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# Theory of Knowledge in Islamic Intellectual Tradition

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## **Abstract**

Early Muslim philosophers, theologians, logicians and experts in jurisprudence understand knowledge as "firm true belief supported by evidence". They consider conjectures as a kind of ignorance, the domain of certain knowledge confined in necessary truths; and the domain of uncertain knowledge limited to contingent facts. From their definitions and postulates, we can conclude that they took "having appropriate source" as the criterion of knowledge. For this reason, they included the qualifications "firm" and "immutable" in their definition of knowledge in lieu of distinction between the definition and the criterion of knowledge and separation of cognitive characteristic features of beliefs from the noncognitive ones. Their approach in epistemology is externalistic but it accommodates foundationalism and fallibilism while evading epistemological relativism. In this approach, knowledge is defined as true belief with proper source. Having proper source is a criterion for knowledge which is not explicitly stated but is implied by different qualifications introduced by them. A source of belief is proper iff it bears a causal relation of some sort to the state of affairs the belief depicts.

Keywords: Islamic Intellectual Sciences, knowledge, certainty, conjecture, belief, truth

"As to virtue leading us to happy life, I hold virtue to be nothing else than perfect love of God. For the fourfold division of virtue, I regard as taken from four forms of love" (St. Agustine, cited in Stumpf, 1987, p. 57).

## Introduction

Early Muslim thinkers have discussed epistemological issues sporadically. They have not dedicated a particular chapter to epistemology they have clear views about though. The aim of this paper is to present a framework for epistemology on the basis of views classical works in Islamic Intellectual Sciences have developed about issues like definition of knowledge, criterion of knowledge, types of knowledge, origins of knowledge and fallibility. As a prelude, we need several introductory notes.

### 1-Islamic Intellectual Sciences

In this paper, we use the term "Islamic Intellectual Sciences" to refer to a range of theoretical thought developed in the last thirteen centuries or so in the Islamic world. Historically speaking, traditional sciences in the Islamic world were divided into two main groups; the Intellectual Sciences (Olum e Aqli) and the Narration based Sciences (Olum e Naqli). The latter includes, among others, Lexicography, Jurisprudence (Feqh), Exegesis of Koran (Tafsir) and History. The former includes Philosophy, Logic, Theology, Theoretical Mysticism and the Science of Osul. It should be noted here that the words "Intellectual" and "Narration based" serve merely as proper names; they describe the disciplines which fall under them no more than the title of a book does its content. Thus, neither the traditional science of Jurisprudence for example, is hundred percent narration - based nor is Theology entirely intellectual. We need use this term because the constituents of an "epistemology" we mean to construct on the basis of views expressed by authors in the Islamic tradition are scattered in different books belonging to these disciplines. The same point is true of the term "Islamic Philosophy" or "Arabic Philosophy". They depict a discipline more than describe its content or even its orientation. Neither all nor the majority of those philosophers who belong to this tradition were Arab. It is a highly controversial issue whether the general orientation of this philosophy is Islamic in the strict sense of the term "Islamic". Needless to mention, many of these philosophers were non-Muslims. Nonetheless, we cannot help use these terms in order to refer to a particular tradition in philosophy.

## 2- Theory of knowledge

The theory of knowledge we can build on the basis of classical works in Islamic tradition includes two distinct parts; epistemology and ontology of knowledge. In epistemology we are concerned with the definition of knowledge and how knowledge can be distinguished from ignorance and particularly from compounded ignorance and the crucial question of justification. In ontology of knowledge however, we discuss about different kinds of knowledge, the nature of knowledge

being physical or non-corporal, the type of relation that stands among the triad: knower, known and knowledge. These discussions constitute an answer to the question how the phenomenon we call knowledge can exist. Several topics in Muslim philosophy such as mental existence theory as alternative to both mental representation theory and relation theory, knowledge as non-corporal entity, classification of knowledge into knowledge by presence and conceptual knowledge, the classification of conceptual knowledge into perceptive, imaginative and intellectual and the notorious and controversial question of the unity of knowledge, knower and known are parts of ontology of knowledge. The first topic discusses how perception is possible and tries to show the secret in correspondence of our understanding to reality. The second topic concerns a fundamental distinction that exists between two major groups of beings the physical and nonphysical. The third and fourth topics deal with varieties of knowledge. And the last subject investigates the relation between knowledge and existence. It goes without saying that all these discussions take the definition of knowledge for granted. For this reason, epistemology precedes the ontology of knowledge in the order of importance. It is in epistemology that we define that particular phenomenon philosophers classify into different groups explaining how it can exist. So the essence of knowledge, how to discern knowledge from ignorance, skepticism and certainty, the relation of knowledge to evidence, the relation of knowledge to other mental states, possible scope of knowledge, limitations of knowledge, knowledge and mistake and the like constitute the problems of epistemology.

## 3-Epistemology

In Western tradition, epistemology has a long history. Perhaps it starts from Socrates conversation with Theaetetus narrated by Plato where Socrates arrives at the definition of knowledge as justified true belief in his special way. Different views have so far emerged about the definition of justification each one trying to solve the problems previous ones had faced. Historically speaking, rationalism was the first doctrine that defined justification in terms of irrefutable evidence. This doctrine led to skepticism about the external world because no irrefutable evidence could be produced for proving that the external world really exists or for any claims about the state of affairs therein. So, rationalist definition of justification seemed to be incomprehensive. Empiricism emerged as a reaction to this bottleneck. This doctrine defined justification in terms of appropriate evidence. So, the evidence we must have to support our belief in order to consider it as knowledge needs not be irrefutable; it is enough to be appropriate. This qualification solved that problem but gave rise to another one; it did not properly exclude for, it entailed that some instances be considered as knowledge which were not really so. Causal theories of knowledge stepped in then to deal with this trouble. The elements involved in justifying a belief have to have some real relation to the truth of that belief. In this way, the externalists' approach to knowledge came to replace internalism.

## 4-The Method

In Islamic Intellectual Sciences, the ontology of knowledge is discussed more than epistemology is. No particular chapter is dedicated to epistemology in Islamic Philosophy while extensive investigation into the ontology of knowledge is seen almost in every serious philosophical work. Even the epistemological presuppositions these philosophers hold are revealed more in their works on theology or logic than in their philosophical writings. Epistemological topics are scattered in different disciplines. In philosophical theology, questions of definability of knowledge, definition of knowledge, varieties of knowledge, sources of knowledge, the criteria of knowledge and of ignorance, the difference between two sorts of knowledge: (Ilm) and (maarefah) and division of knowledge from the knower's point of view are addressed. In classical texts of logic, some issues related to epistemology are discussed such as the definition of perception and judgment, kinds of judgment, the role of argumentation in producing knowledge and proper origins of knowledge. In some classical texts of speculative philosophy, passing references are made to validity of intuition, the domain of reason and the origin of perfect understanding of truth. In theoretical mysticism, elaborated discussions on the cognitive value of mystical claims are carried out without establishing any particular theory of knowledge. It is in the science of Osul that debate on knowledge, certain knowledge and conjectural knowledge, the innate validity of certain knowledge and the conventional validity of some kinds of conjectural knowledge reaches climax.

We have two fundamental assumptions underlying this research. First, an author remains consistent in his major presuppositions across different disciplines. Second, different authors belonging to one paradigm share foundational assumptions of that paradigm. Almost all important thinkers whose works we have consulted for this study have written on philosophy, theology and logic. Even those who have neglected a particular area – like mystics ignoring logic- did not deviate from the main stream current in the discipline they neglected. Those – like Ghazali, Ibn Teymyeh and Isfahani to name a few- who did, expressed their opposition explicitly. It is logically possible but practically more unlikely than likely that when moving from a discipline to another, a thinker changes his background assumptions unknowingly. It is equally unlikely that experts in Osul for instance, opposed logicians on some major principle but left it unasserted. So, we are justified in collecting our material for research from different disciplines so far as they fall within one and the same paradigm.

### 5-Conceptual complications

A very complicated problem that we face in this study is conceptual. There are special terms used in epistemological discussions in Western tradition. There are also special terms used in epistemological discussions in Islamic philosophy. It is very hard to determine which couple of expressions are bilingual synonyms. This problem cannot be solved by reference to lexicographers because these philosophical terms are not used by normal language users. For example, the word "knowledge" is used by English translators of Plato's works in a special sense. In the

Islamic tradition, the word "Ilm" is used in a way much resembling the use of the English word "knowledge". But it's a very sensitive matter to make sure that these two terms are synonymous. Another problem that deteriorates the situation is that some of the theoretical terms used in philosophical discussions in a particular language have several senses. It is for this reason that authors usually define the theoretical terms they use in their discussions. It is worthwhile to mention a delicate point here. The complication partly stems from the fact that different languages follow different patterns of concept formation. A philosophical insight in one tradition may be conceptualized in a particular way and expressed by a special word. Sometimes we cannot find an equivalent for that particular concept in another tradition. The reason may be the absence of that particular concept in that tradition's episteme so to say. Notwithstanding this problem, we have to take some bilingual translation of terms as received first and try to assess them in the course of our investigation. Otherwise, the investigation becomes impossible. When doing so our choices maybe arbitrary in some cases. This makes us susceptible to criticism. But there is no alternative way. There is no a priori criterion by reference to which we can settle this problem. If such a dispute can ever be settled, it's exclusively through investigations like this. In cases we fear confusion of concepts, for example when the context fails to determine the sense of the word used, we try to elucidate sufficiently for instance by mentioning synonyms and antonyms.

# Part one: ideas discussed by early authors Definability of knowledge

A glance at the classical works in Islamic theology and philosophy shows that there is no consensus among Muslim thinkers about the concept knowledge being self-evident. Bahrani (1215-1258) says: "some philosophers and theologians like Abul Hussein and Fakhr Razi and their followers thought that the concept knowledge is self-evident so it needs not be defined. But there are other philosophers and theologians who believe that the concept knowledge is not selfevident" (Bahrani, 1404, p.43). Sharif Mortaza (934-1015) believes that the concept knowledge is among obvious concepts that we normally understand. We know it"better than any other concept which we may use in order to define it" (Sharif Mortaza, 1405, vol.2, p. 276). Obeydoly (1260-1333) narrates that some early philosophers thought that knowledge is not definable. He cites two arguments they constructed to prove this point. The first argument says the concept knowledge is a self-evident concept. It is not possible to define a self-evident concept because it involves creating something which already exists. In other words, through defining a concept, we try to make it understood. If it is already understood, then our endeavor is pointless. The second argument says that the definition of knowledge would be circular. To explain why definition of knowledge would be circular, they say "if knowledge is definable its definer is either knowledge or something else. The consequence is impossible. So the antecedent is impossible too. The consequence of this conditional is impossible because in definition, the defining concept must be more obvious than the defined one. It goes without saying that nothing is more obvious than itself. So, knowledge cannot be defined by knowledge. Knowledge cannot be defined by any other concept either. Because the other concept used as definer is either known or unknown. If it is unknown, it cannot make the defined concept known. If it is known, it would be known in virtue of knowledge. Now, if we try to understand knowledge through this definer, we're trapped in a vicious circle. Because we try to understand knowledge via this definer but to understand this definer, we have to understand knowledge. So, the definer is understood via the defined and the defined is understood via the definer. This is direct circle (Obeidoly, 1381, p.33).

Having mentioned these two arguments, Obeidoly goes on criticizing this view. He thinks knowledge can be defined by other concepts. These concepts may or may not be self-evident. If they are not self-evident they should be defined also. But to define those concepts we need not invoke the concept knowledge in order to avoid circular definition. The fact that those concepts which are used in the definition of knowledge are known to us poses no threat of circularity. When the concepts we use in the definition of knowledge are known, they are instances of knowledge rather than the concept of knowledge itself (Obeidoly, 1381, p.34).

Sadra (1559-1629) also cites two arguments constructed to prove impossibility of defining knowledge. One of them is the argument we mentioned above. In his commentary on Asfar, Sabzawari (1791- 1868) gives the same answer to it. The second argument reads as follows: if knowledge is supposed to be in need of a definition, then our knowledge of our knowledge too will not be self-evident. Since the consequence of this conditional is wrong, its antecedent is wrong too. Sadra reacts to this argument saying when we speak of our knowledge of our knowledge, we may mean either of two things. We may either mean that we are aware of having a certain mental attitude when we have one. Or else, we may mean that we know in detail what our knowledge is. If we mean the first meaning, what we say is true but it doesn't follow that the concept "knowledge" is self-evident. Of course we are always aware of the mental attitude we have, but this fact doesn't have anything to do with the concept "knowledge" being self-evident. If we mean the second meaning, then what we say is wrong. We have to admit that this knowledge is neither self-evident nor permanent. Everybody knows that they have ears and eyes but hardly do they know what the essence of eye and ear is (Sadra, 1383, vol. 3, p. 278).

The controversy on this issue is wide and deep both in Islamic tradition and in Western tradition. Notwithstanding the fact that people normally have a clear understanding of knowledge though they may be unable to articulate it in language, it is very important to identify the elements constituting the concept knowledge as a prelude to explaining the criteria by which to discern knowledge and ignorance. Perhaps for this reason epistemology discusses the definition of knowledge in length.

## Traditional definitions of propositional knowledge

The classification of understanding into two types i.e. conception and assent goes back to the early days of philosophy and logic. Assent is divided into different kinds. One kind is called Ilm. From the explanations given for Ilm, we can conclude that what they had in mind when they used this term is the same as what modern epistemology calls propositional knowledge. We shall examine this conclusion further in the course of this investigation, but for the time being, we take it as axiom.

We shall see later that slight differences exist in minute details between the concept knowledge and the concept ilm in these two traditions. But we can overlook them tentatively for pragmatic purposes.

### The first definition

Tusi (964-1039) is a great theologian in the Islamic tradition. He defines knowledge as true belief confidently held. He says if a belief is not true, it is considered ignorance. If it is true but not confidently held, it doesn't deserve the name of knowledge; it may be called taqlid or tanhit as the case maybe (Tusi, 1414, p.74). Taqlid literally means to follow someone in practice considering his opinions true unknowingly. Tanhit is a case a true belief occurs to one's mind out of the blue. Tusi's explanation suggests that belief is confidently held if and only if it is firm and supported by evidence and proof.

## The second definition

Khajeh Nasir (1200-1274) defines knowledge as true, firm and certain belief (Khajeh, 1407, p. 171). This definition is explained by Helli (1227-1305) who is a well known interpreter of Khajeh's works in the following way. If a belief does not correspond to reality it is considered compound ignorance (jahl morakkab) though the believer is certain about it. If a belief is not held with certainty, it is either 50% probable, or more than that or less than that. If belief in both a proposition and its negation is 50%, then the believer's mental attitude is called doubt (shak). If the believer is more than 50% sure about his belief then his mental attitude is called conjecture (dhan). If it is less than 50% then it is called fancy (wahm). If one truly beliefs in a proposition with certainty but his belief is not firm, then his attitude is called imitative belief (Eeteqad taqlidi) (Helli, 1436, P.78).

## The third definition

Fazel Meqdad (1365-1455) defines knowledge as true certain belief supported by evidence (Meqdad, 1422, p. 558-560). This definition differs from the previous one in that it allows a true certain belief based on accepting experts' opinion to be called knowledge.

## The difference between ilm and maarefah

In their epistemological discussions, Muslim philosophers use two theoretical terms; ilm and maarefah. Some thinkers like Tusi state that these two terms are synonymous (Tusi, 1414, p.74). But others make distinctions between them. Mir Seyyed Sharif (1339-1395) explains the difference between these two terms in the following way; maarefah means knowledge preceded by ignorance therefore they don't say of God that he has maarefah while they say of him that he has ilm since his knowledge is eternal (Mir Seyyed Sharif, 1370, P.97). Avicenna (980-1037) makes another distinction. He says the knowledge produced through thinking and reasoning that involves no element of sense perceptions is called ilm. If some

elements of sense perception are involved in the production of knowledge, that knowledge is called maarefah (Avicenna, 1404, p.148).

The former distinction obviously belongs to lexicography. But the latter is a philosophical point. The reason why Avicenna says so is that he considers certainty as an indispensable part of the essence of ilm. It's evident that only rational reasoning can produce certainty. All knowledge produced through sense perception lack generality and certainty. Therefore it doesn't deserve to be named knowledge.

#### **Divisions of assents**

A notorious classification in epistemology relates to the question of conjecture and certainty. There are complications in the approach of early philosophers to this question. We first narrate here important points raised in classical works then, analyze them.

Logicians, philosophers and theologians divide understanding into two levels; conception and assent. Conception is a simple understanding that includes no judgment. Therefore propositional knowledge does not cover conception. Assent is the understanding that involves judgment. Modern epistemology calls it belief. Traditional theologians called it mental decision (aqd al qalb). Different discussions are carried out about assent or belief that relate to epistemology. In classical texts we see five different approaches to the classification of belief. These approaches are notably different. The first approach belongs to Farabi, the second to Avicenna and the third to Sharif Mortaza, the forth to Fakhr Razi and the fifth to Helli.

# Approach one

In his book almantequyat (Logical Issues), Farabi (838-908) says:" assent can generally be defined as believing that something is in the external world as we think in our mind that it is. Assent can be true or false. It is true if reality corresponds to what we believe. It is false otherwise. True assent can be divided into three kinds; certain, half certain and uncertain. A false assent is never certain. Certainty means to believe that 1- A is B, 2- negation of this assent is impossible and 3- negation of the second assent is impossible too and so on ad infinitum. Uncertain belief means to believe that A is B and to believe that this may be false indeed. Half certain belief includes beliefs in dialectical positions, indemonstrable propositions or the conclusion of syllogisms the contents of the premises of which are not proved to be true or are the results of imperfect inductions. He adds: "there are two kinds of certainty; necessary certainty and non-necessary certainty. Necessary certain assents never change and are confined to things which are permanent... but non necessary certain assents may undergo changes and are confined to things which are not permanent...". (Farabi, 1408, Vol.1, P. 268).

## Approach two

In the first part of his book al Esharat WA al Tanbihat (Hints and Reminding), Avicenna presents a more precise classification. The commentator of this book Khajeh explains this classification in detail. He says: "pure doubt happens when one prefers neither P to not P, nor vice versa. In this case, there is no judgment at all. This case must be considered as a case of simple ignorance which is opposite to judgment. But, if we prefer P to not P, for example, when judging in favor of the preferred, then, we may also judge that not P is impossible. In this case, our assent is certain. If we allow that not P is also possible, then our belief is no more than conjectural. Certain beliefs are either such that their correspondence to reality matters for us or it doesn't matter. If it matters, it either corresponds to reality indeed or it does not. If it corresponds, then, either we are capable of denying it or not. If we are not capable of denying it, then our mental attitude is yaqin (certitude). Such a kind of beliefs has three properties; certainty, correspondence and immutability. If we are capable of denying it, then our belief is true, certain but mutable. False certain beliefs are called compounded ignorance..... However, Sometimes the term conjecture is used as opposite to certainty, to refer to conjectural beliefs, to mutable certain and true beliefs and to those beliefs whose correspondence to reality does not matter. The reason why all these three kinds are called conjecture in this second sense is that they are void of immutability, correspondence to reality or certainty or a couple of them" (Khajeh,1375 Vol.1, P. 12-13).

It is worthwhile to make a delicate note here. The phrase "we are not capable of denying it" in the above quotation can be interpreted in two ways. In one interpretation, he means to say when we believe that P, P is sometime so that we cannot deny it because it speaks about a necessary fact. In another interpretation, he means to say that when we believe that P, we are sometimes so that we cannot deny P because we have inferred P by logical syllogism for instance. Had we reached P by way of accepting experts' opinion rather than by argument, then we would remain capable of denying it. Obviously, the first interpretation makes the restriction an ontological one while the second interpretation makes it epistemological.

## Approach three

Sharif Mortaza classifies belief in a different way. In his view, belief is either the result of evidence or the result of confusion or the result of relying on the opinion of somebody else or is without a cause. The first is called knowledge. The second is ignorance. The third is imitation. And the fourth is lucky guess (Sharif Mortaza, 1405, P125).

## Approach four

Fakhr Razi (1123-1185) divides belief into six categories. When one doubts that P as much as he doubts that ~P, then, one is in a state of doubt. If one is not certain about a proposition but he prefers either of the sides, the preferred side is called conjecture and the other one is called fancy. Certain belief which is false is called ignorance. Certain belief which is true but without a cause is called imitation. And certain true belief which has a cause is called knowledge. There are different kinds of knowledge. One kind of knowledge is the knowledge produced as the result of considering the subject and the predicate of a sentence. This kind of knowledge is self-evident. Another kind of knowledge is produced by sensation. It is called

inevitable. One kind of knowledge is produced as a result of argument. This is called theoretical knowledge (Fakhr Razi, 1411, P.243). Khajeh takes issue with this classification from two points of view. His first objection is that doubt must not be considered as a kind of belief. We explained this point earlier. His second objection is that inevitable beliefs are not confined in beliefs produced by sensation (Khajeh, 1405, Vol.1,P.155). He has not challenged Fakr Razi on his idea of beliefs emerging without a cause. Maybe he thinks that this classification is the same as his own dichotomy of mutable and immutable. We shall come back to this point later.

## Approach five

In his book Kashf al Morad, Helli divides beliefs into two categories; firm beliefs and shaky beliefs. He divides firm beliefs into two categories; true and false. Again he divides true firm beliefs into immutable and mutable. Then he says that shaky beliefs are called dhan (conjecture). False firm beliefs are called compounded ignorance. True firm beliefs that are mutable are called taqlid (imitation or following experts' opinions). Immutable, firm and true beliefs are called ilm or knowledge (Helli, 1413, P.225). He repeats the same classification in his book Taslik al Nafs but adds another division. He divides shaky beliefs into shak (doubt) and wahm (fancy) (Helli, 1436, P. 78). He defines doubt and fancy in the same way that Fakhr Razi does.

# Criterion of knowledge

There is no direct reference to the criterion of knowledge in works of early authors but we can gather from what they say in other relevant issues that they consider appropriate source of firm belief as a criterion of knowledge. They speak alluding to the idea that if the source of belief is appropriate it guarantees its truth. We mention here four topics they have discussed from which we can conclude this point.

# 1-Sources of knowledge

Earlier we saw that Avicenna considered sense perception as the source of a kind of knowledge he named Marefah and intellectual reasoning as a source of a kind of knowledge he called ilm. From this we can infer that he considers sensation and reason two sources of knowing. Sohrawardi (1154-1191) speaks about mystical revelation as another source without which man cannot understand a particular sort of truths (Sohrawardi, 2001 P.13). Sadra too believes that some theoretical truths cannot be reached except through mystical revelation (Sadra, 1382, P.19). These authors think that all findings which people claim to have obtained via treading the wrong path ought to be considered as hocus-pocus. There are on the other side of the dispute, theologians who accuse mystics and philosophers of having produced illusions and hallucinations superstitiously mistaking them for revealed truths because they rely on mystical revelation as proper source of understanding (Tehrani, 1369, P.113 &176).

What matters for us is not the question which party in this dispute is right and which party is wrong. What matters is the very dispute. It displays a presupposition both parties hold; only those beliefs can be trusted which are produced from appropriate source. Their difference of opinion is on which source is proper and which source is not. While Sadra and Sohrawardi take mystical revelation as appropriate a source for forming some beliefs, Tehrani (1923-2008) takes it improper.

## 2-The self-evident / convoluted dichotomy

Muslim logicians divide both conception and assent into two categories; badihi (self-evident) and nazari (convoluted). If an assent is not self-evident, it doesn't occur without argument. The function of argument, then, is to produce assent. Correct thinking yields new knowledge. Obviously, there is a causal relation between argument and belief. Bearing in mind that most Muslim thinkers impose the restriction that belief must be supported by evidence in order to deserve the name knowledge (therefore beliefs formed by accepting experts' opinion are not knowledge), we can infer that from their point of view it is very important what the source of belief (assent in their terminology) is.

If none of our beliefs were self-evident, then knowledge would become impossible because of infinite regress. Consequently, some assents must be self-evident if knowledge is to start. How can we understand which assent is self-evident? The criterion logicians have is that "all rational people agree with the assent" (Fazel Meqdad, 1412, P. 49). How can we envisage the causal relation in the case of self-evident assents? To answer this question, we need consult explanations given about the self-evident.

In their discussions about the content of propositions used in syllogism, logicians such as Avicenna explain what they think about the self-evident. Avicenna divides propositions from this point of view, to 14 groups but asserts that only five groups among them can be said to be warranted. They are: awalyat (the primary), mahsusat (the sensible), motawaterat (the frequently narrated), mojarrabat (the empirical) and fetryat (the innate). The assent in these five categories is inevitable. The inevitability of the assent can be overt or covert. It is overt in case of the sensible, the empirical and the frequently narrated. The covert inevitability may stem from either rational faculty or some other faculty. If it stems from rational faculty, it is either based on the presence of a rational middle term or without it. If the middle term is present then the assent belongs to the category of the innate. If it is not, then the assent belongs to the category of the primary. The inevitability stemming from other faculties other than reason renders the belief unwarranted. An example of this is fancies and illusions. As they are checked against rational criteria, their truth or falsity can be determined (Avicenna, 1404, P.64-67).

## 3-The function of argument

Fazel Meqdad says: "knowledge cannot be produced without evidence since no effect can exist without a cause." (Fazel Meqdad, 1422, P. 558) Khajeh and Helli believe that "thinking" is synonymous to "speculating" meaning to arrange one's

thoughts in order to produce a fresh one (Khajeh, 1405, P. 62 and Helli, 1436, P. 82). Tusi believes that such arrangement of thoughts produces knowledge (Tusi, 1414, P. 75 & 83). Helli adds:"correct rational argument necessarily leads to new knowledge because when the cause is present the effect must also exist" (Helli, 1436, p. 85). Obeidoly mentions a difference of opinion between two groups of theologians and another difference of opinion between them and philosophers in regard to details of this issue. These two disputes imply that all these thinkers consider appropriate source of belief as the criterion of knowledge. Theologians dispute among them on the question whether or not knowing the evidence for P makes one know that P. The Motazelite answer positively while the Asharite answer negatively explaining that it is God who produces the knowledge. Philosophers on the other hand believe that knowing the evidence for P only prepares the mind for receiving knowledge endowed by the Active Intellect (Obeidoly, 1381, P.40).

We can occlude from this disagreement that the proponents of the three conflicting views share one common background presupposition; knowing P as the result of knowing the evidence for P that guarantees its truth is produced by some cause. One group takes the evidence as the cause. The other group considers God the cause. And the last group takes the Active Intellect as the cause.

Sadra summarizes these points in a paragraph thus: " both conception and assent can be either fetri (innate) or hadsi (by guess) or propagated from them or received via the illumination of the sacred faculty... no understanding, besides the self-evident, can be obtained unless with the help of the understanding already obtained. But this propagation of understandings has a restriction; one must be aware how an understanding propagates another" (Sadra, 1362, P. 4). Sadra mentions four sources for knowledge in this paragraph. They are the sacred faculty, the natural structure of the mind, the faculty of guess and argument. He stresses on an important point in regard to argument begetting knowledge. Knowing premises does not suffice for inferring conclusions; one needs to know that the premises so arranged, logically yield the conclusions. This is a restriction recently imposed on closure principle by some epistemologists. We shall come back to this point later. For the time being, we can add that Sadra implicitly hints here at the connection between the truth of a belief and its origin as a condition for belief being counted as knowledge. So, whenever we doubt whether a particular belief is to be considered as knowledge, we can make up our mind by checking its source.

## 4-Distinction between faculties

Avicenna makes a distinction, in his discussion about the content of propositions used in syllogism, between the necessity reason discerns and the necessity other faculties – the faculty of fantasy in particular- realize. He also draws a line between self-evident propositions the truth of which is guaranteed and the generally accepted which are not warranted. His departure point here is distinguishing cognitive from non cognitive properties of belief. He says: "ordinary people's minds are more acquainted with the faculty of fantasy than the faculty of thinking... sometimes the faculty of fancy drives the mind to issue a judgment which is inevitable though false. It does so by deliberately confusing it with a judgment the senses make. .. Sometimes it is not easy to distinguish a necessity

fantasy imposes from one reason does" (Avicenna, 1404, P.63-67). In this explanation, Avicenna is taking for granted that if fantasy is the source of one's belief, this belief may not be knowledge, but if the source is reason then the belief's truth is guaranteed and it is knowledge.

### Part two: discussion

In this part, we analyze the views mentioned in part one in order to extract more components of the epistemological theory in Islamic Intellectual Sciences. The differences of opinion we saw among the authors about issues pertinent to these components will also be discussed mainly in order to show for what theoretical reasons these differences have emerged. Occasionally, we will try to reconcile seemingly conflicting views via a deeper analysis of their underlying assumptions. We begin with analyzing views on assent as assent is a focal notion in this field.

Facets of belief and the question of source

## 1-Different approaches to the divisions of assent-belief

We saw five approaches to classification of assent in the literature. On a second analysis, we can gather that theses authors had two points in mind: first, the source of assent determines its degree of validity second, the strength of assent matters for them. We shall later see that they did not sharply distinguish between the two facets of assent; assent as manifesting a mental state and assent as depicting mind independent facts. We use "assent" and "belief" interchangeably here because they are co referential though not synonymous. In the field of epistemology, they both refer to the first component of knowledge. The difference between them, if ever existed, is irrelevant to this discussion. (Assent is said to differ from belief in that it is a part of belief; belief is composed of assent plus the subject of assent.) This is obviously neutral to our theory.

Bearing this point in mind, it is noteworthy that in the approaches we mentioned, two distinct tendencies can be discerned. One is the tendency to divide assent on the axis of the degree of its strength; certainty is the one hundred percent strong assent while conjecture is only more than fifty percent strong. The other tends to divide it on the axis of source. The first two approaches and the last one are motivated by the former while the third and the forth approaches by the latter. We saw Sharif Morteza dividing beliefs into four kinds; those founded on evidence, on confusion, on other peoples' authority and on nothing. In the fifth approach, Fakhr Razi somehow shared this tendency for he imposed the condition of having a cause for considering a true certain belief as knowledge. This tendency is the foundation stone of externalism.

## 2-Parallel divisions

Parallel to Farabi's division of true certain assent into necessary and non necessary in approach one is the division of true certain assent into mutable and immutable in approach two and the division of true firm assent into mutable and immutable in approach five. One question rises here; are these three divisions

entirely different from each other or do they overlap to some extent? Before answering this question, we need delve further into what they had in mind.

Farabi's point is clear. The adjective "necessary" qualifies not the assent but the proposition one assents to. This is obvious from the example he gives: "a whole is bigger than each one of its constituent parts". Helli's point is also clear. "Mutable" qualifies the assent rather than the proposition because he asserts that assents stemming from proof is immutable and from accepting experts' opinion is mutable. But Khaje's point (in approach two) is quite vague. As we already said, it can bear two interpretations. In one interpretation it echoes Farabi's and in another one Helli's. Now we can partly answer the above question. While Farabi's necessary true certain assents are only about necessary facts it is not clear whether Kahjeh's immutable true certain assents are also limited to them. Khajeh had seen Farabi's works. He could have duplicated his view but he did not. Helli was prominent among Khajeh's pupils. It is highly probable that Khajeh has distanced from Farabi's position by distinguishing between the two aspects of assent as the result of which he could no more apply the characteristic of a mental state to its content as Farabi did. Perhaps, he omitted the examples Farabi gave for this reason. In this scenario, his student Helli took the final step by introducing the notion of "source of assent" to complete the distinction. At any rate, these parallel divisions point to the fact that the two facets of assent or belief were known though roughly articulated.

## 3-Multiple qualifications for assent

In approach two, we saw that Khajeh speaks about two different qualities according to which assents are classified; being certain and being undeniable. A true certain assent may be deniable or undeniable he says. Here we find another clue to what he had in mind. If we assume that both of these adjectives qualify the belief as a mental state, then, we face a deadlock. How can we think of Smith having a certain belief which he can deny? His belief in P is either certain or not? If certain, he cannot deny it. Consequently, we have to assume that the adjective "certain" qualifies the belief as a mental state while the adjective "undeniable" qualifies the belief as depicting a fact. In this way four separate situations can be envisaged: 1-Smith holding a certain belief in an undeniable fact, 2- Smith holding a shaky belief in an undeniable fact, 3- Smith holding a certain belief in a deniable fact- that is a contingent fact- and 4- Smith holding a shaky belief in a deniable fact. All these four cases actually exist. Instances are thus respectively: Smith proving a mathematical theorem, Smith memorizing the mathematical theorem from his teacher without understanding it, Smith holding true belief in, say, zoology as a scientist and Smith memorizing sentences about zoology without understanding the facts they are about.

# 4-Redundant Qualification?

The mutable/immutable dichotomy we saw in approach five suggests that firm beliefs are of two kinds. Some firm beliefs stem from accepting expert's opinion (taqlid). They are mutable i.e. may perish. This view assumes that it is possible to form a firm belief in P by accepting other's opinion without any understanding. It

entails that Smith for example may come on Monday, to believe firmly that he suffers from cancer because Dr. Jones says so and to believe firmly, on Wednesday, that he suffers from epilepsy because Dr. Jeans says so and again come to believe firmly on Friday that his problem is something else because a third specialist says so. This assumption looks problematic. There may be capricious individuals who do change mind in this manner. Common sense however, normally advises that they should be referred to psychiatrists perhaps for treatment. To say of such transient states of mind that they are firm beliefs would no doubt be extravagance. Such states of mind must not be called knowledge because there is no firm belief involved not because the firm beliefs are mutable. Had Helli aimed to exclude such mental states from the semantic scope of the term knowledge, he could have done it by showing that they are not sufficiently firm to be named knowledge. So, the qualification "immutability" seems redundant. Is there a remedy from this problem?

There seems to be one. Helli is aware of the difference between two kinds of following experts' opinion (taqlid) and deploys the notion "mutability" shrewdly in order to highlight the importance of the role source of belief plays. Let's take up these points one by one.

We can distinguish between two kinds of following expert's opinion. Sometimes one accepts an expert's opinion blindly without forming one's own opinion about the content. We follow our layers' advises as to how to behave in a court blindly i.e. without understanding the legal mechanisms. But sometimes we form our own opinion based on the views of experts. The majority of people have ideas about their health they are not doctors though. Common sense does not refrain from attributing "knowledge" to them perhaps. We may say "Smith knows he is ill, doctor told him so yesterday". But in this latter case too Helli has his reservations.

Although the mutable / immutable dichotomy refers, on the face of it, to a quality which assent has, this quality as such is not as important as the source which it stems from is. What matters more is the source of assent. If it is a proper one, the assent it produces can be called knowledge. When the source of an assent is appropriate, then the assent will be immutable. So, immutability is only a sign. So is mutability too. Following experts' opinion Helli thinks is not a proper basis for belief formation evidently because different experts have different opinions on one and the same subject matter. Thus, admitting such sources as proper implies admitting unwarranted beliefs as knowledge. There is no guarantee that such beliefs are indeed true. Helli says this in his especial way; beliefs based on following experts' opinions are mutable. Here, he speaks generally. That is, generally speaking, if following experts' opinion were to be admitted as an appropriate way of forming belief, then it is admitted in advance that some beliefs which are considered as knowledge need not be sure to be true. Under this interpretation, Helli is not focusing on each and every instance of following experts' opinion as the source of a true, firm and mutable assent. Rather, he means to say that in general, following others' opinions is not a good way of acquiring knowledge.

The above analysis shows that the qualification "immutable" merely plays the role of a criterion by which we exclude some mental states from the semantic domain of the term "knowledge". If we dismiss this reading of Helli, we cannot help

accuse him of committing a blunt flaw; the very qualification "immutable" would be redundant.

## 5-Belief/fact overlap

As we saw (in approach one), Farabi divides certain beliefs into two kinds; necessary and non-necessary. As examples of necessary certainty and non-necessary certainty, he mentions the propositions "a whole is bigger than each one of its parts" which is a permanent fact and "John is home" as a transient fact respectively. He then adds "non necessary certainty may change and become false for no reason pertinent to the subject's mental weakness" (Farabi, 1408, Vol.1, P. 268). The belief /fact overlap is obvious here. The belief in the contingent fact of John being home is either permanently true or permanently false. The impermanency of the fact of John being at home cannot cause the belief in it to become false unless belief and fact are confused with each other. It is extremely strange that Farabi admits that non necessary certainty can turn false here while he has earlier explicitly asserted that" A false assent is never certain" (ibid. P.266). The reason why this overlap happens is the failure to distinguish between properties of belief as a mental state and properties of belief as depicting facts. We shall see more consequences for this failure in coming discussions.

## 6-The firmness qualification

We saw in approach five that Helli mentions "firm" as a quality of assent. In approaches two and four, Khajeh and Fakhr Razi speak about "certainty" as a quality for assent. There is little or no essential difference between what all these thinkers understood from these terms. Both Fakhr razi and Helli mention the cause of assent. They base a division of assent on this parameter. In the light of our previous analysis, can we reduce this qualification too to a sign representing the criteria of knowledge? Or is it a condition independent from and additional to truth?

It depends on whether we read them from behind externalist spectacles or internalist ones. If we suppose that Fakhr, Helli, Khajeh and Meqdad thought as internalists do, we would say that it mattered much for them what characteristics the mental state they talk about had. In their phenomenal world, subjects issue judgments about facts. Sometimes these verdicts are firm and certain. Sometimes they are shaky and conjectural.

But if we suppose that they thought as externalists do, then we would say they understood assents and beliefs as contingent beings that come to be due to some cause. They described different causes that give rise to assents. In the light of this investigation, they discerned different kinds of assents. The quality "firmness" or "certainty" qualifying assent depicts varieties of causes too. They did not explicitly link the degree of the strength of belief to the types of causes of belief in their investigations though because they did not distinguish sharply between the two facets of assent. Although assent can be viewed from two different angles; as mental state and as depicting reality, they took assent as one whole. Once, they talk about its strength and then, about its possible sources. They do not feel any need to bridge these two parts because they have not separated those two aspects.

On internalist reading, we cannot reduce the qualification "firm" or "certain" to the sign of appropriate source but on externalist reading we can. What encourages us to prefer the latter reading is the fact that the alternative is problematic. Supposing that "firmness" is a condition independent from truth, we must allow the possibility that some assents produced by appropriate means fail to be firm. Although we do allow this now but it is extremely hard to attribute such a view to any one of these thinkers. They could not allow such a thing because they did not, as we saw above, distinguish between several facets of belief. They were realist epistemologically and metaphysically. Like Avicenna, they considered refusal of self evident statements as insanity. They took tangible facts as one class of the self-evident. Hence, sensing something was, for them, the cause of belief as a whole. It was impossible that the cause exists but the effect does not.

# 7-The order of qualifications

From the above analysis we can now move to separating the qualification "true" from the other ones. On the surface, it seems that three divisions of belief are independent from each other. But from the explanation we saw in part one we gather that they are ordered. But the order of divisions is not uniform in all the explained approaches. Approach one begins by true/ false division followed by certain/uncertain and then by necessary/ non necessary. Approaches two and four start from certain/uncertain division followed by true/false division. Approach five starts from firm/shaky division followed by true/false then by mutable/immutable.

Truth, firmness and immutability are arranged in different orders by different authors. This is insignificant as far as the analysis of assent is concerned. But if we add to our present discussion the final point we concluded in part one i.e. that appropriate source of belief is the criterion for knowledge, then, the conceptual priority of truth to the other two parameters stands out. Propositional knowledge includes assent. When a belief stems from appropriate sources, the source guarantees the truth of the belief. It also may determine the firmness and immutability of the belief. But there is a big difference between the relation truth bears to proper source and the one firmness and immutability do to it. While proper source guarantees the truth of belief -so we can infer the truth of our belief from propriety of its source-, it cannot guarantee the strength and immutability of belief. The reason is obvious. Truth is a parameter of a single component but firmness and immutability are not. There is one reality that makes P true. But the elements involved in making a belief firm or immutable are multiple. Truth is an objective notion while firmness is a subjective one. People of different mental capacities in various psychological states react to external stimuli differently. So under a particular situation S, John may form a firm belief in P while Jane may not. Truth is beyond these fluctuations. This shows that the distinction between the role truth of the belief plays from the role firmness and immutability play is as important as the previous distinction between the two aspects of assent.

### 8-Classification of views

To sum up, the thinkers we discussed take the following positions about assent to P:

- 1- Concerning P, if one has no assent, one is ignorant. (all)
- 2- Concerning P, if one has shaky assent, one's mental state is conjecture. (all)
- 3- Concerning P, if one has firm assent but P is false, then one's mental state is compound ignorance. (all)
- 4- Concerning P, if one has firm assent through sense perception, one's mental state is Maerefat not Ilm. (Avicenna)
- 5- Concerning P, if one has firm assent through intellectual reasoning, one's mental state is Ilm and it means certitude (Yaqin). (Avicenna)
- 6- Concerning P, if one has firm assent based on following expert's opinion, one's mental state is not knowledge (Ilm). (Helli)
- 7- Concerning p, if one has firm assent not based on following expert's opinion, one's mental state is knowledge because it is immutable. (Helli and Khajeh in one interpretation)
- 8- Concerning p, if one has firm assent and P refers to a necessary fact, one's mental state is certitude (Yaqin). ( Farabi, Avecinna and Khajeh in one interpretation)
- 9- Concerning p, if one has firm assent and P refers to a contingent fact, one's mental state is non necessary. (Farabi)

## **Conclusion**

From our analysis of views on assent we conclude that the qualities of assent on the basis of which it is divided reflect two different aspects of assent; the subjective and the objective. In lieu of a clear distinction between these two aspects and the characteristic features of each, early authors introduced the notion of source. One possible interpretation of their positions combines these positions with their idea about appropriate source of knowledge. In this interpretation, their approach tends to externalism and the notion of proper source of assent becomes central.

# Proper Source; definition and criterion

From definitions of knowledge we quoted in part one, we gathered that "true belief" is a component unanimously agreed upon. The difference among authors is in introducing further qualifications. "Confidently held", "firm and certain" and "supported by evidence" are the qualifications. From their discussions under four topics of sources of knowledge, self-evident/convoluted dichotomy, function of argument and distinction between faculties we inferred that they take proper source of belief as a criterion for knowledge. From their investigation into assent we concluded that the subjective/objective aspects of assent somehow relates to the question of source. Now, we should take another step to clarify the notion of proper source in a way that solves the apparent differences.

Why is the notion of proper source focal? A glance at the components of knowledge suffices to throw light on this point. Belief, firmness of belief and certainty of belief are accessible through introspection. But truth is not. Everybody knows by introspection that they do or do not belief that P. Hardly can a person be found who wonders whether or not he believes that P. likewise, everybody knows how strong or weak his belief in P is. It is absurd to say "so and so knows that he believes that P but he in fact does not believe that P". But it is not at all absurd to say that "so and so believes that P but he is wrong". Whosoever believes that P takes P to be true. But they may be mistaken. The criterion of knowledge is vital for epistemology because the truth of belief is not as beyond any questions as the very existence or the degree of the strength of belief is. There are thousand beliefs people normally hold. Some of them are definitely false. We need some means to sort out true and false beliefs. That apparatus must be more easily accessible than truth is.

Another introductory note is good to make here. Search for the criteria of knowledge well consists with the limitations of human knowledge. Discerning knowledge from other mental states is something and the solid frontier of human understanding is something else. The criterion of knowledge helps one to decide whether or not a belief he holds is tenable. By advance of human understanding the frontiers of knowledge broaden and mistakes are revealed and corrected all thanks to the criterion of knowledge.

What is the proper source of belief? This question may be understood scientifically or philosophically. Understood scientifically, it can be answered empirically. As a philosophical question, it calls for theoretical analysis. One answer we can give on the basis of a reading of views expressed by early Muslim authors is this: the source of a belief is appropriate if it bears a causal relation to the fact which is represented in the belief.

Suppose that Smith says he knows that John is a murderer. Asked how he knows that, he may say his late grand father told him so in dream. Or he may reply: the police have proven it. The former answer is rejected outright because dreams are not proper sources for belief.

Why does dream fail to be a proper source? One simple answer would be this: because such beliefs often turn out false. This is not a good answer however because the same question may be repeated: why dream- produced -beliefs often turn out false? The answer to this question is not as simple. What happens in a dream has no causal relation with the situation the proposition one believes describes. At least such a relation is not yet discovered. But the process in which the police proves a case has a causal relation to the case. So, the element causing the belief in P has a real causal relation to the fact expressed by P. this causal link guarantees the truth of the belief.

We saw that Avicenna considered sensible beliefs among overt inevitable assents (Avicenna, 1404, P.63-67). That is, the real tangible facts related to our senses affect perception and cause the assent. It is for this reason that the assent is said to be inevitable. In regard to convoluted assents also, we saw that argument was considered as the cause of arriving at the conclusion and acquiring fresh knowledge as the result. In perfect proof (borhan e lemmi), the middle term is the cause of both our arriving at the conclusion and the real belonging of the predicate to the subject in the mind- independent external world (Avicenna 1404, Vol.3, P. 79). So, the same element that produces a belief in our mind is responsible for the existence of the state of affairs which the proposition we believe states.

## Fallibility and knowledge

We have so far arrived at "true belief based on proper source" as definition for knowledge and counted "proper source" as the criterion of knowledge. Through this definition, knowledge is distinguished from other true beliefs. By this criterion one can discern knowledge from other mental states. Now it is time to take up the question of fallibility. In which sense can knowledge be fallible?

The question of fallibility primarily relates to the phenomenon of justified false beliefs. In the same way that true beliefs one holds are not necessarily what one knows, the false beliefs one holds are also not necessarily what one should not hold; they are divisible into two categories; the justified and the unjustified. Since justification for belief is taken to indicate its truth however, the question of justified false belief turns out to be a real dilemma. How can a justified belief be false while to be justified implies being true already? Fallibility is said to provide a solution.

Fallibility needs to be accounted for within our frame work too. Since we posit that proper source guarantees the truth of belief, we must explain how beliefs formed from proper source sometimes turn out false. There seems to be a dilemma here too. One horn of the dilemma is to reject the possibility of error. This leads to solipsism. The other horn is to reject the idea that having proper source guarantees truth. This nullifies the criterion of knowledge.

Fallibility may be accounted for in a way that evades relativism, emphasizes on limits of Human knowledge, relies on the traditional "reality in itself/reality in our episteme" dichotomy and explain exactly how error penetrates.

As we saw, Avicenna uses the notion of realty in itself as opposed to reality in our episteme in his logical discussion on kinds of proof. This notion essentially alludes to the limits of knowledge. The very idea of perpetual advancement of knowledge implies that at any given moment of time much of what we suppose to know we do not really know. The gulf between reality as we claim to know and reality as it is can never be bridged. This however does not and must not mean that one single unit of knowledge can possibly become a false belief.

For every piece of knowledge we claim to have, we have a belief we consider true and a reason that shows from what source it stems establishing that the source is appropriate and thus, proving our claim. If in any one of these stages a flaw is found, then we give up our claim of knowledge. The reason which we are supposed to produce in order to prove our claim must succeed in two ways; it must showimplicitly at least- that the source of our belief is proper (the objective facet) and it must convince the subject (the subjective facet). The reason must prove the claim. For example, when we claim P, people expect us to produce Q as a reason that establishes P beyond any doubt (unless off course P is a foundational self- evident proposition). Q must show that I have acquired P from an appropriate source. It must also show that no rational person admitting Q can deny P. in this sense, the reason must be irrefutable. If Q fails to link its truth to the truth of P by necessity, people – myself included- refuse to yield to P. Suppose that attorney general accuses Smith of committing murder. The evidence for this accusation must be so strong that the jury feels they cannot believe them and believe simultaneously that Smith is innocent. If the jury can believe the evidences and can meantime exonerate Smith, it means that the reason the attorney has produced is not good. That Smith is - or is not- a murderer is a contingent act. The states of affairs narrated by the police are also contingent facts. But the relation between them must be necessary if the latter is to be a reason for the former. So, evidence must be irrefutable. This analysis shows that Farabi is wrong when he assumes that necessary certainty is confined to necessary facts (Farabi 1408, P.269).

But this does not mean that whenever we know P we hold P with certitude. Q must yield to P by necessity and certitude but neither one needs be necessary or held by certitude. Both P and Q may be contingent facts and may be held with a probability less than hundred per cent. Yet, Q must yield P necessarily and by certitude if it is to be an evidence for it. This is an expansion of the distinction between syntax and semantics in logic.

A final distinction: the truth of belief is preserved in valid arguments but the degree of the strength of belief is not (in the same way that the degree of probability is not preserved). The reason is quite clear. Truth is an objective feature. There is only one thing that makes P true. But the mental state of belief is produced under the influence of several heterogeneous factors. Cognitive faculties, non-cognitive faculties such as emotions and volition and external elements interact in the production of belief. Imagine a physician who enjoys smoking. He may read in medical records that 90 percent of smokers die of cancer. He understands that he is a heavy smoker. From these two premises he should conclude that he will most probably get cancer. But he does not because he enjoys smoking. He consoles himself by the wish that he will be among the five percent who escape cancer. The process of belief production is not entirely ruled by reason and logic. So, other factors intervene to stop or accelerate the emergence of a belief, to strengthen, to weaken or even to kill a belief. Ghazali refers to this fact saying: "beliefs vary in strength... a believer who observes behaving according to his beliefs for a longer time sticks to his belief far stronger than one who observed for a shorter period of time..." (Ghzali 1409, P.143).

Now we can see where error steps in. According to foundationalim, every belief we hold must be supported by other beliefs and this chain goes on till we reach foundational beliefs that require no support because they are self-evident. We already discussed about how evidence works. The unsupported beliefs are either produced from proper source or not. If they are, they are valid in the sense that we can confidently hold them true. Here is one of the windows open to error. A number of beliefs are taken as axioms. Through time and by the development of measurement skills and methods, these axioms are replaced. What happens in these cases is that a particular source of belief turns out to be improper after we mistook it for proper for a long time. Norms of rationality develop through such a process.

This is the inevitable outcome of our limitation of knowledge. We are not omniscient. What we do not know are far more than what we know. And what we know is ultimately based on unwarranted axioms we cannot help assume to be true in order for the cycle of understanding to get off and sort out the true and false beliefs gradually. A part of Khajeh's elaborate explanation of kinds of assent throws light on this point: "The certain assents which need not be already known to be true – though they are indeed either true or false- are divided into two groups; those accompanying admittance and those accompanying denial. The former group is divided into accepted universally, accepted by a particular group or by a particular

person like a teacher, a student or debater. The latter is called axiom. These assents are partly used in sciences. Sciences start with them and the problems are based on them. They are also used in constructing reduction ad absurdum by debaters who do not believe them but use them to prove their positions. Sometimes these axioms are tentatively yielded to by a debater in dialectics who defend them [for a purpose he hides from his opponent]... all these are called axioms" (Khajeh 1375, V.1, P.13).

## Certitude versus conjecture

The main stream doctrine in contemporary science of Osul in regard to the question of validity holds, following the lead of Sheikh Ansari (1788-1855), that certitude is perfect exposure of truth hence innately valid, conjecture is partial exposure of truth hence valid but by extrinsic validation rather than innately. The question of validity concerns what can be used as a middle term in arguments built to prove a Sharia law. Thus, when experts in Osul discuss certitude and conjecture, what they have in mind is certitude or conjecture about a religious commandment. In spite of this, the arguments they present discuss characteristic features of certitude and of conjecture in general. These debates are theoretical and display the epistemological presuppositions held by founders of Osul. Any positions in these epistemological issues largely affect positions in Osul.

They hold that as a matter of principle, conjecture (zan) is not a valid path to divine will. Except for some particular kinds of conjecture that we have sufficient reasons to think they are validated by divine law maker (sharea) we should not rely on conjecture. They call them especial conjectures (zonun e khas). They then extensively elaborate on different kinds of conjecture proving a subset as validated. The division of conjectures into different kinds is done on the axis of the source. For example, some conjectures are the result of relying purely on text methodologically interpreted and some are the result of relying on pure rational reasoning and some result from relying on a mixture of textual interpretation and rational reasoning.

Having established that a few kinds of conjecture are valid because the divine law maker has validated them, they face a complicated problem. Since divine commandments as to what man ought to do are issued with the aim of enabling man to enjoy the real benefits of those deeds, the methods prescribed by divine law maker for discovering divine commandments must be flawless. It is known however that conjecture is not a warranted way to the truth. Hence, validation of any kind of conjectures by divine law maker implies his making man susceptible to mistakes that rob them of some real interests of theirs. To solve this problem they invoke the notion of alternate interests. To go into the details of this issue takes us beyond the limits of this paper.

What matters for us here is the fact that this doctrine poses a threat to the theory of knowledge we have so far developed. This doctrine refuses the division of knowledge to certain and conjectural. The proponents of this doctrine consider conjectures as a kind of ignorance. They explicitly say that opinion based on validated conjectures does not deserve the name knowledge because the evidence in its support is semi scientific. The outcome of such evidences is not knowledge they stress. We need to solve or explain away this problem.

In the light of our earlier discussions, we can show that this problem has risen owing to three failures: failure to discern cognitive from non-cognitive properties of belief, failure to see that correspondence to reality exclusively belongs to the cognitive aspect and failure to identify the reason why innocent mistakes are excusable. Slight adjustments in the doctrine will solve the problem while preserving the main objectives.

As we saw, Araqi thinks that certitude (I.e. hundred percent strong belief) intrinsically exposes the truth. He says so because he defines certitude in the same way that Farabi does. So, the truth of belief is a constituent of certitude. Even if we admit this definition, we can ask which constituent of certitude plays the role of exposing the truth; the degree of the strength of the belief or its truth? That the property "true" means correspondence to reality may allow us to say a priori that true certain beliefs expose the truth intrinsically i.e. truth is identical to exposing reality. But in order to say that conjecture is partial exposure of truth while certitude is full exposure, we have to add another assumption. We need to assume that the strength of belief has a conceptual or causal relation to its truth. But this is not tenable. All experts of Osul - Araqi included- unanimously agree that some beliefs we hold with certitude are instances of compound ignorance. He seems to have confused the cognitive feature of belief- that is the epistemic relation belief establishes between the subject and the world- with the non-cognitive feature of belief- i.e. the psychological effect of doubt and worry in calling man to search and that of certitude in calling man to stop searching. Perhaps, what facilitates this confusion is a lingual element. Unlike Farabi, the authors in Osul use the Arabic word Qata (قطع) to mean Yaqin (قيين). Literarily, Qata means "cut" or "cutting". They use it for certitude because when one arrives at a conclusion in certitude, one stops investigating or cuts his search. The state of mind called certitude has some psychological effects and some cognitive effects. They have different features they are interwoven though.

Whether or not a belief links us to reality depends on its truth rather than on the degree of its strength. So, a hundred percent strong belief may expose the reality if it is true or expose our hallucinations, whims, wishes etc. if it is false. The same thing is correct of a fifty one percent strong belief. So, neither certitude exposes reality intrinsically nor does conjecture partially expose it via extrinsic validation by God or anybody else.

The third failure may be stated in the following way. In cases one holds a wrong belief with certitude, Araqi thinks one should be and is pardoned for the disobedience he commits unknowingly. This is a part of the theory of validity of certitude. He is partially right here, as far as his position falls within the framework of rational judgment to pardon innocent mistakes. But the reason he introduces for it is wrong and based on confusion. So is his conclusion.

In innocent mistake cases we pardon not because the mistake is not ill motivated but because if we do not, we implicitly charge people with responsibility beyond their capacity. When a court fully investigates a case and issues a verdict which later turns out to be wrong, the court does not bear penal responsibility for the mistake because it could not have done otherwise under the circumstances not because it actually thought that way in full good intention. To punish the jury means to expect them to do what they cannot. If the reason for dropping penalty were the

fact that the court thought so in good intention at the time, the legal responsibility too must be dropped. For, the convict is supposed to undergo restrictions due to the court's subjective state. This cause comprehends both the penal and legal aspects and there is no justification to set them apart. Penalty is not leveled because it involves responsibility beyond capacity but legal consequences are not dropped because they do not involve that. This shows vividly that pardon in case of innocent mistakes is based not on the subjective factor but on the objective unavailability of alternatives.

Araqi thinks that the reason innocent disobedience by one who falsely believes with certitude is pardoned is the fact that the person believes with certitude. He takes the subjective element responsible for exoneration. If one guesses falsely and commits disobedience as the result, one is not pardoned. This is the focal idea in his doctrine of validity. We can clearly see the confusion here. The reason for exoneration in innocent mistake cases is something else. Wherever it is applicable, the punishment drops. So, if one cannot help depend on a conjecture he arrives at after proper search, one should not be charged with responsibility beyond capacity hence, his pardon for disobedience.

The orthodox view on conjectures says that especial conjectures are those resulting from sources the divine law maker validates. They are valid in the sense that either they link us to reality or give us acceptable excuse for disobedience. But their validity rests on extrinsic validation. If they are not validated, they are null and void. So, the beliefs we form via these conjectures are not indeed knowledge. We consider them as knowledge by extension because of divine validation.

The previous analysis is sufficient to show that this view can be incorporated into our theory of knowledge provided that we introduce some alterations. Validation by divine law maker may be understood as introducing a number of methods for forming belief in regard to Sharia laws as proper sources rather than authoritatively appointing some apparatus already known to be defective as so-called valid. It is helpful to notice that the difference between validated and invalid conjectures is in the source of belief they produce. Conjectures created by relying on textual interpretation for example are counted as validated but those based on qias are not, according to Shiite Osul. If we interpret validation of some conjectures by divine law maker in terms of introducing proper sources for belief rather than declaring the validity of what is not valid by itself, then we can evade many complexities inevitable in the orthodox interpretation such as the problem of engendering loss of real interests.

## Conclusion

The epistemological theory we can construct based on views expressed by logicians, philosophers, theologians and experts in Osul in Islamic tradition is a kind of externalism that accommodates foundationalism and fallibilism evading epistemological relativism. In this theory, knowledge is defined as true belief with proper source. Having proper source is a criterion for knowledge which is not explicitly stated but is implied by different qualifications introduced by them. A source of belief is proper iff it bears a causal relation of some sort to the state of affairs the belief depicts. Axioms are inevitable in any scientific inquiry and are latent

in all branches of knowledge. They gradually undergo corrections. Thence, fallibility is inevitable. Since different aspects of belief are not sharply distinguished from one another in the discussions of early authors in Islamic tradition, some instances of confusion resulted from conceptual or lingual overlaps are seen that can be treated successfully through reinterpretation and slight alterations.

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