The Formation Of Knowledge
And Disputation (Al-Jadal) İn
Ghazâlî's Logic

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Abstract
Ghazâlî attaches great importance to logic and attracts attention to the significance of logic saying “the knowledge of one who is not acquainted with logic is unreliable”. The word 'logic' calls to minds the notions of conception (tasawwur) and assent (tasdiq). According to Ghazâlî, the notions of conception and assent are the bases of all sciences. In this sense, the five arts emphasized by Aristotle and many other logicians as the application areas of syllogism are based on conception and assent. By virtue of their significance in Ghazâlî's logic, this study is going to elaborate on the formation of knowledge and disputation (jadal) which is among the five arts.

Key words: Ghazâlî, knowledge, conception, assent, disputation, the five arts, topics, dialectical discourse.

Introduction
As well as being among the subject matters of logic, disputation is the title of one of the significant works in Aristotle's The Organon. Aristotle's works on logic are listed as follows: Categories, Peri Hermeneias, Prior Analytics, Posterior Analytics, Topica, Rhetorica, Poetica and Sophistici Elenchi. The latter five of these works are referred to as the five arts of logic. Of these, Posterior Analytics was named as Kitab al-Burhân, Topica was named as Kitab al-Jadal, Rhetorica was named as Kitab al-Khitabah, Poetica was named as Kitab al-shi'ır and Sophistici Elenchi was named as Kitab al-
Safsatah by Islamic logicians. Like Aristotle, most of the Islamic logicians surveyed the five arts as individual works or chapters. However, as regards Ghazâlî, it is seen that he mentions the five arts where needed instead of handling them as individual works or chapters. Of the five arts, Ghazâlî places the most emphasis on demonstration (al-burhân). While he deals with disputation, rhetoric (al-khitabah), poetry and sophistry (al-safsatah) briefly, he emphasizes the types of certain or uncertain knowledge. In this study, before handling Ghazâlî's views on disputation, I will deal with the meaning he attributes to logic and his views on the five arts briefly for better comprehension of his views on this topic. Also, as I examine his views on disputation, I am going to try to refer to how he describes disputation, the benefits of disputation (jadal) and the types of knowledge he uses in disputation primarily

1. Logic and Formation of Knowledge

According to Ghazâlî, logic is a science which distinguishes true definition and syllogism from false definition and syllogism, certain knowledge from uncertain knowledge. Logic is the measure of all other sciences and, even, the only way to gain access to fresh knowledge. Ghazâlî, points out a close relationship between logic and other sciences. To him, the relationship between logic and other sciences is not ordinary. Rather, it is like those between poetry and meter; accepted inflection (al-irab) and grammar (al-nahiv). In other words, just as poetry would be deficient without measure and accepted inflection would be deficient without grammar, a science with no correlation with logic is unimaginable.

In the introduction to his work al-Mustasfa, Ghazâlî writes “this introduction is an introduction to all sciences and the science of those who have not comprehended it thoroughly is unreliable” Ghazâlî clearly demonstrates the significance he attributes to logic which he considers as one of the six disciplines of philosophical sciences. Hereby, Ghazâlî helped Aristotle's formal logic to gain recognition in the Islamic world and enabled its teaching in madrasahs starting from his era until recent past. His saying which decreed “the science of those who have not comprehended logic is unreliable” made it possible for logic which had never been accredited until then to become

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1 Al-Ghazâlî, Magasid al-Falâsifah, (ed. Suleyman Dunya), Egypt, 1961, p. 36.
3 Al-Ghazâlî, Mi'yar al-Ilm, (ed. Suleyman Dunya), Cairo, 1961, p. 59-60.
4 Al-Ghazâlî, al-Mustasfâ, Egypt, h.1322, V. I. p. 10.
5 Al-Ghazâlî, al-Munqidh min al-Dalâl, p. 38. Ghazâlî takes philosophical sciences as arithmetic, logic, physics, metaphysics, theology, politics and ethics. See same work.
the basis of Islamic science⁶. In fact, by saying “the science of those who have not comprehended logic is unreliable”, Ghazâlî not only changed the inimical attitude towards logic but also stressed necessity of teaching it.

According to Ghazâlî, the most benefit of logic can be listed as follows:

a) It distinguishes the true/valid knowledge from false knowledge.

b) Renders those who want to reach true knowledge able to hand down correct decisions in conception (tasawwur) and assent (tasdiq).

c) Since logic is the only way to acquire true knowledge, it helps utilizing the knowledge.

d) With its knowledge-acquiring feature, logic helps attain eternal bliss.

e) Reveals the reliability of human mind against sensual deceptions.

f) In addition to the fact that it facilitates acquiring the unknown through the known, logic prevents the individual from running into contradiction⁷.

According to Ghazâlî, one of the basic aims of logic is distinguishing the intellectual things from sensual things and, as regards creed, distinguishing demonstration (al-burhân) from dubiousness⁸. Additionally, logic demonstrates the methods of reasoning. It is not possible to attain all unknown by means of the known. However, the ultimate way to enlighten the unknown is taking the known as basis. This is facilitated by logic. Ghazâlî states that logic is not only a method of attaining the unknown by means of the known but also an agent distinguishing the truth (knowledge) from the false (knowledge)⁹. Moreover, logic shows how the mind can reach the unknown through certain knowledge¹⁰.

According to Ghazâlî all sciences are based on logic because sciences are basically consisted of conception and assent which are two main subject matter of logic. While conception deals with notions that have not become judgment and images of objects in mind, assent is concerned with the transformation of the parts of the objects with images in mind which come together and become judgment. In this sense, logic is made up of both conception and assent. That science originates merely from conception is out of the question. Alongside the image of an object in the mind which is, in other words, the quality of the notion, there must be a subject and a link between


⁸ Al-Ghazâlî, Mi’raj al-sâlikîn, p. 110.

⁹ Al-Ghazâlî, Maqasid, p. 35.

¹⁰ Al-Ghazâlî, Mi’yâr, p. 60.
the subject and the object. For Ghazâlî, conception is the comprehension of essences (zât) signified by a single utterance in the way the meaning of words like object, tree, angel, jinn etc. are comprehended via scrutiny and understanding. As for assent, it is cognizing such judgments (al-hukm) as “The Universe is created in time”, “He who obeys to God shall be awarded”, “Sinners shall be punished”.

Every judgement inevitably requires two conceptions. He who does not comprehend “the Universe” and “created in time” individually cannot confirm or deny the proposition “The Universe is created in time”. If “The Universe” or “created in time” are replaced with several letters bearing different meanings or no meaning to create a judgment, this judgment can be neither confirmable nor deniable. Because, although the topic is formed by a verb and a link, a provision such as “The Universe is time in created” neither bears a meaning nor offers an understandable expression. Naturally, such an incomprehensible expression cannot be denied or rejected.

According to Ghazâlî, both conception and judgment are divided into two as requiring no thinking endeavor for comprehension and requiring thinking endeavor for comprehension. While Ghazâlî exemplifies the conception that is comprehensible without any endeavor with such notions as entity, object (al-shay), etc., he exemplifies the things comprehended via endeavor with notions like spirit, angel, jinn, etc. Likewise, Ghazâlî exemplifies the assents that require no endeavor to comprehend with propositions like “two is bigger than one”, “objects that are equal to another object are equal to each other as well”, “something cannot be right and wrong at the same time” and points out that such propositions have innate in human mind. Ghazâlî expresses that a mental effort is required for the assent of propositions like “The Universe is created in time”, “Doomsday is awaiting the humankind”, “All sins and worships shall be requited”.

Ghazâlî states that notions comprehended without any mental endeavor do not need any definition. However, attaining knowledge about notions comprehended through mental effort require definition. For example, if one does not know what “human” is, they initially must ask “what is human?” and for this question to be able to be answered, that human is “reasoning” and is “a living thing” must be known. Once it is known that human is “reasoning” and is “a living thing”, the definition “human is a reasoning living thing” can be made. Thus, the close kind and the close distinguishing that must be given in a full definition is mentioned. If the close genus and the close distinguish-

ing are not included in definition, it is a deficient definition. In other words, it is not genus proximum and differentia specificae.

Ghazâlî puts forward that reasoning is not necessary for the cognition of innate assents. However, we need full reasoning so as to be able to comprehend not primary (al-awwali) propositions.

For example, if we do not acknowledge the proposition “The universe is created in time”, we will encounter the following:

The Universe is conceived.

All conceived things are created in time.

So, the Universe is created in time.

“The universe is created in time” cannot be clearly comprehended unless it is antecedded by a assent like “All conceived things are created in time”. So, to attain knowledge about something we do not know, what is known must be utilized. While in conception (tasawwur), other notions are needed to render an unknown notion known; in assent, two propositions are needed to cognize an unknown proposition in which case it is seen that every piece of information can only be attained as long as there is a premisse information. However, this is not never-ending. It has to end with an initial information which is the one perceived by the mind without any reasoning or endeavoring.¹²

2. The Five Arts

Ghazâlî handles the five arts referred to as the application area of logic by Islamic logicians in terms of the bliss it offers to the humanity, especially in his work Mi’raj al-sâlikîn. Ghazâlî who differentiates bliss as unconditional (mutlaq) and conditional (muqayyet), states that sophistry (al-safsatah), rhetoric (al-khitabah), disputation (al-jadal) and poetry provides conditional bliss and the benefits they can offer are earthly and ephemeral but, if desired, one can utilize them to attain ethereal bliss like the prophets once did.¹³ For him, conditional bliss is temporal and dependent on situations while unconditional bliss originates in the worldly life and extends to the eternity¹⁴.

Ghazâlî metaphorizes the five arts with gold. He states that gold goes through five different phases. Each one of the five arts can be correlated with one phase as follows:

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¹² Al-Ghazâlî, Maqasid, p. 34-35.
¹³ Al-Ghazâlî, Mi’raj al-sâlikîn, p. 110.
¹⁴ I.b.i.d., p. 108.
1. Genuine, pure gold. According to Ghazâlî, genuine, pure gold is the equivalent of demonstration (al-burhân) of the five arts. This phase symbolizes the correctness and certainty of the premisses. The syllogism made up of such premisses is called demonstrative (al-burhâni) syllogism. In other words, demonstrative syllogism is one that reveals the reasons of the presence of the conclusion and the assent of it. For Ghazâlî, demonstration means that the premise is unwavering, doubtless, absolutely correct and certain. Demonstrative knowledge is the one with no contradiction. A human being can neither diverge from it nor even think that diverging from it is possible.

2. Pure gold which is so slightly amalgamated that only most scrutinizing eye can detect, is not as pure as genuine, pure gold. Slightly amalgamated gold corresponds to disputation (al-jadal) (=topic). It consists of premises with flaws that can be detected only by the most captious eyes. This syllogism consisting of such premisses is called disputatious (jadalî) syllogism.

3. Gold which is visibly amalgamated with copper which can be detected by every scrutinizing and even not-scrutinizing eye. This carat of gold symbolizes rhetoric. Rhetoric consists of suppositional premisses that set forth prevailing suppositions. The syllogism established upon such premisses is named rhetorical (al-khitabi) syllogism. In other words, as Ghazâlî puts forward, “rhetorical syllogism is one that is made up of the suppositional (zannî) premisses by which the mind can realize its contradiction and easily detect its flaws.” Rhetorical syllogism does present certainty nor does it bind.

4. Nugget that is coated with a thin layer of gold; it does not contain any gold within and even the most scrutinizing eye can not realize that it is not gold. This carat of gold corresponds to demagogy (al-mughalatah) of the five arts. Rhetoric consists of premisses which are neither propable (zanni) nor certain but put into a form mixed with certainty (yakiniyat). The syllogism made up of such premises is called demagogy and sophistical (al-mughalatah ve al-safsatah) syllogism. Such analogies seek nothing but demagogy and sophistry. Demagogy is performed with premisses that are incorrect but can easily be assumed to be correct. They aim at deceiving and

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16 Al-Ghazâlî, Maqasid, p. 120.
17 Al-Ghazâlî, Makasid, p. 101; al-Mustasfâ I, p. 38
18 Al-Farâbî, Ihsâ”ulûm, p. 64.
20 Al-Ghazâlî, Maqasid, p. 100; Mi’yâr, p. 184.
22 Al-Ghazâlî, Maqasid, p. 101; Mi’yâr, p. 184.
unrightfully overwhelming the adversary. Ghazâlî states that demagoguery is “forming up syllogism by drawing up untrue evidence (al-hujja) which appear to be true so as to overcome one's adversary taking advantage of their lack of knowledge.” In other saying, “the syllogism which is made up of premisses that are neither propable (zanni) nor certain but put in a form mixed with certainty is called demagoguery and sophistry syllogism.”

5. Gold which so amalgamated that everyone can realize. This carat of gold corresponds to poetry of the five arts. Poetry is made up of premisses which are proverbial to everyone. Although the incorrectness of these premisses is known by everyone, the imagination of the self goes towards such premisses. The syllogism gained from these premisses is called *poetical (şiirî) syllogism.* Poetry is “the syllogism which consists of the premisses that cause the soul to get relaxed or bored.” In other words, poetry is “syllogism based upon fictious (mukhayyalât) premisses.” Poetic syllogism consists of things that help one concept any situation or entity included in the topic as superior or inferior. In this sense it bears no science or supposition (zann). However, even though the addressee knows that it is not true, they use it to lead their adversary towards desire, hatred, generosity, meanness, dismaying and encouraging. Thus, poetic syllogism makes a weird, undeniable effect on the human soul.

As seen, Ghazâlî explains the five arts in five individual stages correlating each to one of five states in which gold can be found.

As expressed above, every syllogism consists of some premisses according to whose situation the syllogism yields a certain, suppositional (zanni) or incorrect result. According to Ghazâlî the five arts which are demonstration (burhân), disputation (jadal), rhetoric (al-khitabah), poetry, sophistry (safsatâh) consist of following premisses: 1. Primary propositions (awwaliyât), 2. Things that perceptible through the senses (al-mahsûsat), 3. Unanimous reports (al-mutavatirat), 4. Imaginaries (al-wahmiyyat), 5. Accepted data or premises by one’s adversary in a discussion (al-musallamât), 6. Probabilities (al-zanniyat), 7. The empirically tested premises (al-mujarrabât), 8. Well-known premises (al-mashhûrât), 9. Confusion between similar things (al-mushabbihat), 10. Disputes and deceptions (al-mukhayyalât), 11. Accep-

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24 Al-Ghazâlî, *Maqasid,* p. 101; *Mi’yâr,* p. 185. Sophistry, is the syllogism made through vehmiyyat. If it is made knowing that it is incorrect, then it is called demagoguery.
tables (maqbûlât), 12. Seemingly renowned, 13. Assents that the mind cannot abstract in middle terms and analogies (al-fitriyyât). 30

Ghazâlî puts the premisses used in the five arts into two groups: certain and non-certain. Certain premisses are primary propositions, things that perceptible through the senses, the empirically tested premisses, innumerable narrations, known by an omitted middle (al-fitriyyat) which are assents that can be known by means, not by themselves and the intuited premisses (al-hadsiyyât). Knowledge of this type is known as the premise of disputation. Uncertain premisses are imaginaries, musallamât, probabilities, well-known premisses, al-mushabbihât, al-mukhayyalât, acceptables and seemingly reknown. 31 Of these types of knowledge, well-known premisses and musallamât are used for disputation (jadal), imaginaries (al-wahmiyat) and muşabbihat (resemblance or similarity) are used for sophistry (al-safsatah), seemingly reknown, probables (al-maznûnât) and maqbûlât are used for rhetoric and al-mukhayyalât is used for poetical syllogism. 32

After presentation of logic and the five arts from Ghazâlî’s point of view, we can pass on to disputation and the types of knowledge used in it.

3. Disputation (jadal =dialectics)

Disputation is the syllogism that consists of well-known premisses. 33 According to Ghazâlî, as expressed above, the syllogism that is made up of premisses with flaws that can be detected by a scrutinizing eye is called disputatious (jadali) syllogism. 34 In other words, disputation is the syllogism that is utilized in “restraining disputes and deceptions (muhayyalat) thus, overwhelming the adversary.” 35 Disputatious syllogism uses premisses that consist of near certain ideas. Near certain ideas are seemingly accepted by everyone; without a rigorous reasoning, the mind cannot put forward the opposite of these ideas. 36

31 See Ghazâlî, Mi’yâr, p. 130, 202.
32 Al-Ghazâlî, Maqasid, p. 110-112.
33 Al-Ebheri, Isagoge, p. 6.
34 Al-Ghazâlî, Maqasid, p.101; Mi’yâr, p.184; al-Mustasfâ, p.38.
36 Al-Ghazâlî, Mi’yâr, p.184.
According to Ghazâlî the aim of disputation is overwhelming the adversary via using the renown. Ghazâlî refers to the 6th Verse of Jum’a Sura of the Quran. This verse includes the following discourse of God to the Jews:

Say: “Oh Jews, now that you argue that you, among all people, are the real followers (friends and beloved subjects), do desire death, if you are frank, do this without hesitation.”

What is pointed out in this verse is the desire of the lovers to join their beloved. Because, it is commonly known that a lover wants to come together with their beloved. In relation with this, the following syllogism can be made:

If you want to join Ahmet, you are his friend (1st premise)

It is seen that you want to join with him (2nd premise)

So, you are his friend (conclusion)

Taking the verse above into consideration, the following syllogism can be made regarding the Jews:

If the Jews desire to join God; they are his friends.

But they do not want to join him (die).

So Jews are not God's friends.

Ghazâlî states that Prophet Abraham's answer to Nimrod is another example for disputatious (jadali) syllogism. Abraham said to Nimrod who had been arguing with him about greatness “God makes the sun rise from the East, can you make it rise from the West?” Prophet Abraham's challenging can be put into syllogism form as follows:

My God makes the sun rise (1st Premise)

Who makes the sun rise is divine. (2nd Premise)

So, my God is divine. (Conclusion)

As seen, Ghazâlî expresses that disputation (jadal) consists of renowned knowledge and points out that its main purpose is to overwhelm the adversary. Disputation consists of knowledge derived from well-known premises and al-musallamat. However, if needed be, other knowledge used for attaining demonstration can also be utilized in disputation. Here, we are going to

37 Al-Ghazâlî, Mi’raj al-sâlikîn, p. 109.
38 Quran, Jum’a, 6.
39 Quran, al-Bakara, 258. Al-Ghazâlî, Mi’raj al-sâlikîn, p. 110; Al-Qistâs al-mustaqîm, Cairo, 1900, p. 43-44.
deal with the types of premisses used in disputation, not those used in demonstration.

3.1.1. Well-known premises: Well-known premises are “the propositions trusted thanks to their renown and the common point of view.” In other words, “they are opinions confirmed by virtue of everyone, the majorities or virtuous societies.”

For example, propositions such as “Lying is evil”, “Making the thirsty suffer is evil”, “Giving thanks to those who serve food or saving people from death is good”, “Justice is necessary” are well-known premises. Conclusions derived from well-known premises can sometimes be right or wrong. Ghazâlî informs that propositions from well-known premises can form as follows:

- Knowledge derived from well-known premises is shaped as a result of repeatedly hearing from tutors, family elders and well-esteemed people. This repeatedly-heard knowledge permeates to beliefs in such a manner that they are considered as conclusions of reason. That prostration is considered as 'good'; sacrificing animals to gain God's grace are examples of this.

- Favoring mutual helping, living in harmony and peace carry with them the recognition of renowned knowledge. “Feeding the hungry and making wishes for well-being widespread is good”; “cursing, hatred and showing ingratitude to blessing is bad” are examples of this.

- Propositions derived from well-known premises may originate from compassion and inherent kindness as well as they can confirm accepting renowned notions like courtesy, cowardliness and pudicity which are inherent. That is the reason why some people find it ill to slaughter animals and avoid eating them because when considered with reason alone, it can be said that slaughtering an animal is bad. Had Islam not decreed that animals were at humanity's disposal and that they could be sacrificed, the understanding that slaughtering animals is bad could have been accepted by the majority of people and become a widespread tendency. Thus, al-Mu'tazila and some other schools have made different approaches due to the pain the animals suffer while their throats' are slit.

- Sometimes, the proposition is true but it takes some time to realize its truthness. The mind keeps repeating the trueness and, subsequently, this proposition settles in the mind. For example, a person who says “Unanimous reports (tawwâtur) requires no science/knowledge because individual (âhâd)
pieces of information require no science (knowledge). Now that the totality of individual pieces of information adds nothing to the reports of one person (âhâd), the totality of them also requires no science.” is an example of above-mentioned situation. However, since one person's word (the information he brings) requires no science when taken into consideration individually, this reasoning is wrong. In the case of unanimous reports, the information brought by hundreds, even thousands of people is present so it cannot be held equal to a piece of information brought by one single person. When this difference between unanimous reports and reports of one person piece of information is not regarded, the syllogism mentioned is confirmed as absolute. Naturally, this leads to a wrong conclusion. According to Ghazâlî, knowledge derived from well-known premises can vary in accordance with the situations the nations, cities and persons are in. For example, a whole clan can have one well-known premises that is different from those of others while a proposition that means nothing to doctors can mean a lot to carpenters and, likewise, a proposition that means nothing to the carpenters can mean a lot to the doctors.

Ghazâlî puts forward that the analogies by Islamic theologists and most of the Islamic canonists are based on “renowned premisses” they acknowledge due to their renown. Thus, their analogies have come to contradictory conclusions. Depending upon research or evidence, premisses originating from well-known premises can sometimes be correct but they are thought to be absolutely correct. For example, the proposition “God is almighty” is thought to be correct since it is renowned. Yet, this is not a correct proposition because God is not mighty enough to create his peer. So, “God is mighty enough to do everything that is possible” is a better proposition. Likewise, it is said “God knows all”. However, it is not possible for God to know that a being equal to him exists. Mentioned renowned propositions express that putting forward what is logically impossible is not a matter of might. God does not create what does not comply with his justice, mercy and profundity because his might functions in conjunction with his other attributes, not independently.

Ghazâlî also makes a point on the difference between the propositions originating from primary proposition used for attaining demonstrative knowledge and the propositions originating from well-known premises used for attaining disputatious knowledge and defines this difference as follows:

45 Al-Ghazâlî, al-Mustasfâ I, p. 48; Mihakk, p. 108.
When a person who is wise but not educated; who has not gained the nature to like or dislike something and been let alone is given renown propositions like “Murdering is bad”, “Saving a person's life is good”, it is possible that he will reject them. Yet, against such propositions as “Something cannot be right and wrong at the same time”, “two is more than one” he cannot waver because such propositions are from primary proposition. In this sense, the most apparent difference between well-known premises and primary proposition is that the propositions originating from well-known premises can be rejected and the propositions originating from primary proposition cannot be rejected by anybody.

3.1.2. Premises accepted by one’s adversary in a discussion (al-musallamât): While musallamat is dealt with in al-Mustasfâ, Mihakk and Mi’yar al-Ilm as a separate chapter, it is taken as one of the proposition types of the premisses used in the five arts in Maqasid al-falasifah. Musallamât consists of propositions acknowledged by the adversary or which are renowned only between two adversaries. Such propositions are used only between two adversaries. Musallamât separates from renowned propositions only in terms of being general or private. Renowned premise is acknowledged by everyone while musallamât is acknowledged only by the adversary.

In a debate related with musallamât the probables (al-maznunât) on which two adversaries debate or the things resembling well-known premises are either established afterwards (vaz-i) or through faith. However, a thing may be acknowledged via hearing constantly and this leads to accustoming and the self concludes that it is right. When explored, it can be seen that the propositions in this group are not based upon supposition. Resulting from this, the analogies generating from these may not bear correct knowledge. However, it can be possible in musalamât that the premisses used by two adversaries are correct. In this sense, if the premisses used in musalamât are made up of correct knowledge, they can be used for judicial matters/alfiqhiyyat (syllogism made up of premisses formed with suppositional knowledge).

3.2. The Benefits of Disputatious Syllogism

According to Ghazâlî, disputatious syllogism offers some benefits though not to such extend that demonstrative (burhânî) syllogism offers because people who cannot be convinced by demonstrative evidence can be convinced by disputatious syllogism. Indeed, the level and manner of perception

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48 Ghazâlî, Maqasid, p. 106; Mi’yâr, p. 197.
49 Al-Ghazâlî, Maqasid, p. 107.
50 Al-Ghazâlî, Mi’yâr, p. 199.
varies from person to person. Stating that disputatious syllogism offers many benefits, Ghazâlî lists some of them as follows:

a. Confuting innovative, strayed people who do not follow the path of righteousness; who is incapable of attaining the knowledge of righteousness through demonstration (burhân) using evidence and revealing their ill thoughts.

b. Influencing person with an above-average level of knowledge who can not be convinced by preaching and is not sophisticate enough to investigate the terms of demonstrative (burhânî) syllogism using disputatious analogies and leading him to the way of righteousness.

c. Students of medicine, geometry and other particular sciences (el-ulumu'l-cüzziye) will not permit them to incline to demonstration and learn the premisses and the principles of these sciences. So, until they learn how to learn through demonstration, their favor must be gained with disputatious analogies whose premisses are among the renown.

d. One of the features of disputatious syllogism is that it permits the solution of a problem and its contradiction emerge simultaneously. When this occurs, the problematic aspects of both can be thought over and the real complexion of the matter can be revealed.\(^{51}\)

Now that disputation does not grant the humans precise knowledge, it offers probable conclusions. However, since its aim is to overwhelm the adversary via statements, it is a commonly used method in many sciences, especially logic.

Philosophers other than Ghazâlî have also accentuated the benefits of disputatious syllogism and its areas of usage. For example, Farâbî, states that disputatious sayings are used for two purposes:

a. They are the questioner's using renown sayings accepted by all people to overwhelm and gain supremacy upon the responder when he sees that the responder is appealing to renown sayings for defense or victory.

b. They are sayings used by a person to form a strong supposition related with an idea in him or in somebody else that he wants to correct. Although these sayings are not certain knowledge, the person thinks that they are.\(^{52}\)


\(^{52}\) Al-Farâbî, *Ihsâ’ al-ulûm*, (edited by Osman Amin), Cairo, 1949, p. 64.
Conclusion

Ghazâlî regards logic as a measure of distinguishing the right from the wrong and points out that logic is a necessity for all sciences no matter whether they are religious or not. For him, logic is based on assent and conception. In this sense, logic is the foundation of all sciences. Our knowledge based on notions and propositions are divided into two as innate and willing. From willing and non-willing notions, willing and non-willing propositions; from propositions, reasoning originates. Five universals which are demonstration, disputation, rhetoric and poetry make up the area of application of reasonings. In this regard, every single one is valuable in terms of the significance of aimed knowledge. Ghazâlî deals with disputation in that it provides bliss. Disputation ensues demonstration in terms of value because it provides suppositional knowledge and aims at overwhelming the adversary while demonstration leads to certain knowledge. Disputation is made up of renown knowledge and musallamât which is the knowledge acknowledged by only one of the adversaries. According to Ghazâlî, neither renowned knowledge nor the knowledge originating from musallamât are certain. It can only convince the adversary. For this reason such knowledge are important though not as important as that used in demonstrative syllogism.