust of sense perception are the usual ones which point to the discrepancy between what is perceived and what is the case. The perceptions of sense are subject to error; they do not disclose to us “what things really are.” As an example al-Ghazālī cites the difference between our perception of the size of the sun and our determination of its size by means of geometrical computations. “In this and similar cases of sense-perception the sense as judge forms his judgements, but another judge, the intellect, shows him repeatedly to be wrong; and the charge of falsity cannot be rebutted.”7

If certain and infallible knowledge is not to be found in sense perception, can it be found in so-called “necessary truths”? al-Ghazālī writes, “Perhaps only those intellectual truths which are first principles (or derived from first

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2 Ibid., p. 25.
3 Ibid., p. 21.
4 Ibid.
5 Ibid., pp. 21-22.
6 Ibid., p. 23. (Italics mine.)
7 Ibid.
principles) are to be relied upon, such as the assertion that ten are more than three, that the same thing cannot be both affirmed and denied at one time, that one thing is not both generated in time and eternal, nor both existent and non-existent, nor both necessary and impossible."\(^8\) Initially it is difficult to deny certainty and infallibility to such assertions. But al-Ghazâli is not satisfied. He points out that the "intellect judge" showed sense perception to be dubitable and fallible, and he adds, "Perhaps behind intellectual apprehension there is another judge who, if he manifests himself, will show the falsity of intellect in its judging, just as, when intellect manifested itself, it showed the falsity of sense in its judging. The fact that such a supra-intellectual apprehension has not manifested itself is no proof that it is impossible."\(^9\) In fact, so-called "necessary truths" may be doubted if we consider that our waking consciousness may indeed be only a state of dreaming. And as is the case with dreams, when we awake we realize that what we perceived in our dreaming state was purely imaginary and illusory. Thus, al-Ghazâli writes, necessary truths "are true in respect of your present state; but it is possible that a state will come upon you whose relation to your waking consciousness is analogous to the relation of the latter to dreaming. In comparison with this state your waking consciousness would be like dreaming!"\(^10\)

What could such a supra-intellectual state be like? One possibility with which al-Ghazâli was well acquainted was the Sufi’s "mystic union or ecstasy." The Sufis, he wrote, "consider that in their 'states' [or ecstasies], which occur when they have withdrawn into themselves and are absent from their senses, they witness states [or circumstances] which do not tally with these principles of the intellect."\(^11\) Even the principles of non-contradiction, identity, and excluded middle are said to be transcended sometimes by those who achieve a mystical vision. It is for this reason that they insist that the truths they perceive are not to be described in sensory-intellectual terms. The rules and principles of the intellect tend to distort rather than describe what they discover in their ecstatic unions.

al-Ghazâli notes another possibility from the Qur’an wherein it is said, “The people are dreaming; when they die, they become awake.” Death, then, may bring about this supra-intellectual state. After death things will appear differently, for the distortions of worldly existence are removed, as it were, from man’s vision.

In this manner al-Ghazâli has carried his skepticism to its extreme limit. He

\(^8\) Ibid.
\(^9\) Ibid., p. 24.
\(^10\) Ibid.
\(^11\) Ibid., pp. 24-25.
has found himself capable of doubting not only the deliverances of sense but also the principles of logic and mathematics. This, he wrote, was an unhealthy condition, a disease. "The disease was baffling, and lasted almost two months, during which I was a sceptic in fact though not in theory nor in outward expression."12 Al-Ghazâli was then driven to find an escape from the unsettling disease of skepticism. He recognized that, from a rational point of view, a strict demonstration was required to dispel the doubts that beset sensory-intellectual knowledge. But he also recognized that such demonstration was impossible, since it depended on first principles which were themselves subject to doubt.13

How, then, did al-Ghazâli restore a state of balance and health to his intellectual life? Clearly, it was not through reason. He wrote, "This did not come about by systematic demonstration or marshalled argument, but by a light which God most high cast into my breast. That light is the key to the greater part of knowledge. Whoever thinks that the understanding of things Divine rests upon strict proofs has in thought narrowed down the wideness of God's mercy."14 Given the Divine light, "the necessary truths of the intellect became once more accepted," and they regained their "certain and trustworthy character."15

Now, what is the nature of the "light" which is "the key to the greater part of knowledge"? The answer is by no means clear. Indeed, to the intellect this "light" is quite obscure! Nevertheless, it is apparent from the writings and life of al-Ghazâli that this "light" is one of mystical intuition or vision which, in a non-sensory, supra-intellectual way, illumines man's knowledge of himself and the world and endows it with significance and trustworthiness. Only in such a "vision" of God, the ultimate principle and lord of all creation, does knowledge become secure and well-founded.

In another way al-Ghazâli develops his thought on the basis of a complete trust in the existence and nature of God and in the authority of Muhammad and the Qur'ân. The Divine "light" is then the first step towards the affirmation of faith in God and His Prophet. Such faith transcends reason in the sense that its objects cannot be apprehended or ascertained by reason alone. Reason begins to play its role only after belief in first principles, especially belief in God. But even then, reason remains significantly limited in its authority as compared with that of the word of God, and in its ability to answer ultimate questions such as those about the eternity or non-eternity of the world.16

12 Ibid., p. 25.
13 Ibid.
14 Ibid.
15 Ibid.
16 Ibid.
If we now consider the problem of doubt in the philosophy of Descartes, we find several interesting similarities to al-Ghazālī.

1. In the first place, Descartes' account of his encounter with doubt is also autobiographical or at least quasi-autobiographical. In both the *Discourse* and the *Meditations* he describes a self-centered, self-critical process of discovery whose object is knowledge with certainty. Moreover, in Descartes as in al-Ghazālī, the process seems to be ambivalent in character. It is at once artificial or methodological, an instrument of investigation, as well as an intimate, personal, existential experience. Thus, on the one hand, al-Ghazālī talks of his "protracted effort" to "induce" doubt concerning what he is said to know.17 And Descartes clearly and repeatedly describes doubt as an instrument for the investigation of truth. He writes that "it is necessary once in one's life to doubt of all things, so far as this is possible."18 On the other hand, for both, to doubt was neither satisfactory nor pleasant. Indeed, they considered doubt a kind of disease or affliction, to be delivered from which was the highest felicity. al-Ghazālī's near nervous breakdown is clear evidence of this fact. This response to doubt is not as evident in the case of Descartes, but it may be seen now and then. For example, in the *Discourse* he insists that doubt cannot be allowed to extend to practical life. Its effects here would be self-stultifying and disastrous.19 Again, and more significantly, Descartes is profoundly aware that the determined pursuit of universal doubt is no easy task, nor is it a mere construction of a carefree intellect oblivious of any involvement in the reality and implications of this doubt in actual life. On the contrary, at the end of *Meditation* I, Descartes writes,

This task is a laborious one, and insensibly a certain lassitude leads me into the course of my ordinary life. And just as a captive who in sleep enjoys an imaginary liberty, when he begins to suspect that his liberty is but a dream, fears to awaken, and conspires with these agreeable illusions that the deception may be prolonged, so insensibly of my own accord I fall back into my former opinions, and I dread awakening from this slumber, lest the laborious wakefulness which would follow the tranquillity of this repose should have to be spent not in daylight, but in the excessive darkness of the difficulties which have just been discussed [the uncertainties in knowledge].

In short, for both Descartes and al-Ghazālī, though doubt is an instrument,  

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19 *Discourse*, Pt. III.
neither its use nor its implications and results are a lighthearted matter. It is, rather, of the utmost seriousness theoretically as well as practically.

2. In carrying out the process of doubt, the first two steps are common to both philosophers. First, the distrust and rejection of the evidence of sense perception as falling far short of certainty are based on essentially similar reasons which, moreover, are widely recognized. Therefore, comment here is unnecessary. Secondly, however, it is significant and interesting that they also distrust and reject mathematics and so-called necessary truths as subject to doubt on grounds that are again very similar. They both insist that doubt is cast upon mathematical knowledge not only (a) because we often make mistakes in our calculations and deductions, but also (b) because it is possible that we are deceived in such “knowledge” either by being in a dreaming state or through the agency of some evil power superior to ourselves. We have seen how this is argued by al-\textit{Ghazālī}. But Descartes writes as well that

We shall also doubt of all the other things which have formerly seemed to us quite certain, even of the demonstrations of mathematics and of its principles which we formerly thought quite self-evident. One reason is that those who have fallen into error in reasoning on such matters, have held as perfectly certain and self-evident what we see to be false, but a yet more important reason is that we have been told that God who created us can do all that He desires. For we are still ignorant of whether He may not have desired to create us in such a way that we shall always be deceived. . . .\textsuperscript{20}

The “method” of doubt in both cases proceeds by a process of elimination or reduction. Every type or source of knowledge that is in any way dubitable is put aside as inadequate until a completely certain foundation is discovered. The third step in the process of doubt, then, is the identification of that which is indubitable and the knowledge of which is completely certain and adequate. In al-\textit{Ghazālī} we found that the only solid and sound foundation of truth is knowledge of the existence of God arrived at by means of a mystical vision or intuition after a careful and critical scrutiny of what we ordinarily call “knowledge.” al-\textit{Ghazālī} wrote, “He who learns the tradition (\textit{ḥadīth}) and science and then pursues sufism succeeds, but he who pursues sufism before learning endangers himself.”\textsuperscript{21}

For Descartes, on the other hand, the sound and solid foundation of all knowledge is the indubitable assertion of the existence of the thinking self. Now the question is, how extensive is the divergence between Descartes and

\textsuperscript{20} \textit{Principles}, Pt. I, 5.
al-Ghazālī in their resolutions of the problem of doubt? Clearly one maintains consciousness of the existence of the individual self as the foundation of all certainty, whereas the other claims it is the consciousness of the existence of God. Initially, then, the difference between the two conclusions seems to be wide and serious. But on further consideration we recognize at least two aspects of the Cartesian approach which bring it surprisingly close to that of al-Ghazālī.

The first aspect may be referred to as the method of cognizing or knowing the existence of the self. Now, it is clear that we do not apprehend the existence of the self by sense perception. For this would be subject to doubt in the same way that all other knowledge by sense perception is subject to doubt. It is also clear that we cannot know the self by logical deduction or inference. For this, too, would be subject to doubt. In short, knowledge of the self is neither a matter of empirical generalization, nor a matter of logical deduction. The assertion, cogito ergo sum, refers to a unique form of cognition.

What, then, is the manner in which the existence of the self is recognized as indubitable? The answer is that the awareness of the existence of the self is an immediate awareness, a direct experience or intuition. Strictly speaking, the existence of the self is not proven, in any ordinary sense of proof; it is, rather, apprehended clearly and distinctly. And this apprehension is the fundamental illumination on which all further knowledge by deduction or empirical inference depends.

We may conclude from the above that, at least as far as the manner of cognizing that which is indubitable is in question, the views of Descartes and al-Ghazālī are much closer than they seemed to be at first. Both assert that the sound and solid foundation of all knowledge is recognized only by means of an unmediated encounter with something that presents itself for unqualified and certain belief.

The second aspect of Descartes' approach centers upon the place of God in the quest for certainty. The scope and value of knowledge, according to Descartes, remain extremely limited as long as knowledge is confined to the existence of the self, for doubt continues to beset all sense perception and mathematical demonstration. It is only with the proof of the existence of God that knowledge of physical reality and abstract principles is made secure. Without the guarantee of God’s veracity and good will the epistemological edifice of Descartes remains both empty and shaky. “The knowledge of all other things [other than the existence of self or mind] depends on the knowledge of God.”22 Descartes writes further that since the mind “conceives that

it may have been created of such a nature that it has been deceived even in what is most evident, it sees clearly that it has great cause to doubt the truth of such conclusions [i.e., mathematical or logical conclusions], and to realize that it can have no certain knowledge until it is acquainted with its creator."  

The function of God, however, is not confined to the guarantee of truths other than the existence of the self. In Meditation III Descartes declares,

... There is manifestly more reality in infinite substance than in finite, and therefore ... in some way I have in me the notion of the infinite earlier than the finite —to wit, the notion of God before that of myself. For how would it be possible that I should know that I doubt and desire, that is to say, that something is lacking to me, and that I am not quite perfect, unless I had within me some idea of a Being more perfect than myself, in comparison with which I should recognize the deficiencies of my nature. (Italics mine)

In commenting on this N. K. Smith writes,

The centre of gravity of Descartes' philosophy thus shifts away from the self to that which in thought is disclosed to the self as other than the self, and as preconditioning the self, and (what in this connection is specially significant) as preconditioning the self's awareness of its own nature. The self's existence is indeed disclosed to it in and through thought; but the thought—the cogito—turns out to be no such ultimate as it may at first have seemed to be; it is complex, an awareness of the self as being finite and imperfect, i.e., as being possible of existence only in and through what transcends it and relatively conditions and upholds it.  

In other words, though we know the bare existence of the self, i.e., that it is, independently of God, we know the nature of the self or what it is, only through or in relation to God.

Finally, if we add to the above considerations the following two features of Cartesian thought, we realize that its divergence from that of al-Ghazālī to this point is rather minimal. First, Descartes is convinced not only that man is dependent on God for certainty and validity in knowledge, but also that God is the cause of man's coming-into-being and indeed of his continuing existence from moment to moment in time.  

Secondly, it is a significant, though often disregarded or dismissed, fact that Descartes gives a prominent place to faith in divine revelations which are not comprehensible to reason. He writes of the limitations and finitude of human reason and even asserts that "we must trust to this natural light [of

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23 Ibid.
25 *Meditations*, III; *Principles*, Pt. I, 21; and *Reply to Objections*, V.
reason] only so long as nothing contrary to it is revealed by God Himself."  

Furthermore, in the Discourse Descartes concludes,

"If there are finally any persons who are not sufficiently persuaded of the existence of God and of their soul by the reasons which I have brought forward, I wish that they should know that all other things of which they perhaps think themselves more assured (such as possessing a body, and that there are stars and an earth and so on) are less certain."

So far, then, I have attempted to suggest some interesting parallels between the philosophies of al-Ghazâlî and Descartes along the following lines: (a) in the origin of doubt and the manner of conducting it; (b) in the use of doubt to discover a firm foundation for certainty in knowledge; (c) in the final appeal to divine existence and authority as man’s guarantee against the many possibilities of deception in the acquisition of knowledge; and (d) in the claim that, at least in some respects, the ultimate foundations of knowledge are not subject to proof or demonstration, but rather must be immediately apprehended or accepted. The assertion of the possibility of immediate intuition, which is not sensory-intellectual, is the solution to the problem of doubt.

The last point requires comment, since it is the initial point of difference between Descartes and al-Ghazâlî. Now, though there are good grounds for maintaining that Descartes’ cogito ergo sum is a matter of immediate intuition, and not of rational demonstration, there is no ground for saying that the Cartesian proofs of the existence of God are not rational in character or that they are not intended to be so. Therefore, to the extent that the existence of God is central to Descartes’ resolution of the problem of doubt, we must recognize that, unlike that of al-Ghazâlî, this resolution is not a matter of intuition or mystical vision. Nevertheless, we also must recall here the facts that the natural light of reason for Descartes is dependent upon God for its validity or reliability, and divine revelations must be accepted in spite of reason, according to Descartes.

Finally, we may point to the obvious but interesting fact that the most serious divergences between Descartes and al-Ghazâlî begin after they have resolved the problem of doubt in considerably similar ways. And these divergences become extensive indeed.

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26 Principles, Pt. I, 28; Cf. also 25.
27 Discourse, p. 104.