AN ANALYTICAL-CRITICAL APPROACH TO HISTORICAL ITINERARY OF CRITICISM OF SKEPTICISM FROM IBN SINA TO MULLA SADRA

Seyyed Mohsen Miri¹

Abstrak

Mengamati pemikiran beberapa filsuf Muslim (dari Ibnu Sina hingga Mulla Sadra), artikel ini mencoba menunjukkan peran yang luar biasa dari filsafat Islam dalam konfrontasi intelektual dengan skeptisisme dan menguraikan betapa tradisi ini telah mampu memperkaya dan memperdalam kajian. Makalah ini juga akan menunjukkan pola argumentasi Ibn Sina dalam membuktikan kemungkinan pengetahuan dan menolak skeptisisme. Mulla Sadra yang dianggap dipengaruhi oleh Ibn Sina, al-Razi dan Suhrawardi dalam mengkritik skeptisisme, mengungkapkan argumentasinya dalam karyanya Hashīyāt Elāhiyyāt al-Shifā' and al-Asfār al-Arbā'a

Kata-kata kunci: Keraguan, skeptisisme, pengetahuan, kemungkinan pengetahuan, prinsip ketidakmungkinan dari kontradiksi, Filsuf muslim

Abstract

Surveying some Muslim philosophers' thoughts (from Ibn Sina to Mulla Sadra), this article attempts to indicated remarkable role of Islamic philosophy in intellectual confrontation with skepticism and expounds how much this tradition has been capable of enriching and deepening that discussion. This paper will also shows Ibn Sina's pattern of proving possibility of knowledge and negating skepticism. Mulla Sadra who considered has been influenced by Ibn Sina, al-Razi, and Suhrawardi, in critizising of skepticism, he has dealt with this in his two works of *Hashīyāt Elāhiyyāt al-Shifā'* and *al-Asfār al-Arbā'a*.

Keywords: Doubt, skepticism, knowledge, possibility of knowledge, the principle of impossibility of contradiction, Muslim philosophers.

¹ Associate Professor, International Research Institute, Al-Mustafa International University. E-mail: Sm-miri@ miu.ac.ir

Introduction

A concise historical survey of the itinerary of human thought indicates that since long ago there have been people, even though a few, who – in spite of attempts of philosophers and thinkers for knowing the actual world, detecting secrets of the existence, and regulating some methods and criteria for its evaluation – denied capability of human beings in this connection and doubted or denied any knowledge and criterion for assessing truthfulness. Opposing that destructive, anti-rational current, philosophers have remarkably tried to present arguments and evidence to reject that perspective. Written pieces of ancient Greece clearly reflect this challenge. This question has continuously preserved its significance until now.² In rational opposition to skepticism, Islamic philosophical tradition has, in turn, deeply and continuously pursued, thereby enriching, the discussion. This article expounds, analyzes, and investigates attempts of Muslim thinkers from Ibn Sina to Mulla Sadra.

Among Muslim philosophers, Ibn Sina is perhaps the first to have dealt with this discussion effectively. After him, Bahmanyar³ and Suhrawardi⁴ pursued this problem in the same direction and extensively and made it more complete. Abu Hamid al-Ghazzali (450-505 A.H.) also dealt with skepticism, but in a different way; he took a new approach to its explanation – and, of course, not its criticism.

Continuity of this discussion should be pursued in the works of Fakhr al-Din al-Razi (544-606 A.H.)⁵ whore ports and expounds cases of skepticism in an extensive, detailed way as to both trends mentioned above. After him,

Such discussions can be found in detail in the following sources: Mohammad Hossain Thabataba'i, *Ūsūl-e Falsāfeh va Ravēsh-e Realism*, Ba Talighe-yeMurtaza Mutahhari (Tehran: Sadra, 1382), p. 72-91; 6: 95-99; Javadi Amuli, *Rahiq-e Makhtum dar Sharh-e Hekmat-e Muta'āliyeh*, Vol.2 (Qum: Esra',1386), p. 41-48 & 70-73; Yahya Mahdavi, *Shakkakan-e Yunān* (Tehran: Kharazmi, 1376), p.21; W.K.C Guthrie, *Tārīkh-eFalsafeh-yeYunan*, Hasan Fathi (Tehran: no publisher), p. 65-66; Theodor Gomperz *Motefakkeran-e Yunāni*, Translated by Mohammad Hasan Lotfi (Tehran: Kharazmi, 1375), p. 499; Fredrick Coplestone, *Tārīkh-eFalsafeh*, Jalaloddin Mojtabavi, Vol. 1 (Tehran: Soroush, 1375), p.112.

³ Bahmanyar bin. Marzban, *al-Tahṣīl* (Tehran: University of Tehran, 1375), p. 292-93

⁴ Shihab al-Din Suhrawardi, *Musannafat Sheikh Ishraq* Vol. 1 (Tehran : Pazjouheshgahe Olume Ensani va Motale'ate Farhangi, 1373), p. 212.

Fakhr al-Din Razi, *al-Muhassal*, dar: *Naqd al-Muhassal* (Tehran: Moasseseye Motaleaatie Daneshgahe McGill, 1359), p. 12-47; 1410: Vol.1, p. 348-52.

Khawaja Nasi al-Din al-Tusi⁶ seriously criticized skepticism based on his discussion on al-Razi's report and analysis. In the wake of that tradition, Mulla Sadra gathered all explanations and criticisms presented before him in one framework.⁷

The Nature of Skepticism

In a general categorization, viewpoints discussing possibility of knowledge are divided into two groups: realism and otherwise. The latter is itself divided into several groups: unrealism, skepticism, and relativism.

- 1. Realism is a perspective that, while emphasizing existence of a reality beyond man's mind and thought, considers attaining that reality possible through mind. Philosophers tend to this viewpoint.⁸
- 2. Unrealism, which is also attributed to sophists as well⁹, is based on denying the reality beyond man's mind. Since there is no reality, there is no subject of knowledge (the known) as well as a knowledge which discovers the reality or is in accordance with it; hence, truth and falsity are nonsensical.

⁶ Nasir al-Din Tusi, *Talkhīṣ al-Muhassal* (Tashih by Abdollah Nurani) Tehran : University of McGill and University of Tehran, 1359), p. 12-47.

⁷ After him and in the contemporary era, Allama Thabataba'i (1423:7-8;1368:6/14; 1382:6/255-73) and his outstanding students such as Mutahhari, *Ūsūl-e Falsāfeh*, Vol.6, p.255-73; Javadi Amoli, *Sarcheshme-ye Andisheh* (Qum: Esra', 1384,1386,1387,...) and Mohammad Taqi Mesbah Yazdi, *Amūzesh-e Falsāfeh* (Tehran: Beinolmelal, 1377) Vol.1/Lessons 12-19) have pursued this problem in a more detailed way and, considering contemporary doubts, have presented new opinions. While considering ancient heritage, their various explanations, analysis, comparisons, and aplications are somehow different from their predecessors and have opened new horizons for confronting skepticism. This essay's writer has surveyed criticism of skepticism in the contemporary era in a book to be published soon.

⁸ This discussion can be pursued in detail in the following sources: Bertrand Russell, Masāel-e Falsāfeh, Translated by Manouchehr Bozorgmehr (Tehran: Kharazmi, 1367), p.39; J.A. Moore, "Borhan-e Alam-e Kharej", Translated by Manouchehr Badi'ee, Nashriey Arqanun, (1374), No. 7-8: 123-46; Javadi Amoli, Ma'refat Shenāsi Dar (Qum: Esra' 1384), p. 194; Mutahhari, Ūsūl-e Falsāfeh, 6/90,197,198; Alexander Miller Miller, "realism", In Edward N. Zalta (Ed). Stanford Encyclopedia of Philosophy, 2010; Drew Khlentzos, "Semantic Challenges to Realism", In Edward N. Zalta (Ed). Stanford Encyclopedia of Philosophy, 2004.

Whether such people have really existed or not is still a matter of deliberation and research. See, al-Tusi, *Talkhīṣ*, p.46

3. Skepticism, which is, in turn, divided into two kinds: "Global skepticism" which allows possibility of error in all human conceptions and, accordingly, denies possibility of attaining a definite knowledge of facts and realities believing in impossibility of any definite judgment on them; and "local skepticism" which expresses doubt over knowledge of some affairs while accepts possibility of knowledge some affairs and realities. ¹⁰ Relativism, which can also be considered in two forms: relativism in reality, and cognitive relativism, both of them referring to unrealism or skepticism. ¹¹

However, the subject investigated in this article is only skepticism.

Ibn Sina and Criticism of Skepticism

Among Muslim philosophers, Ibn Sina is, perhaps, the first to have dealt effectively with this discussion. His influence commences from Bahmanyar and remains unaffected up to our time.

How to Encounter the Problem

In Ibn Sina's works, criticism of comprehensive skepticism and proving possibility of knowledge on the basis of principle of impossibility of contradiction¹² has, at least, occurredin two cases: one in *Ilāhiyyāt al-Shifā*', article 1, chapter 9, and the other in *Burhān al-Shifā*¹³; with one difference

¹⁰ Peter Klein, "skepticism" in J. Dancy and E. Sosa (Eds.), *A Companion to Epistemology* (Basil Blackwell, 2010), p. 715-19.

For detailed discussion as well as criticism and surveys concerning relativism, see: H. Siegel, "Relativism" In J. Dancy and E. Sosa (Eds.), A Companion to Epistemology (Oxford: Blackwell, 1992), pp. 428-30); Chris Swoyer, "Relativism" In Edward N. Zalta (Ed.) Stanford Encyclopedia of Philosophy. (Feb 2, 2003 Edition); Steven P. Stich, "Epistemic Relativism" In Routledge Encyclopedia of Philosophy, edited by Edward Craig. Vol. 3. New York: Routledge. 1999; Mutahhari, Vol.6/172-77; Pirouz Fatoorchi, "Nesbigaraë-ye Protogoras va Revayathaye Jadīde An", Faslnameye Zehn (1381&1382), No.5; Seyyed Mohsen Miri," Emkan-e Ma'refat dar Qur'ān-e Karīm", Isra (1389) No. 5.

¹² Whether Ibn Sina's theory of "the man floating in the space" and that of presence of comprehension with the soul as an abstract affair – if proved that Ibn Sina believes in it – can also be dealt with in criticism of skepticism is a matter to be pursued somewhere else.

¹³ Husain 'Abd Allah Ibn Sina, *Ilāhiyyāt Shifā*' (Qum: Maktabat Ayatollah al-Mar'ashi,1404 A), p. 49-52; *Burhan Shifā*' (*Qum*: Maktabat Ayatollah al-Mar'ashi, 1404 B), p.118.

:in the former it is discussed in a more detailed and analytical way because of the major problem there being negation of skepticism, while in the latter it is presented secondarily.

Although Ibn Sina has just dealt with comprehensive skepticism in these two works not explaining all doubts raised by skeptics, while al-Fakhr al-Razi has reported problems and their answers more completely,¹⁴ and capability of Ibn Sina in solving the problem and his remarkable influence upon Muslim philosophers who came after him is undeniable. While mentioning some reasons and claims of skeptics, he analyzes and criticizes their viewpoint and proves possibility, and even actuality, of knowledge in accordance with the reality. Among reasons presented for negation of skepticism – such as immediate knowledge of one's self or feelings, primary self-evident affairs, etc. – he chooses primary self-evident affairs, analyzes the principle of impossibility of contradiction through adopting a lingual-semantic approach and relying on meaningfulness of terms, and concludes that skepticism is impossible.

Significance of his criticism of skepticism is not exclusive to cognitive-contextual aspects; rather, methodical and formal characteristics and also some non-cognitive aspects are of the same importance: such as creating a feeling of sympathy in the skeptic, using a specific method of discourse through which the skeptic gradually abandons his doubt, applying formal logic and deductive method, adopting dialectical approach and not demonstration, and the like.

In short, Ibn Sina's pattern of proving possibility of knowledge and negating skepticism is as follows: in philosophical defense of possibility of knowledge and negation of skepticism while encountering people of absolute skepticism who deny any kind of truthful knowledge, and believe that there are no trustworthy propositions as to knowledge – for with respect to nothing one can trust the proposition "A is B" nor its contradiction "A is not B" –Ibn Sina, through emphasis upon the principle of impossibility of contradiction as a knowledge, attempts to nullify claims of skepticism because of being self-contradiction and against the actuality. In his opinion, acceptance of that principle suffices to destroy absolute skepticism, for skeptic's claim is that we have no knowledge while Ibn Sina nullifies this viewpoint through expounding the principle of impossibility of contradiction as a truthful knowledge – and to prove incorrectness of a universal, negative proposition it is enough to present a particular, affirmative proposition which has only one instance.

¹⁴ Razi, *al-Muhassal*, p. 12-47; Fakhr al-Din Razi, *Al-Mabāhith Al-Mashriqiyyat* (Beirut, Dar Al- Kutub Al-Arabi,1410), p. 348-52.

Criticism of Skepticism

1. Origin of the Argument

Ibn Sina enters the realm of skepticism and its criticism by investigating various meanings of truth. He asserts that a meaning of truth is "the proposition which is in accordance with the reality" and maintains that among such propositions the one whose rightfulness is permanent is more truthful, and among propositions whose truthfulness is permanent the one whose truthfulness is primary and causeless (i.e., in no need for reasoning and demonstration) is more truthful. 15 Among primary propositions, the most central one is the principle of impossibility of contradiction according to which "there is no mediator between affirmation and negation" - which is, in turn, analyzed into these two propositions: "nothing can be both A and non-A" (Law of non contradiction) and "everything is either A or non-A" (Law of non excluded middle). This proposition is the foundation of all other propositions and exists in all of them, either potentially or actually, in such a way that if it is disrupted, all other cognitive propositions will fall down and there will remain no such proposition. Thus, the principle of impossibility of contradiction is a proposition whose truthfulness is absolutely evident and, hence, is undeniable and undoubtable.

2. Encountering Skeptics

First, Ibn Sina divides those who believe in negation of possibility of knowledge and negation of impossibility of contradiction into two groups: those who are interested in attaining the truth but they have come to the conclusion that real knowledge is not possible and have claimed general skepticism due to complexity of such discussions, cognitive errors, unawareness, and egoism, and those who do not concern themselves about knowledge and only pretend to be skeptical to reach their purposes.¹⁶

Before commencing criticism of skepticism, Ibn Sina faces the fact that if he is to negotiate with the absolute skeptical to convince him to abandon his skepticism, the only way he has is that of syllogism and demonstration, while validity of all kinds of reasoning goes back to the principle of impossibility of contradiction, and this is vicious circle. Is reasoning against skepticism not impossible?

He asserts that we cannot use knowledge-bearing syllogism in order to reject skepticism, but we can direct the skeptic to the appropriate cognitive

¹⁵ Ibn Sina, *Ilāhiyyat Shifā*', p.48.

¹⁶ Ibn Sina, *Ilāhiyyat Shifā*', p. 49.

situation by using conceptual and propositional instruments for reminding him of his prior cognitions, enlightening him about errors in his claim, and expounding unacceptable requisites of his idea. Considering these points, Ibn Sina chooses different ways for encountering each group.

Encountering the First Group

Attempting to detect factors and reasons which cause such doubt first, he tries to reply to them by analyzing such factors. ¹⁷ He divides those factors and causes into two categories of personality-centered and knowledge-centered and, explaining each, presents his solution for the problem.

Two personality-centered examples, which cause doubt and bewilderment over possibility of knowledge, are as follows:

- 1. Numerous differences and disagreements of outstanding scholars which have still remained unanswered after passage of years and continuous debates leading to the fact that they and their followers have not been able to reach an absolute agreement with each other.¹⁸
- 2. Unfamiliar, strange assertions of outstanding scholars, such as "one thing cannot be seen twice, not even once," or "objects do not exist on their own, their existence is relative."

The knowledge-centered example is that in pursuing theoretical topics, one sometimes encounters a perspective with reliable evidence for both confirmation and negation sides – something causing doubt and perplexity over both affirmative and negative propositions and leading to doubt over possibility of absolute knowledge of any reality, including doubt over correctness of self-evident propositions such as impossibility of contradiction.¹⁹

Ibn Sina's Replies:

Reply to the first personality-centered reason²⁰

 Apart from angels and prophets who are in connection with the Unseen, all human beings, even such great philosophers as Plato and Aristotle, make mistakes due to their human characteristics. It should not be

¹⁷ Ibn Sina, *Ilāhiyyat Shifā*', p. 50-51.

¹⁸ Ibn Sina, *Ilāhiyyāt Shifā*', p.50.

¹⁹ Ibn Sina, *Ilāhiyyāt Shifā*', p. 51.

²⁰ It seems that this reply can also answer the second proof in addition to the first.

assumed that greatness of some people because of their knowledge would make them infallible, and this should not cause wondering and skepticism.²¹

- 2. Greatness of thinkers does not mean that their level of knowledge and correspondence of viewpoints, especially on complicated thematic issues, should be the same. Many an expert thinks correctly with regard to something while he is not an expert on something else and thinks incorrectly. Even an expert on something may sometimes make mistakes in understanding a proposition related to the very thing due to various reasons. Therefore, issues should be dealt with separately and we should not generalize their judgments to the whole.²²
- 3. In spite of being correct in the matter of propositions on the one hand and correctness of introductory propositions on the other, experts make terrible mistakes because of not observing formal as well as logical regulations in presenting proofs and conclusions as well as relying on their personal disposition and instinct. Although they are fairly familiar with logic and may have even been authors and teachers of logical sciences, knowledge of logic alone is not enough for correct thinking; what is important is its using in the process of thinking so that one may not make mistakes.²³

In this case, the skeptic departs common naivety. By reminding him of some anthropological and epistemological points as well as expounding mistakes occurred in thinkers' cognitive process, his skepticism and perplexity will be shaken and he will realize how much his unconditional trust in intellectual figures caused him becoming confused and perplexed.

Reply to the Second Personality-centered Reason

In response to the second example, he refers to a very important experience in human life. Not all men speak to others in the same level of clarity. Based on their policies andfor many reasons, many people speak in a mysterious, symbolic language or with unclear hints and ambiguities in a way that if we refer to the appearance of their sayings or use dictionaries or colloquial understandings of people we will make mistakes and fail in understanding their intentions. For example, one cannot understand words of some mystics who speak symbolically via common literature. This has

²¹ Ibn Sina, *Ilāhiyyāt Shifā*', p. 52.

²² Ibn Sina, *Ilāhiyyāt Shifā*', p. 52.

²³ Ibn Sina, *Ilāhiyyāt Shifā*', p. 52.

been the way most philosophers, and even prophets who are infallible, have spoken.²⁴

Of course, one should not neglect possibility of error in thoughts and words of some such people, save prophets, since they are not infallible.

Reply to the Knowledge-centered Reason

In this response, Ibn Sina indicates that if two reasons have contradictory results one can never conclude that both of them are incorrect, for this necessitates acceptance of coincidence and negation of two contradictory affairs —in other words, acceptance of possibility of existence of a mediator between existence and non-existence while this is under no circumstances possible. If all propositions could be doubtable, this proposition could not be doubted that "coincidence and negation of two contradictory affairs is under no circumstances possible."It cannot be both said that this is a book and this not a book but rather is a chair. Therefore, in two propositions of "A is B" and "A is not B" one is correct and one is incorrect, even though we cannot determine which of them is correct. One can neither say they are both wrong, because there is no mediator between existence and non-existence or between "is" and "is not," nor can one say they are both correct, because coincidence of "is" and "is not" is impossible too.²⁵

To talk with the skeptic who doubts everything, Ibn Sina begins with this question whether he has a conception in mind of "I doubt everything." Skeptic's answer cannot be but one of the following:

- He says I have no conception in mind, I have no comprehension
 of what I say, and that is why I have no intention of conveying any
 meaning to others. Contrary to our prediction, it is revealed in this
 case that this skepticism is not due to concern about knowledge, but
 rather is for the sake of controversy. Hence, scholarly argumentation
 is of no use for this person and he should be categorized under the
 second group.
- 2. He asserts I mean something by what I say, but not a particular or a limited one; rather, I have all meanings and concepts in mind." For example, if the word "man" or the proposition "I doubt everything" is used in this conversation, several meanings such as man, non-human, animal, tree, earth, sky, etc. and "I am not skeptical of anything," "I am asleep", etc. are also meant. It is clear that this response, like the

²⁴ Ibn Sina, *Ilāhiyyāt Shifā*', p. 52.

²⁵ Ibn Sina, *Ilāhiyyāt Shifā*', p. 52-53.

- previous one, shows that this person is not in search of the truth; he is obstinate, and no kind of knowledge can influence him.
- 3. He says I have only one particular meaning in mind by uttering this word. In this case, the word "man" denotes only one concept, and this is the case the philosopher desires. The philosopher uses this answer to pursue his argument against skepticism something to be mentioned in the next response.
- 4. He says by this word I neither intend one particular meaning nor all meanings, but rather some certain concepts. Compared to the second case, this is one step ahead; for he has accepted that the particular word refers to only a few limited concepts and held that it has no denotation as to other meanings. In this case, there are only two possibilities: either all objects of denotation refer to one meaning according to which there will exist only one meaning (like case 3), or meanings are multiple and distinct from each other according to which the only thing they have in common is the word and they are homonymous. If the latter, the skeptic is recommended to consider a specific word for each of those meanings in such a way that each word should only refer to one meaning for the sake of clarity, avoiding errors, and finding a solution. A truth-seeking skeptic will accept this suggestion; hence, there will be only one meaning for a particular word such as man.²⁶

In options 3 and 4, the skeptic intends only one denotation by his word or phrase. Having such a confession at hand, Ibn Sina makes it the basis for his criticism of skepticism in the following way:

Skeptic's latest utterance means that when he intends concept of rational human by using the word "man," this word does not denote non-man or other concepts; for denotation of this word is something other than that of non-man. If the word denoted both man and non-man, serious problems, in which the skeptic himself does not believe (since it is assumed that he has accepted only one denotation by any given word), would be caused. Some of such problems are as follows:

- 1. Man's being book, elephant, pigeon, iron, stone, tree, and whiteness, blackness, lightness, heaviness and any other thing which is an instant of non-man while he is man.
- Negation of law of identity, according to which nothing would be itself; for example, man would not be man but rather non-man, stone, etc.

3. The word man having no longer any meaning, for when a word denotes both man and non-man – which itself covers infinite concepts – there will remain no denotation.²⁷

Following that, Ibn Sina asserts that not only the perspective of "all words and propositions denoting contradictory meanings without any distinction" but that of probability, i.e., "reference of some words and propositions or even one word or proposition to contradictory meanings"28 face those problems; for to believe in such perspectives necessitates generality of signification of contradictory meanings as well as lack of distinction among meanings in all cases. The claim is that such judgment holds true only for some cases; for example, one word denoting both "white" and non-white, or proposition A denoting both "this is white" and "this is not white." However, some other cases, such as the word "man" and the proposition "this is man," denote only one thing and not its contradictory meaning. Ibn Sina holds that such utterance necessitates that word and proposition should in all cases denote contrary meanings, for if the word white should denote non-white as well and denotation of both of them be the same, it could be said that "every non-white is white" and "every white is non-white." Now, if the supposed man- who assumingly does not include non-man – is white, he will be an instant of non-white as well - since "every white is non-white." Also, if nonman, which is a distinct concept, is white, it will also be non-white – as mentioned above - which means that man while is distinct from nonman, as was assumed, is not distinct anymore, and is at once non-man and man. As a result, everything will be everything – something obviously not acceptable. Thus, Ibn Sina achieves his goal, i.e., proving possibility of knowledge and removing doubt, in this option and indicates that in all examples, including equilibrium in proofs, neither coincidence nor negation of two results is possible.²⁹

²⁷ Ibn Sina, *Ilāhiyyāt Shifā*', p. 52-53.

Considering the point that this perspective means that the principle of contradiction is impossible only in some cases and conditions and not in all of them on the one hand and Ibn Sina's reply to it on the other, some Muslim philosophers inferred from this opinion of Ibn Sina, and perhaps from his other opinion of eternal truth of principle of impossibility of contradiction, that Ibn Sina's perspective means that the principle of impossibility of contradiction is of eternal necessity and came to invaluable cognitive conclusions on the basis of that characteristics.

²⁹ Ibn Sina, *Ilāhiyyāt Shifā*', p. 52-53.

Encountering the Second Group

The second group, whom Ibn Sina calls sophists, is those who have no concerns about knowledge; rather, they oppose knowledge consciously and deliberately for such purposes as ostentation, fame, political or social power, and the like. Such people have no doubt over possibility of knowledge and do believe in it. However, they use skepticism and unrealism instrumentally for the sake of achieving their goals, as they think the latter is possible via the former. By asserting that, Ibn Sina has indicated distinction of these two groups on the basis of efficient truth and their motivation. Again, like dealing with the first group, he begins with a conversation. In this countering, addressee's response will be one of the three following:

- 1. He remains silent and refuses to continue the debate.
- He continues the debate and having listened to explanations we present, becomes convinced and admits truths and cognitions mentioned earlier. In this case, claim of skepticism is eliminated and we achieve our purpose.
- 3. He continues arguing, does not become convinced, and still insists on his belief. Here, Ibn Sina suggests another approach: to make him face a difficult and upsetting situation; for example, bringing fire close to him or hindering him from having access to food and water. As a reaction to such difficulties, he will complain the pain, thirst, or hunger. In this case, he should be told that based on your own claim pain and non-pain, hunger and non-hunger, thirst and non-thirst, eating and not eating, drinking and not drinking, etc. have no differences, their existence is doubtful, and you do not have any certainty as to their real existence. If he said that this is not true and he did not have any doubt over the fire which burnt him and there is a difference between existence of fire and its non-existence, he had accepted the principle of actuality and the absolute skepticism had collapsed; for he has admitted, at least, existence of one or some few realities.³⁰

Bahmanyar and Criticism of Skepticism

Bahmanyar, who studied Ibn Sina, has dealt with this issue in the third chapter of the first article of metaphysics of his book *al-Tahṣīl*,³¹

³⁰ Ibn Sina, *Ilāhiyyāt Shifā*', p. 52-53.

³¹ Bahmanyar, *al-Tahṣīl*, p. 291.

encountering the problem mostly similar to Ibn Sina – even in some cases narrating the latter's very phrases in summarized fashion. The only thing he has added is what Mulla Sadra quotes from him, i.e., the relation between the principle of impossibility of contradiction and other cognitive propositions and thoughtsbeing the same with the relation between the Necessary Being and other existents, in the sense that as there would have been no existent had the Necessary Being not existed, there would have appeared no cognitive proposition in the world of thought and knowledge had the principle of impossibility of coincidence of two contradictory affairs not existed.³²

Al-Ghazzali and Criticism of Skepticism

His discussion on skepticism has been presented in *al-Munqīdh min al-Zalāl*. Survey of process of skepticism and escaping from it in this book is presented in reporting his personal experiences. He has been thirsty for comprehending truths since his childhood. In the beginning, he notices that all people do not have the same belief and have contradictory perspectives. On the other hand, many beliefs are formed on the basis of imitation and following opinions of fathers. Since he believed that attaining the truth and its knowledge is beyond imitation and another way should be sought, he decided to investigate characteristics of that knowledge. The convincing answer is certain knowledge which is in accordance with the fact, is infallible, and is undoubtable. The question is that whether actualization of such knowledge is possible and such cognition is attainable. In order to find an answer, he turns to human conceptions, whether sensible or otherwise, and concludes that such knowledge is attainable only in two categories of sensible and self-evident affairs.³³

Here, a problem occurs: we make mistakes in sensible affairs too, such as gradual motion of shadows while seeming fixed to us, or a huge star which seems small while we later, by considering geometrical evidence, realize that it is huge. These problems lead to expansion of doubt, and the very error in senses causes this possibility that intellectual primary propositions – such as "ten is more than three," "affirmation and negation do not coincide in one thing," and "one thing cannot be originated and pre-eternal, existent and

³² Sadr al-din Shirazi, *al-Ḥikma al-Muta'āliya fi-'l-Asfār al-Arbā'a*, Vol. I (Qum : Mostafavi,1368), p. 423.

³³ Abu Hamid al-Ghazzali, *al-Munqidh min al-Dalāl* (Beirut : Dar al Andalus, 1967), p. 63-65.

non-existent, necessary and impossible" – are not trustworthy precisely like sensible propositions; for as the intellect disaffirms senses in sensible affairs, there may exist another judge beyond the intellect that will disaffirm the intellect later on. He not only finds no answer to this problem, but finds the counter-example of the dream which strengthen, in his feeling, the previous possibility of fallibility of self-evident affairs.³⁴

The Example of Dream

There are times when one sees something in a dream which he is certain of, but when he wakes up he realizes that all such things have been but illusions. However, a third state is probable whose relation with awakens is like the relation between awake and sleep in which we realize that our certainties at time of awakens have also been false and nothing but illusions. There are some examples of this third state: the world of death in relation to this world, which, as the holy prophet asserts, is similar to a state between sleep and awakens and in which there are things we see which are contrary to what we see in this world or they have mystical experiences or witness things which are not compatible with ordinary world's affairs.³⁵

He becomes doubtful of everything so far and becomes engaged in absolute and general skepticism. He remains in this skepticism for two months and, as he puts it, his spirit is no longer in balance. But finally his doubt leaves him and he becomes certain of intellectual primary propositions. That certainty after doubt, however, was not brought by intellectual reasoning and argumentation; rather, it was God's blessing that, as he puts it, enlightened his heart and healed him of that disease. Then, he expounds ways of attaining the Truth through narrating some subtle, mystical traditions. At the end, he announces such necessity, primary propositions unarguable. ³⁶

Analysis and Survey

It becomes clear from this report that:

1. Al-Ghazzali's motivations and method of pursuing this problem has been cognitive; although he becomes engaged in a psychological and spiritual crisis later.

³⁴ Al-Ghazali, al-Munqīdh, p. 65-66.

³⁵ Al-Ghazali, al-Munqīdh, p. 67.

³⁶ Al-Ghazali, al-Munqīdh, p. 67-68.

2. What seem important in al-Ghazzali's opinion regarding philosophical discussion of skepticism is his methodological explanation, presentation of some reasons for skepticism, and notification of the important point of sensory mistakes. It seems that what historically distinguishes al-Ghazzali from his former Muslim thinker Ibn Sina is this aspect. Although it is quite possible that some arguments in favor of skepticism, such as the dream, have been presented by some people, such as Sekstus, before him and before Islam, among Muslim thinkers al-Ghazzali is probably the first, or one of the first, who has presented and reported this point. After him, al-Fakhr al-Razi and others have dealt with it too. Anyhow, he has been remarkably able to complete Ibn Sina's plan for explaining skepticism and causes of its appearance. On the other hand, his solution for escaping from skepticism is of no philosophical importance.

Some Differences of al-Ghazzali and Ibn Sina

- 1. Ibn Sina opposes skeptics from the very beginning, negates skepticism, and never shows interest in it; contrary to al-Ghazzali who initially tends to absolute skepticism, then leaves it and tends to realism.
- 2. Although al-Ghazzali leaves skepticism for realism and overcomes this problem, he considers that a blessing from God and via a non-arguing and non-philosophical way, while Ibn Sina, as a philosopher, attempts to organize a particular system which, while classifying motivations and emphasizing cognitive motive, explains doubts and their answers and comes to a conclusion, to present an intellectual pattern for negation of skepticism, and to show the cognitive way of escaping from skepticism. Relying on self-evident affairs which are cognitions accepted by all people, he suggests some intellectual, inter-mental solutions sharable by everybody and not personal experience, thereby treating divine blessings in solving skepticism as being through the intellect.
- 3. Such arguments as the example of dream, motion of shadows, error of senses, and the like mentioned by al-Ghazzali do not exist in Ibn Sina's points.

Suhrawardi and Criticism of Skepticism

Shihab al-Din Suhrawardi (549-587 A.H.) has also dealt briefly with this problem in the discussion of meanings of the word truth, following Ibn

Sina's way and even completing it. He has spoken more clearly than Ibn Sina in relation to rejection of cognitive skeptics. Entitling the very opinion of Ibn Sina "they said," he asserts that a meaning of truth is the propositional truth. Among propositions the one whose rightfulness is permanent, primary, or causeless (i.e., in no need for reasoning and demonstration) is more truthful, and among primary propositions the most central one is the principle of impossibility of contradiction which is the foundation of all propositions and whose truth is self-evident, undeniable, and undoubtable. Based on this, he criticizes skeptics and deniers of this principle. Such skeptics' problem is solvable if they are in search of the truth and are not obstinate. They are included in one of the following states:

- 1. They consider their opinion as to denying knowledge correct and in accordance with the factuality. Here, they have admitted existence of knowledge and its truthfulness, even though at the least level something nullifying their belief in the absolute skepticism.
- 2. They believe that their very belief in denying knowledge is also null and void; meaning that truthful knowledge is not only possible but actualized. In this case, they have abandoned believing in their first claim of negating any kind of knowledge first, and accepted existence of much cognition secondly.
- 3. They say that they do not know whether their belief in denying knowledge is correct and in accordance with the factuality or not; hence, they have doubts over this. In this case, what they say at least means they have abandoned their first claim of negating any kind of knowledge and declare it doubtful. Here, we ask them whether they are certain of this doubt or they are doubtful about this very doubt too. Do they understand some particular thing from what they are saying or not?

If the answer to this question is positive, they have admitted one knowledge in accordance with the factuality (i.e., knowledge of the doubt) and that they understand this concept. But if they say they have doubt about their very doubt and they understand nothing from it, if they claim they do not know what kind of psychic state they have as to their doubt, i.e., they do not know whether they have doubt about it or they deny the doubt, or if they say they do not know whether they exist or not, etc... the solution is fire and pain.³⁷

Although he, contrary to Ibn Sina, has not dealt much with analyzing causes and motivations of skeptics as well as their solutions such as equilibrium of proofs and egoism and has solely discussed Ibn Sina's last

³⁷ Suhrawardi, Muṣannafat Sheikh Eshraq, Vol I, p. 212.

solution, he has added notable points to complete and develop that solution; for Ibn Sina indicated self-contradiction of skeptics' claim through analyzing the word and meaning and did not take any other approach except giving some hints in *Burhan al-Shifā*, 38 while Suhrawardi does not content himself with this much and indicates this with a clearer explanation and through a way other than analyzing the word and meaning. Contrary to the notable influence of Ibn Sina on him, Suhrawardi seems not to be influenced by al-Ghazzali at all, even by presenting samples and examples.

Al-Fakhr al-Razi and Criticism of Skepticism

Reporting and criticizing skepticism in his two books *al-Muhassal* and *al-Mabāhith al-Mashriqiyya*, al-Fakhr al-Razi (544-606 A.H.) has discussed it more detail than all predecessors. As evidence indicates, he has taken his report from Greek sources of skepticism. In some cases – such as the example of dream – his ideas are totally similar to Ghazzali's.

In the survey of global skepticism in *al-Mabāhith*, he treats knowledge as possible and considers the principle of impossibility of contradiction the most fundamental proposition treating it as self-evident and unarguable because of leading to vicious circle. He divides people who oppose knowledge into three groups: those who deny knowledge and the principle of impossibility of contradiction due to lack of correct conception of notions mentioned in the propositions in question, those who believe in the equilibrium of proofs and are unable to distinguish between correct and incorrect propositions, and those who are obstinate and fond of controversy. He believes that the solution to the first group is explaining notions or conceptual parts of propositions; to the second group is the very fire and pain mentioned by Ibn Sina, and to the third group is to help them remove propositional doubts and ambiguities.³⁹

Since this is a triple division, it is clearer from the double division presented by Ibn Sina and refers to the case of probability of lack of correct conception of notions too, although from among causes of skepticism it only mentions equilibrium of proofs and does not speak of other causes mentioned by Ibn Sina. However, it seems that the correct and logical division is that: people are either obstinate or truth-seeking; if the latter, they deny knowledge either due to lack of correct conception of notions

³⁸ Ibn Sina, Burhan al-Shifa', p. 118.

³⁹ Al-Razi, al-Mabāhith, Vol. 1/349.

mentioned in the propositions, or because of equilibrium of proofs and the like.

Al-Razi does not explain viewpoints of the first and the second group and their solutions more than this, but gives more explanation regarding the third group. Attaining the truth is only possible through three ways: sense, imagination, and the intellect. However, the problem is that in many cases we attain certainties through these three ways but later we realize that they are false. Therefore, all of these three ways of attaining knowledge are untrustworthy. He gives some examples for each of these.⁴⁰

Here, division of conceptual instruments and possibility of error in three methods of sense, imagination, and intellect are presented, while Ibn Sina did not mention them at all and al-Ghazzali mentioned only sense and intellect. Contrary to *al-Mabāhith*, he deals with both global and local skepticisms in *al-Muhassal*. He presents two divisions as to deniers of knowledge one of which being to some extent different from *al-Mabāhith* and even from all works of previous thinkers and can be considered a compliment to them. These two divisions are made through consideration of kinds as well as causes and motivations of skeptics.

- 1. Division based on causes and motivations of skeptics: this division is the very one mentioned in *al-Mabāhith* and reviewed earlier⁴¹: those who do not have correct conception of respective notions, those who believe in the equilibrium of proofs, and those who are obstinate and fond of controversy.
- 2. Division based on the type of perspective: In opposition to those who believe in the possibility of knowledge in sensory self-evident, primary conceptions, there are three other groups: those who, like Plato, Aristotle, Ptolemy, and Galen, only accept self-evident propositions as knowledge and do not believe in sensory affairs; those who, contrary to the first group, treat sensory conceptions as valid and do not believe in self-evident, primary propositions; and those who believe in neither of these and totally deny knowledge. These are those whom he calls "sophists."

He reports that the reason why the first and third groups do not trust sensible affairs is that senses are exposed to error because of their relation to particular things, and the evidence he presents are as follows:

1. Visual errors. For example, sometimes we see things bigger or smaller than their actual size, such as the fire at night which we see bigger when it is far; sometimes we see one thing two, like when we close one of

⁴⁰ Al-Razi, al-Mabāhith, Vol. I, p. 350-351.

⁴¹ Al-Razi, al-Mabāhith, Vol. I, p. 349.

our eyes and look at the moon and mistakenly see two moons in the sky; sometimes we see multiple things one, like when we look at a stone with multiple colored lines drawn closely to each other from the center to the circumference and we mistakenly see only one color because of mingling of colors; sometimes we consider unreal things real, such as a mirage, pouring of the rain drops appearing to us as a straight line, or a flame rotating so fast which we suppose a fiery circle; or sometimes a moving object appears to us immobile and vice versa; like ship passengers who see the land moving and consider themselves to be immobile. 42

- 2. Errors of senses in recognition subsistence; like when we look at a red object, for example, and we think that it is the very color we have seen some seconds ago, because our sense sees no difference between similar things and considers them of subsistent existence, while Sunnis believe that it is God who gives colors to things moment by moment. This can be expanded to other than colors too and we may say that God creates things moment by moment according to which sensory error will again be probable.
- 3. Error of senses in dreams dealt with while discussing al-Ghazzali's ideas.
- 4. Errors in hallucinations in which the one who suffers from psychological disorder sees unreal things real or feels that real things are created by his own illusions and do not exist actually. Now, how can we distinguish between such a situation and what a normal person sees and feels? It is quite possible that, because of conditions we are not aware of, whatever we feel and are certain of its existence is illusion and unreal. For instance, when we see snow we think that it is white, while careful consideration indicates that this conception is incorrect, for snowflakes are colorless and it is their combination that has made us making mistake. All these examples show that human senses are untrustworthy, suspicious, and invalid.

Proofs and evidence presented by the second group regarding untrustworthiness of self-evident affairs and intellectual judgments as knowledge are, in his opinion, as follows:

1. According to the claim of philosophers and believers in the possibility of knowledge, the most obvious and self-evident proposition among self-evident and non self-evident propositions is the principle of impossibility of coincidence and negation of two contradictory affairs which is the basis of all other propositions. However, precise deliberation indicates that this principle is also doubtful and untrustworthy; for every concept coming to mind and thought must be distinguishable from other concepts and this

⁴² Al-Razi, *al-Muhassal*, p. 18 -19.

necessitates determination of that concept, while in the claimed propositions there are such concepts as non-existence which cannot have determination and differentiation due to their being non-existential.

- 2. We observe things of which we are rationally certain, while accurate consideration indicates that there is no room for such a certainty and their falsehood is probable. We see a person in front of us, then we blink and our eyes open and close. Here, we are apparently certain that he is the same person, but a little deliberation brings this probability to our mind that perhaps God has destroyed that person and created another one with the same characteristics. Or we see a person speaking purposely and become rationally certain that those words are created by a living, wise, willful, and purposeful existent, while a little deliberation may cause probabilities that change all those certainties into doubts: maybe God, the Omnipotent, the Free, has made him uttering those words without that person having any will, rationality, etc. in the utterance of those words; or they may be some abrupt, meaningless, and purpose less words being put together.
- 3. Another reason is change of beliefs that happens to us. Sometimes we come to a conclusion and believe in it because of some evidence and proofs, while later we find counter-evidence or stronger arguments which make us believe in the contradictory idea. This indicates that to trust and rely on intellectual beliefs is wrong.
- 4. Sometimes a person believes in something due to some such things as habit, heartlessness, compassion, and many other known or unknown factors; for example, someone who has always been with philosophers and is attached to them may become certain of their beliefs, just as the one who has been close to theologians may believe in their viewpoints. Either of these two groups of people rejects viewpoints of the others' due to their closeness to a particular group; therefore, it becomes unclear which one's beliefs are correct and which ones are not. Hence, it becomes possible that other certainties we have may also not be safeguarded against errors and their correctness becomes doubtful.⁴³ This example is so close to example of equilibrium of proofs mentioned by Ibn Sina.

The third group's perspective— those who are also called sophists—on the absolute skepticism and denial of any kind of knowledge, whether sensory or intellectual, is also based on the whole proofs of two groups mentioned above.⁴⁴

⁴³ Al-Razi, al-Muhassal, p. 19-26.

⁴⁴ Al-Razi, al-Muhassal, p. 26-29.

Al-Razi's Answer to Skepticism

After presenting such division which is different from that of predecessors, al-Razi deals with a solution for skepticism. His answer to skepticism is the very Ibn Sina's to the absolute skepticism. As for those who do not have a correct conception of respective concepts, his solution is explanation of conceptual parts of the question.

Following Ibn Sina, he does not consider arguing, guiding, and presenting solutions useful for those who are abstinent. Rather, he believes that they must be made confess to sensory feelings such as pain by being somehow burnt – which means admitting such self-self affairs as impossibility coincidence of two contradictory affairs, since he has differentiated between pain and lack of pain.

As for those who believe in equilibrium of proofs, he tries to explain their viewpoint and proofs more first, and then nullifies them. Addressing the philosopher who believes in the existence of self-evident, truthful knowledge, the skeptic says you either attempt to justify obviousness of such propositions, or do not do so and remain silent. The latter means that skepticism is strong enough and no one can argue against it. And the former means that those propositions are not self-evident *per se* and are in need of explanation, while you assumed that they were self-evident. Based on this, the skeptic concludes that there is no way other than accepting skepticism.

In *al-Mabāhith*⁴⁵ he explains the very skeptics' argument with some differences: if we tell skeptics that when you accept that there is a sense, an imagination, a dream, an awakeness, a mistake, a correctness, etc. you have admitted existence of some realities and cognitions, he will reply that although this necessitates confession to some realities, our dubieties cause doubting them; and you cannot argue against us using our dubieties, for it leads to vicious circle. It is so because your argument means that you have used a theoretical proposition in order to prove a self-evident proposition (the principle of impossibility of coincidence and negation of two contradictory affairs), while you claimed that proposition of the principle of impossibility of coincidence and negation of two contradictory affairs was the basis of all theoretical propositions – this is clearly vicious circle; thus, our skepticism still remains established.

Al-Fakhr al-Razi, who believes in the self-evident affairs and possibility of knowledge of them, gives the same answer Ibn Sina had given, and

⁴⁵ Al-Razi, al-Mabāhith, p. 349

says that if we were to prove self-evident propositions through theoretical propositions you would had been right; but what we do is elimination of doubts—and according to the more accurate interpretation by Ibn Sina, elimination of perplexity—therefore, it will not lead to vicious circle.

Playing a remarkable role in expounding such perspectives, al-Fakhr has made some development in reporting cases of skepticism in comparison with Ibn Sina and al-Ghazzali and paved the way for the coming philosophers such as Khawaja Nasir al-din al-Tusi, Mulla Sadra, etc. for giving answers to skepticism— though he does not have the depth and capability of Ibn Sina and Khawaja in giving answers to skepticism.

Khawaja Nasir and Criticism of Skepticism

Al-Razi's report and explanation provided the grounds for Khawaja to investigate and to criticize the skepticism in *Naqd al-Muhassal* and complete Ibn Sina's, al-Razi's and Suhrawardi's works. There are so many invaluable, novel points in this book of Khawaja, though all of them will not to be mentioned in this essay, but some of them are as follows:

- 1. Like Ibn Sina, he maintains that if the person does not believe in correctness of such primary propositions as the principle of impossibility of coincidence and negation of two contradictory affairs and do insist on his opinion, there will be no room for any kind of dialogue. Of course, the philosopher can pursue solving problems and removing concerns of the perplexed skeptic.
- 2. His answer to skeptics on the example of dream, probability of destruction of a person and creation of a similar one in a blink, that of hallucination of all human like those who suffer from psychic disease and consider unreal things real, and the like is that generalization of hallucinations of the insane and dreams to all human in all conditions is against sound reasoning.

Of course, he accepts possibility of error of man in sensible, as well as other, things and holds that such errors can be caused by various things such as habits, attachments to other people, and the like. However, this does not justify generalization of errors even to cases in which children and the insane also believe. One can reduce the possibility of error to minimum and attain the factuality successfully by observing rules of formal logic, analyzing errors, and solving them. Although he accepts influence of non-cognitive and contextual factors upon the knowledge, Khawaja maintains that there

is a cognitive criterion for correctness and incorrectness which can, above all contexts, judge truth or falsity of our beliefs.

- 3. Relying on the perspective of those whom he considers the people of insight, he challenges historically existence of some people really being sophists.
- 4. One important point which does not play a significant role in answering absolute skepticism but is helpful in solving lots of other epistemological problems and some of ambiguities mentioned above concerning error of senses is separation between sensory perception and judging it. In his opinion, sensory perceptions per se do not make mistakes; rather, that is the intellect's fault. For sensory perceptions are not propositional; they solely provide sensory images under certain determined circumstances - they do not judge. For example, if our eyes recognized a circle by watching a fiery object rotating fast in the darkness, or if a straight stick in the water is seen tilted, it means that the sense has seen it that way under that particular circumstance (considering the one who sees, the object, time, space, and the like); but whether that object with such characteristics exists in reality or not is the intellect's judgment which, through using sensory perception and linking it with other perceptions, determines whether that thing exists or not. Therefore, since perception has no judgments, there is no truth and falsity in that level and the error is intellect's fault. 46 Khawaja is probably the first Muslim thinker who has dealt with this discussion in this manner. Among philosophers who came after him, Allama Thabataba'i has taken this into serious consideration and has developed and completed it.⁴⁷

Mulla Sadra and Criticism of Skepticism

Mulla Sadra has been influenced by Ibn Sina, al-Razi, and Suhrawardi in investigation and criticism of skepticism. He has dealt with this in his two works of *Hashīyāt Ilāhiyyāt al-Shifā*' ⁴⁸ and *al-Asfār al-Arbā*'a. ⁴⁹

1. In encountering skepticism, he follows the very way of Ibn Sina and Suhrawardi, except in one point that he adds toIbn Sina's solution

⁴⁶ Al-Razi, *al-Mabāhith*, p. 12-15.

⁴⁷ Thabataba'i *Ūsūl-e Falsāfeh*, Vol. 6, p. 223-37.

⁴⁸ Sadra, *Hashiyat*, p. 38-42.

⁴⁹ Sadra, *al-Asfār*, Vol. 3, p. 444-47.

for the obstinate – i.e., the fire, pain, etc. – a psychological cure by a doctor. 50

- 2. While expounding three-fold causes of perplexity and skepticism mentioned by Ibn Sina (equilibrium of proofs,...), he adds a forth cause entitled fallacious syllogism. The skeptic says that we do not trust our perceptional instruments (sense, imagination, and intellect); hence, we doubt about all perceptions we have gained through our perceptional instruments being realistic. This is the very point mentioned by al-Fakhr al-Razi which Mulla Sadra recounts briefly, and concludes that none of the sense, imagination, or intellect can be trusted. Then, he repeats the very points said by al-Razi against that claim and asserts that he has taken this from "some learned people" by which he means al-Razi.⁵¹
- 3. In the discussion of equilibrium of proofs, he does not content himself with Ibn Sina's solution of notifying the skeptic about this particular case; rather, he maintains that intellectual level of such people should be raised through studying geometry, mathematics, logic, physics, metaphysics, and finally metaphysics in its most particular sense.⁵²

Given this, it seems that contrary to many other cases of philosophy, particularly epistemology, concerning which Mulla Sadra has presented innovations and novel ideas, in the criticism of skepticism he has contented himself with predecessors' attempts and added no notable point to this philosophical tradition.

⁵⁰ Sadra, al-Asfār, Vol. 3, p. 444.

⁵¹ Al-Razi, Al-Muhassal, p. 40.

⁵² Sadra, *al-Asfār*, Vol. 3, p. 447.

References

- Bahmanyar b. Marzban. Al-Tahṣīl. Tehran: University of Tehran, 1375
- Ibn Sina, Husain 'Abd Allah. *Ilāhiyyāt Shifā*'. Qum: Maktabat Ayatollah al-Mar'ashi, 1404
- -----. Burhan Shifa'. Qum: Maktabat Ayatullah al-Mar'ashi,1404
- Jawadi Amuli, Abdullah. Entezare Bashar az Din. Qum :Esra', 1387
- -----. Sarcheshme-ye Andisheh. Qum: Esra' 1384
- ----. Ma'refat Shenāsi Dar Qur'ān. Qum: Esra' 1384
- -----. Rahig-e Makhtum dar Sharh-e Hekmat-e Mote'āliyeh. Qum: Esra', 1386
- -----. 'Ain-e Nazākh (Tahrīr-e Tamhīd al-Qawā'id). Qum: Esra' 1386
- Pojman, Louise P. *Maʻrifat Shenāsi: Moqaddameh-yi bar Nazarieyye-ye Shenakht*, Translated by Reza Mohammadzadeh. Tehran: University of Imam Shadiq, 1387
- Razi, Fakhr al-Din. *Al-Muhassal*, dar: *Naqd al- Muhassal*. Tehran: Moasseseye Motaleaatie Daneshgahe McGill, 1359
- -----. Al-Mabāhith Al-Mashriqiyyat. Beirut :Dar Al-Kutub Al-Arabi, 1410
- Russell, Bertrand. *Masāel-e Falsāfeh*, Translated by Manouchehr Bozorgmehr, Tehran: Kharazmi, 1367
- Sanki, Howard, *Barresi-ye Panj Ravayat az Nesbigaraiy-ye Shenakhti*, Translated by Pirouz Fatoorchi, Faslnameye Zehn, No. 9 (1382)
- Suhrawardi, Shahab al-Din, *Muṣannafat Sheikh Eshraq*, Tehran, Pazjouheshgahe Olume Ensani va Motale'ate Farhangi,1373
- Sadr al-Din Shirazi, Mohammad, (Mulla Sadra)b, *Al-Hashīyāt'ala Ilāhiyyāt al-Shifā*', Qum, Bidar
- -----. Al-Hikmat al-Muta'āliyāt fi'l Asfār al-Arbā'at. Qum: Mostafavi, 1368
- Tabatabaee, Mohammad Hossain, *Nihayat al-Hikmat*. Qum : Moasseseye Nashre Eslami, 1423
- -----. *Ūsūl-e Falsāfeh va Ravēsh-e Realism.* Ba Talighe-yeMurtaza Mutahhari. Tehran : Sadra, 1382
- Tusi, Nasir al-Din, *Talkhīṣ al-Muhassal*. Tashihe Abdollah Nurani. Tehran : University of McGill and University of Tehran, 1359
- Al-Ghazzali, Abu Hamed. *Al-Munqīdh mn al-Zalāl*. Beirut : Dar ol Andelus, 1967
- Fatoorchi, Pirouz. "Nesbigaraee-ye Protogoras va Revayathaye Jadide An", Faslnameye Zehn. 5. (1381)
- Couplestone, Fredrick. *Tarikh-eFalsafeh.* Translated by Jalaloddin Mojtabavi. Tehran: Soroush, 1375

- Guthrie, W.K.C, d, *Tarikh-eFalsafeh-yeYunan*, Translated by Hasan Fathi. Tehran: No publisher, no year
- Gomperz, Theodor. *Motefakkeran-e Yunani*, Translated by Mohammad Hasan Lotfi. Tehran: Kharazmi, 1375
- Mesbah Yazdi, Mohammad Taqi. Amuzesh-e Falsafeh, Tehran, Beinolmelal, 1377
- Moore, J.A., "Borhan-e Alam-e Kharej", Translated by Manouchehr Badi'ee, *Nashriey Arganun*, No. 7_8 (1374)
- Mahdavi, Yahya. Shakkakan-e Yunan, Tehran: Kharazmi, 1376
- Miri, Seyyed Mohsen. "Emkan-e Marefat dar Quran-e Karim", *Isra*, No. 5 (1389)
- Klein, Peter. "skepticism" in J. Dancy and E. Sosa (Eds.) *A Companion to Epistemology*, Blackwell, 2010
- ----- "skepticism". In Edward N. Zalta (Ed.) Stanford Encyclopedia of Philosophy, 2010
- Boyd, Richard. "scientific realism". In Edward N. Zalta (Ed.) Stanford Encyclopedia of Philosophy, 2002
- Groarke, Leo. "Ancient Skepticism", In Edward N. Zalta (Ed.) Stanford Encyclopedia of Philosophy, 2010
- Khlentzos, Drew. "Semantic Challenges to Realism", In Edward N. Zalta (Ed.) Stanford Encyclopedia of Philosophy, 2004
- Miller, Alexander. "realism". In Edward N. Zalta (Ed.) Stanford *Encyclopedia of Philosophy*, 2010
- Pironet ,Fabienne and Spruyt, Joke. "sophismata" In Edward N. Zalta (Ed.) *Stanford Encyclopedia of Philosophy*, 2007
- Siegel, H. "Relativism" In J. Dancy and E. Sosa (Eds.) *A Companion to Epistemology* (pp. 428-30). Oxford: Blackwell, 1992
- Stich, Steven P. "Epistemic Relativism" In *Routledge Encyclopedia of Philosophy*, edited by Edward Craig. Vol. 3. New York: Routledge, 1999
- Swoyer, Chris. "Relativism" In Edward N. Zalta (Ed.) Stanford Encyclopedia of Philosophy, 2003