

Ibn Taymiyya's Criticism of the Syllogism

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Abstract

The purpose of this study is to examine Ibn Taymiyya's criticism of Aristotelian logic, and to test the arguments he raises against it, as well as the theory he proposes as an alternative.

Ibn Taymiyya tries to prove that Aristotelian logic cannot contribute to knowledge because it is based on metaphysical foundations. He raises arguments that are intended to expose the contradictions of Aristotelian logic. These arguments are based partly on the principles of relativity and skepticism, and partly on empirical presuppositions.

Ibn Taymiyya proposed the use of analogical reasoning (*qiyās al-tamthīl*) which is a type of evaluation and measurement based on the comparison between particulars, or the relations between two similar or dissimilar things. It can be seen that the most important and decisive thing in this relation is the common attribute that links two particular occurrences. Therefore, this inference deals with the relations between things and the causal connections between them. This is expressed in the research method used in the Islamic juridical sciences, which are causal methods, such as: the coextensiveness and coexclusiveness (*ṭard wa-ʿaks*), coextensiveness-cum-coexclusiveness (*dawarān*), and classification and successive elimination (*al-sabr wa l-taqṣīm*).

Introduction

Contrary to the accepted view that the philosophy of Ibn Taymiyya (1263–1328) neglected scientific thought and based itself on the principles of religion as sacred and indisputable, I would like to present an essentially different view and try to emphasize that his criticisms were based on rational arguments that reflect systematic and consistent intellectual thought. Although Ibn Taymiyya is considered as one of the great sages of Islamic law, he separated the standard metaphysical beliefs of religion from the empirical investigation of the phenomenal world that concerns things that change and are indeterminate.

It may be said that, to a large extent, modern research has been satisfied with a partial explanation or theory on the subject of criticism against logic. W.B. HALLAQ published a book called *Ibn Taymiyya Against the Greek Logicians*,¹ which is a translation of the book by *Jalāl al-Dīn al-Suyūṭī* – “*Jahd al-Qarīḥa fī Tajrīd al-Naṣīḥa*”, and which is, in itself, a summary of Ibn Taymiyya’s book “*al-Radd ‘alā l-Manṭiqiyyīn*” (Answer to Logicians). The book contains an important introduction that deals with the criticism against logic and footnotes that explain and interpret the logical and philosophical concepts of the book. In addition, al-Nashshār devotes a chapter in his book to “*Manāhiḡ al-baḥṡ ‘inda Mufakkirī l-Islām*”² (Methods of Research Among Muslim Philosophers) in which he presents the views of Ibn Taymiyya regarding logic and explains them.

Therefore this study will deal with the subject from the philosophical viewpoint and in a comprehensive manner regarding the subject under review – Aristotelian logic – both critically and in connection with the theoretical standpoint of Ibn Taymiyya which is proposed as an alternative to Aristotelian logic.

The criticism of Ibn Taymiyya against Aristotelian logic is related to two main logical subjects: definition and syllogism. This article will focus on his criticism against the logical syllogism. According to Ibn Taymiyya, the syllogism cannot contribute to the advancement of knowledge because of the logical rules that restrict it and the metaphysical components inherent within it. Moreover, the Aristotelian syllogism does not reveal anything since it repeats what is known, and therefore the syllogism is unable to achieve true judgment. In his view judgment can be obtained through various methods and not only through the syllogism:

- a. “Judgment (*taṣḍīq*) cannot be obtained except through syllogism”. Ibn Taymiyya does not accept the middle term, which is regarded as a necessary component in a syllogism. He raises arguments against the necessity of the two premises in the syllogism. In his opinion, one can reach the conclusion without the need for a middle term or by limiting the syllogism to only two premises, but that the conclusion can be reached by means of one, two, or more premises, since this is relative and dependent upon the intellectual level of people.

¹) W.B. HALLAQ, *Ibn Taymiyya Against the Greek Logicians*, Clarendon Press: Oxford, 1993.

²) ‘Alī Sāmī al-Nashshār, *Manāhiḡ al-baḥṡ ‘inda Mufakkirī l-Islām*, Dār al-Ma‘ārif, Egypt, 1966.

- b. "The syllogism contributes to achieving judgment". Ibn Taymiyya recognizes the validity of this proposition since the syllogism, which is composed of two premises and one conclusion. Despite the recognition of the validity of the syllogism from the formal aspect, people do not need the syllogism and do not reach the desired end because of its lengthy method and difficulties. Moreover, everything that can be known through the syllogism can be known without it, while things that cannot be known without syllogisms cannot be known through a syllogism. Thus the syllogism in Ibn Taymiyya's opinion is a lengthy thought process that is tiresome and unnecessary.

In spite of the criticism, one should not assume that Ibn Taymiyya was against logic in general. He himself made use of logical arguments in his criticism of Aristotelian logic, and even the doctrine he proposes is essentially logical. It is important to realize that the concept of logic was applied only to Aristotelian logic, and therefore the theoretical principle he formulated was not regarded as logic. According to T. STREET: "A change in attitude came about in the twelfth century: It should be known that the early Muslims and the early speculative theologians greatly disapproved of the study of this discipline. They vehemently attacked it and warned against it. They forbade the study and teaching of it. Later on, ever since Ghazālī (d. 1111) and Fakhr al-Dīn al-Rāzī (d. 1210), scholars have been somewhat more lenient in this respect. Since that time, they have gone on studying logic, except for a few who have recourse to the opinion of the ancients concerning it and shun it and vehemently disapprove of it."³

As an alternative, Ibn Taymiyya proposes the analogical reasoning (*qiyās al-tamthīl*), which is based on the experiential study of the particular. This means that he deals with the comparison between two particulars in which the first is a proven case while the second is a new situation that is measured in relation to the first. This theory is based on experience acquired through observation and on inductive judgment through consistent examination of phenomena. It investigates the causal connection between things and focuses on the attributes of objects and not their essences, since it is difficult to reveal the essential nature of things. Therefore the investigation of attributes can be made, in his opinion, by means of empirical tools based on experiential principles, such as causality and the necessary connections between things.

³) T. STREET, "Arabic and Islamic Philosophy of Language and Logic", in: *The Stanford Encyclopedia of Philosophy*. The Center for the Study of Language and Information (CSLI), 2008, p. 14.

Ibn Taymiyya criticizes Aristotelian logic with the intention of bringing it closer or adapting it to the epistemology of the Islamic religious sciences. This rapprochement is made in three ways:

- a. By broadening the logical syllogism. He opposes the laws that restrict the syllogism to two premises and a conclusion, and lays stress on the contents of the syllogism and not its form.
- b. By applied logic. He tries to establish an applied or practical logic in contrast to abstract logic. This approach corresponds to the Muslim *fiqh* science, which is a practical and applicable science that deals with the sphere of practical life.
- c. By basing logic on the principles of Muslim religious law. Ibn Taymiyya did not see any opposition between logic and religion, because religion does not prescribe a specific and exclusive method for thought. The scholar can create the appropriate tools of thought depending on his creative abilities and his intellectual development.

The Aristotelian Logical Syllogism

In his *Prior Analytics*, Aristotle analyzes arguments according to their logical structure, that is to say, in accordance with the figure and mood of the syllogism. This is considered as Aristotle's main contribution to logic. On the other hand, in his *Posterior Analytics*, he deals with the demands of proof.⁴ This means that he studies the syllogism with regard to its matter or content, its composition from true and primary precedents. Aristotle says that:

“We know everything through proof. By proof I mean an information-providing syllogism, and by information-providing I mean the one through which we gain knowledge. If my assumption is correct about the nature of knowledge, the proven knowledge must necessarily be true, primary and immediate, better known and prior to conclusion. The conclusions relate to proven knowledge like cause and effect. If these conditions are not upheld, the proof will not correspond to the conclusion. The syllogism may exist without these conditions, but such a syllogism, which is not an information-providing syllogism, will not be regarded as proof”.⁵

⁴) William and Martha KNEALE, *The Development of Logic*, Oxford, 1962, p. 24.

⁵) Aristotle, *Posterior Analytics*, Bk.1, Ch.2, 71b, 20–25.

This definition of syllogism has been subjected to various criticisms by Muslim logicians and also by modern logicians, because this definition is wider than its application by Aristotle himself.⁶

The various syllogistic forms of Aristotle and his disciples are restricted to a more limited range than the definition. In addition, the definition is appropriate for syllogisms composed of more than three terms, and does not maintain the relations between the subject and predicate in the syllogism as set out by Aristotle and his disciples. Aristotle also speaks about the syllogism in his book *The Topics*. He thinks that the dialectical syllogism should begin with opinions that are possibilities accepted by society⁷ – that is to say, the premises of dialectical arguments must be opinions that are acceptable and generally agreed upon by all people or by most of them in order to convince those who are in opposition. The premises of a dialectical syllogism are possible and not necessary.

In his *Prior Analytics*, Aristotle defines the syllogism as a relationship between sentences, certain things being stated, something other than what is stated follows of necessity from their being so. He distinguishes between two kinds of syllogisms: the perfect syllogism which needs nothing other than what has been stated to make plain what necessarily follows; a syllogism is imperfect, if it needs either one or more propositions, which indeed the necessary consequences of the terms set down, but have not been expressly stated as premises.⁸

From this comes the dependence of an assertion on another assertion or other assertions. The reference is to two kinds of inferences. In the first kind, in order to derive one assertion from another we need a third proposition that mediates between the two. In the second kind the inference is the one in which we derive one assertion from another without the need of a third proposition. The inferences of the first kind are mediated inferences, or syllogisms that have a special form, while the second kind of inferences are called unmediated inferences.

The inference is correct with regard to its “matter” (content) when the proposition or propositions from which the conclusion of the inference is

⁶) Some of the Muslim theologians opposed Greek logic such as Ibn ‘Ukayl (d. 1119), al-Mazārī (d. 1141), al-Qushayrī (d. 1072), al-Ṭartūshī (d. 1126), Ibn al-Ṣalāḥ (d. 1245), al-Nawawī (d. 1234). There were also various Western philosophers who criticized Aristotle’s syllogism such as John LOCKE, J. S. MILL, Bertrand RUSSELL, and Ludwig WITTGENSTEIN.

⁷) Aristotle, *Topics*, Bk. 1, Ch. 1, 100b, 20–25.

⁸) Aristotle, *Prior Analytics*, Bk. 1, Ch. 1, 24b, 20–25.

derived is correct, and also when the process of derivation is done according to rule without having to consider whether the propositions from which it is derived are correct or incorrect.

From this we may assume that the derivation process may be correct and done properly, while the proposition derived may be incorrect since the propositions from which this was properly derived were incorrect. The material or content accuracy of the inference includes within it the formal accuracy, but not vice-versa. In syllogistic theory we only deal with the formal accuracy or inaccuracy of the syllogisms.⁹

The Syllogisms

The syllogism is characterized by two laws:

- a) Every syllogism must include only three terms
- b) Every syllogism must include three propositions

The syllogism is an argument in which the conclusion is derived from two premises. The perfect syllogism is an argument composed of three absolute propositions that include exactly three terms, each one appearing in two of the main propositions. The middle term links the major term with the minor one, and therefore there is a conclusion that is included in the premises, since the middle term is included in the major premise and contains the conclusion and stands between them. The middle term links the major term with the minor one, and therefore there is a conclusion that is included in the premises, since the middle term is included in the major premise and contains the conclusion and stands between them. Aristotle says: "I call that term middle which itself contains another in itself: in position also this comes in the middle".¹⁰

Regarding the perfect syllogism, it is said that it has a standard form when its premises and conclusion are all absolute propositions of standard form and arranged in a certain order. The conclusion of a syllogism with a standard form is an absolute proposition with a standard form that includes two of the three terms of the syllogism. The predicate term of the conclusion is called the major term of the syllogism and the subject term of the conclusion is called the minor term of the syllogism.

⁹) S. BERGMAN, *Introduction to Logical Theory*, Jerusalem, Mossad Bialik, 2000, p. 282. (Hebrew)

¹⁰) Aristotle, *Prior Analytics* Bk.1, Ch. 4, 26a, 23–24.

Each of the major and minor terms of the syllogism of standard form appear in another premise. The premise that includes the major term is called the major premise and the premise that includes the minor term is called the minor premise.

What characterizes the syllogism of a standard form is that the major premise is presented first, the minor premise is presented second, and the conclusion comes last.

As for the formal character of the syllogistic argument, in the theory of logic the form of the syllogism is of the highest importance. The validity or invalidity of the syllogism depends solely upon its form, and are not dependent at all upon its specific content or material.

The syllogism is valid if the assertion is valid in its formal aspect. It is valid by virtue of its form alone. If a certain syllogism is valid, any other syllogism of the same form would also be valid. And if the syllogism is not valid, any other syllogism of the same form would also not be valid.

Muslim philosophers knew about different kinds of syllogisms. Al-Kātibī divides syllogisms into two types: “a syllogism that consists of certainties, and syllogisms that do not consist of certainties, such as the well-known ones (*mashhūrāt*), which are issues recognized by all people; the reason for their popularity is either because they include a public interest, or for their delicate nature; each nation has his own well-known issues according to his customs and manners; every professional group has its own well-known issues according to its profession. A syllogism that consists of well-known issues and axioms (*musallamāt*) is called an ‘argument’ and its purpose is to compel the rival and persuade some one who is unable to realize the presuppositions of demonstration such as commonly acceptable beliefs (*maqbulāt*), which are taken from the things that people believe in, either for a heavenly cause, including miracles and dignitaries such as prophets, or holy protectors, or for those who are both intelligent and religious such as scholars and ascetics, who are very useful in God’s glorification and mercy on God’s creations.”¹¹

Al-Ghazali clarifies also that a compound syllogism that consists of more than two premises is a diverted syllogism that does not lead to certain knowledge:

¹¹) Al-Kātibī, Najm al-Dīn al-Qazwīnī, *Al-Risāla al-Shamsiyya: Sharḥ Quṭb al-Dīn al-Rāzī*, Cairo, 1906, p. 15.

“A compound syllogism consists of more than two premises, but the structures leave clear results and some premises; one premise is mentioned for each syllogism; the premises are arranged one over the other, and this leads to one conclusion. Each of these premises becomes complete through a complete syllogism, whose results have been omitted and some of its premises have been eliminated, and which leads to one goal. This type of syllogism is repeated in each polemic and didactic address. This means that the common words used in debates are diverted syllogisms whose structures have been changed for simplicity.”¹²

Al-Fārābī defines logical syllogism by saying that: “It consists of two connected premises of three terms (*ḥudūd*); the two connected premises are connected in one part and disconnected in the other two. The common part in each of the two connected premises is called the “middle term”, and the two parts that are disconnected are called the two ends.”¹³

Ibn Sīnā emphasizes that: “There is no categorical syllogism about one premise, and not about more than two. We say: premises are numerous in syllogisms; these premises can be either non-premises of close syllogism or mentioned just for induction and analogy; thus, they are not the premises of syllogism itself, but premises of induction that is used to recognize the truth of the premise, or are not essential and have no necessary benefit.”¹⁴

The Logical Syllogism in Muslim Philosophy

According to medieval Muslim philosophers, the syllogism is a statement that is composed of propositions. If they are found to be perfect (correct) another statement necessarily derives from them.¹⁵ Muslim philosophers accepted this Aristotelian definition of the syllogism, and this in fact is Aristotle's own definition. The formal characters of the syllogism can be seen in this definition since it does not demand the verification of the premises but only their assumption. Therefore the conclusion that is derived from the syllogism is the same, whether the premises themselves are true or false. This means that if the premises are true, then the con-

¹²) Al-Ghazālī, *Mīyār al-ʿIlm fī l-Manṭiq*, Beirut 1990, pp. 170–172.

¹³) Al-Fārābī, *Kitāb al-Qiyās al-Ṣaghīr. Part 2: al-Manṭiq ʿinda l-Fārābī*, ed. Rafīq al-ʿAjam, Beirut: Dār al-Mašriq 1986. p. 20.

¹⁴) Ibn Sīnā, *al-Shifāʾ*, vol. 13, p. 433.

¹⁵) See Quṭb al-Dīn al-Rāzī, *Sharḥ al-Risāla al-Shamsiyya li l-Qazwīnī*, p. 100; Zayn al-Dīn al-Sāwī, *al-Abṣār al-Nuṣayriyya fī ʿUlūm al-Manṭiq*, ed. Rafīq al-ʿAjam, Dār al-Fikr al-Lubnānī, 1993, p. 140; al-Ghazālī, *Mīyār al-ʿIlm fī l-Manṭiq*, p. 111.

clusion is necessarily true, and if one of the premises is false, then the conclusion is either true or false. The formal character of the syllogism is expressed through placing the premises first and then deriving the conclusion.

The Muslim philosophers developed the Aristotelian syllogism in various ways:

1) Division of the syllogism into two types.¹⁶

- a) The categorical or predicative syllogism. This type is composed of two premises and a conclusion, and each premise includes a subject and predicate. For example: Every body is a composite; every composite is created; therefore every body is created.
- b) The conditional syllogism, which is either conjunctive or disjunctive.
 - The conjunctive conditional syllogism is composed of two premises. The first premise contains two predicative propositions linked by a conditional word, while the second premise is predicative and may be the same premise mentioned in the first premise or its opposite, with the addition of a conditional word. For example:

If the world is created, then it has a creator
It is known that it was created
Therefore the world has a creator

- The disjunctive conditional syllogism is composed of two premises and a conclusion. For example:

The world is either primordial or created
It is known that it was created
Therefore the world is not primordial.

Aristotle did not divide the syllogism in this manner, but it was divided by his disciples Theophrastus and Eudemus, and then by the Stoics and Scholastics who expanded the discussion of the conditional syllogism.¹⁷ But Muslim logicians distinguished between categorical and conditional syllogisms. It can be seen how al-Ghazālī (d. 1111), Ibn al-Ḥāḥib (d. 1248), and al-Khudarī (d. 1575) thought that the categorical syllogism was intended only for complex predicative propositions, while the conditional

¹⁶) Al-Ghazālī, *Mī'yār al-ʿIlm fi l-Manṭiq*, p. 137–145.

¹⁷) William and Martha KNEALE, *The Development of Logic*, p. 68. See also: ʿAlī Sāmī al-Nashshār, *al-Manṭiq al-Ṣuwarī*, Dār al-Maʿārif, Egypt, 1971, p. 465.

sylogism dealt with predicative and conditional propositions, and they divided the conditional syllogism into two types – the conjunctive and the disjunctive.¹⁸

However, Ibn Sīnā (d.1037) did not accept the previous division of the Muslim philosophers, and he divided the categorical syllogism into two types: the simple predicative syllogism or the simple conditional syllogism, or a composite of the two types. The conditional syllogism is divided into the conjunctive or the disjunctive, or is a combination of them both, and is either composed of the predicative and conditional, or of the conditional alone.¹⁹ Ibn Sīnā accepted only three forms of the categorical syllogism, but did not accept the fourth form because of its difficulty and complexity.²⁰

Al-Sāwī²¹ (d. 1145) followed Ibn Sīnā and claimed that the categorical syllogism was composed of either simple predicative propositions, or conditional propositions, or predicative and conditional propositions. He also thought that there were only three forms of the syllogism.²²

Ibn Ḥazm (d. 1064) emphasizes that there can be only three figures of the syllogism because the common term (the middle one) must be a predicate of the first premise and the subject of the second premise, or it must be the predicate of the two premises, or the subject of both of them, and the mind cannot accept a fourth division.²³ This means that Muslim philosophers such as Ibn Sīnā and Ibn Ḥazm were faithful to the Aristotelian method, and did not accept the view of Galen regarding the fourth figure of the syllogism.

Arab logicians deemed the syllogism as the only argument capable of yielding apodictic knowledge, and thus they considered it the chief, indeed the only, tool which can bring about *taṣdīq* with certitude.²⁴

¹⁸) A. Badawi, *al-Manṭiq al-ṣuwarī wa l-riyāḍī*, Kuwait, 1977, p. 212.

¹⁹) Ibn Sīnā, *al-Ishārāt wa l-Tanbīhāt*, ed. Sulayman Dunyā, Egypt, 1960, p. 427.

²⁰) Ibn Sīnā, *al-Ishārāt wa l-Tanbīhāt*, p. 436.

²¹) Al-Sāwī was born in Sāwā near the Teheran of today, and there is a dispute regarding the year of his death. According to Arabic sources he died in the year 450/1053, but Brockelmann mentions the year 540/1143. He wrote various books on philosophy in both languages, Arabic and Persian. See Khayr al-Dīn Ziriklī, *al-Aʿlām*, vol. 5, Beirut, Dār al-ʿIlm lil-Malayin, 1979, p. 206.

²²) Al-Sāwī, Zayn al-Dīn, *al-Abṣār al-Nuṣayriyya fi ʿUlūm al-Manṭiq*, p. 142.

²³) Ibn Ḥazm, *al-Taqrīb li-Ḥadd al-Manṭiq*, in: Ihsān ʿAbbās, al-Kharṭūm, 1959, p.113.

²⁴) W.B. HALLAQ, *Ibn Taymiyya Against the Greek Logicians*, p. xv.

2) The fourth figure of the syllogism added by Galen was not sufficiently discussed by the Muslim philosophers such as Ibn Sīnā, al-Ghazālī and Ibn Rushd (d. 1198). However later logicians devoted long discussions to the subject, and this resulted in the addition of three moods to the five existing Aristotelian ones.²⁵

SABRA argues that the idea that Galen formulated the 4th figure is contradicted by Galen himself in the *Introduction to Logic*, the only complete logical work of his that survived in Greek. Galen says in this work that there cannot be more than three figures for the categorical syllogisms, adding that he has shown this in his book *On Demonstration*.²⁶

3) Muslim logicians preferred to arrange the premises of the syllogism so that the minor premise came first, followed by the major one. They thought that in this order the certainty of the syllogism would be revealed in a clear manner since the transition here would be from the particular to the general.²⁷ For example: Socrates is a man; every man is mortal; Socrates is mortal. Here the transition is from the particular man, Socrates, to man in general, followed by the transition from man to being mortal, which is more general than man.

The Muslim logicians, including Ibn Sīnā, thought that the Aristotelian order of the premises was according to the order of the letters. The use of the two words “refers to” necessitates a change in the order of the proposition so that the predicate comes before the subject. Therefore Aristotle indicates the predicate with the letter “a” and the subject with the letter “c”, and in order to indicate the middle position of the middle term in the first figure, he places the minor premise after the major premise. Aristotle’s first mood is in the following manner: if A is true of B and B is true of C then A is true of C.²⁸

On the other hand, the Muslim logicians reversed the order of the above premises because of the influence of the Arabic language in which the proposition had to begin with the subject. Nevertheless, they retained the

²⁵) Al-Malawī, *Sharḥ al-Malawī ‘alā l-Sullam*, al-Maṭba‘a al-Azhariyya al-Miṣriyya, p. 126.

²⁶) A.I. SABRA, “A Twelfth-Century Defense of the Fourth Figure of the Syllogism”, *Journal of the Warburg and Courtauld Institutes*, vol. 28. (1965), p. 14.

²⁷) ‘Alī Sāmī al-Nashshār, *Manāḥij al-baḥṭh ‘inda Mufakkirī l-Islām*, Dār al-Ma‘ārif, Egypt, 1966, p. 58.

²⁸) AL-FAKHURĪ, *Manṭiq al-‘Arab min Wujhat Naẓar al-Manṭiq al-Ḥadīth*, Beirut, p. 84.

See also: Aristotle, *Prior Analytics*, Bk.1, Ch.1, 25b, 35–40.

letters that Aristotle had chosen and therefore they indicated the first mood of the first figure in the following manner: If all “c” is “b”, and all “b” is “a”, then all “c” is “a”.²⁹

However, PATZIG argues that it is not by chance that Aristotle generally held to the order in which the first premise contains the middle term and the predicate of the conclusion, and the second premise the middle term and the subject of the conclusion. For if the order of the premises is of no account for the validity of syllogism, it is extremely important to its evidence: the order of premises chosen by Aristotle supposing the formula “A belongs to B”, leads in the first figure to evident syllogisms. This evidence disappears if the order of the premises is altered. If the premises are formulated by means of copula, then they must be transposed, and if the first figure syllogisms are to be evident, with the traditional order of the premises, their evidence vanishes.³⁰

It is important to note that in the Greek language not much importance is given to the order of the words in a proposition, so that the subject may come at the beginning or the end. The function of the words does not change, only their order changes. Therefore the intention of Aristotle in using letters is merely to provide examples and not the order of subject and predicate.

The four figures of the syllogism have in fact been determined according to the function of the middle term and its position in relation to the premises. The middle term is an important component in the syllogism since the proof is based upon the mediation between the subject and predicate. The middle term links the two premises or propositions – the major and minor premises – and appears in both subject and predicate. It is present in both premises but does not appear in the conclusion.

The Muslim philosophers devoted extensive discussions to the middle term because of its great importance in the syllogism, while philosophers such as Ibn Taymiyya, who criticized the Aristotelian syllogism, tried to prove the insignificance of the middle term in deriving the conclusions.

²⁹) AL-FAKHŪRĪ, *Manṭiq al-ʿArab min Wujhat Naẓar al-Manṭiq al-Ḥadīth*, p. 85.

³⁰) Gunther PATZIG, *Aristotle's Theory of the Syllogism*, translated from German by Jonathan BARNES. Dordrecht, Holland. 1968, p. 60.

Criticism of Ibn Taymiyya on the Logical Syllogism

Ibn Taymiyya tries to prove that judgment (*taṣdīq*) can be obtained without basing it on a syllogism. This means that the acceptance of a judgment is not done through the syllogism. In his opinion, judgment can be obtained through various methods and not only by means of the syllogism. He tries to undermine the fundamental components of the syllogism and attacks two claims made by logicians with regard to the relation between the syllogism and judgment:

- a) The negative aspect – “Judgment (*taṣdīq*) cannot be obtained except through the syllogism”.
- b) The positive aspect – “The syllogism contributes to obtaining judgment”.

Aristotle and Muslim philosophers talked about different ways to achieve judgments such as induction, analogy, and they did not confine achievement of knowledge to syllogism. Al-Fārābī says that: “Judgment can be achieved either with or without the syllogism. A judgment that we achieve and know without the syllogism consists of three types: acceptable (*maqbul*), well-known (*mashhūr*), and occurring through sensation. Any other type of judgment takes place through the syllogism.”³¹

Ibn Sinā also claims that: “Knowledge which is actually certainty is knowledge where it is believed that ‘so is so’ and where it is believed that it is impossible that it is not ‘so’; a belief that cannot fade away. If we say about ‘actual belief’ that ‘so is so’ without being connected by the second belief as ‘certainty’, then it is not a permanent certainty, but rather a temporary one.”³²

Al-Ghazālī also clarifies that: “Knowledge of judgment is knowledge of the degree of relations between facts themselves, in the affirmative or the negative. It is the certain truth and entire certainty.”³³

Ibn Taymiyya's criticism that: “Judgment (*taṣdīq*) cannot be obtained except through the syllogism” does not mean the limitation of achieving all types of knowledge by syllogism, but is related to the achievement of certain and judicious knowledge. In his opinion, this sentence is a negative sentence in form and content, and therefore its acceptance is not mandatory, but needs proof. Since the logicians have not proved this negation,

³¹) Al-Fārābī, *Kitāb al-Qiyās al-Ṣaghīr. Al-Manṭiq ʿinda l-Fārābī*, ed. Rafīq al-ʿAjam, 1986, p. 75.

³²) Ibn Sinā, *al-Burhān min Kitāb al-Shifāʾ*, ed. Abū l-ʿAlāʾ ʿAfīfī, 1956, p. 78.

³³) Al-Ghazālī, *Mīyār al-ʿIlm fi l-Manṭiq*, p. 173.

how can they claim that people are unable to comprehend any judgment except through the logical syllogism?³⁴ According to Ibn Taymiyya, there is a contradiction in the claims of the logicians. On one hand they say that one cannot obtain knowledge through negation. On the other hand, they use a negative proposition to prove the validity of the syllogism. Therefore the problem raised by Ibn Taymiyya is reflexive, since the assumption is a negative proposition that cannot be proved by means of a syllogism. Were it not so, we would have a circular argument. We have to find an additional proof that is not inferential, and this kind of proof is also problematic, since it conflicts with the idea that judgment cannot be obtained except through the syllogism.

a) Denial of the need for a middle term

Muslim logicians gave great importance to the middle term. For Ibn Sīnā it was considered as “indicant” (*dalīl*), and Ibn al-Ḥājjib³⁵ called it “explanation” (*taʿlīl*). It is therefore clear that Ibn Taymiyya intended, through his criticism of the middle term, to undermine the basic component of the syllogism. According to him there is no need for the middle term in order to reach necessary conclusions. He may have thought that this could be done through intellectual intuition³⁶ (intuitive speculation). In his opinion, even theoretical propositions do not need a middle term, since the aim of the syllogism is to prove the essential or contingent quality of the subject. Although, in his opinion, the essential quality is clear and does not need proof, some of the contingent attributes need a middle term, and some do not. The difference is in time needed to grasp or prove the attributes, or the number of middle terms needed for the proof.³⁷ The Greeks,

³⁴) Ibn Taymiyya, *al-Radd ʿalā l-Manṭiqiyyīn*, vol. 1, Introduction by Rafiq al-ʿAjam. Beirut, 1993, p. 103.

³⁵) Ibn al-Ḥājjib was born in Egypt in 570/1175. He studied the Quran and the sciences related to it, the tradition of Imam Mālik and Arabic linguistics, and was considered as the disciple of the well-known Imam al-Shāṭibī. He travelled to Damascus and spent a long period of time in the Mālikī section of the Ummawī mosque. He later returned to Cairo and then went to Alexandria where he died in 646/1249. Ibn al-Khaṭīb wrote many books on Islamic law and Arabic grammar, and in his writings he contradicted his predecessors on various issues both in grammar and in religious law. See: J.C. VADET, “Ibn al-Ḥājjib”, *EI* ², III, 781–782.

³⁶) al-Ghamrī, *al-Manṭiq ʿinda Ibn Taymiyya*. Cairo: Dār Qebaa, 2001, p. 130.

³⁷) Ibn Taymiyya, *al-Radd ʿalā l-Manṭiqiyyīn*, vol. 1, p. 104.

on the other hand, did not concern themselves with the time needed to reach the conclusion.

Ibn Taymiyya thinks that essential and contingent attributes are similar in that some of these attributes need a middle term to prove them, while others do not need mediation. He wished to demonstrate that the contingent quality sometimes needs a middle term, and thus there is no difference between essential and contingent attributes. He needed this proof in order to contradict the claim of certain logicians that essential attributes do not need a middle term, but contingent attributes do need it. It is important to note that Ibn Taymiyya admits that certain logicians such as Ibn Sīnā eliminated the difference which asserts that essential attributes need a middle term, but contingent attributes do not, while other logicians such as Ibn al-Ḥājjib called this difference "explanation" (*al-ta'īl*).³⁸

According to Ibn Taymiyya, if the aim of the middle terms is a proof in which the scholar gives reasons for the intellectual proof and not the proof of things that exist in the external world, then people differ intellectually. He says that: "There is no doubt that everything that causes and leads to a conclusion – whether it is called a syllogism or a proof – is the cause for proving the judgment of the thing itself, and is called the causal demonstration (*burhān ʿilla*).³⁹ The conclusion is supposed to be the absolute proof and is called the demonstration of fact (*burhān inna*).⁴⁰

³⁸) Ibid. vol. 1, p. 105.

³⁹) When the middle term is the cause of the major term, it is called by the theologians the determination of cause, and the logicians call it the proof of the "why" because it answers the question why. This syllogism is divided into two types: the first is when the middle term is the cause of the conclusion, and the second is when the middle term is the cause for the existence of the major term in an absolute sense and not only in a specific case. The middle term cannot be the absolute cause but is like something that has many causes. One cause among many causes cannot be the absolute cause of the major term but is a cause of a specific time and place, as for example: this tree is burnt because of the fire, or this man is satisfied because he is eating now. see Al-Ghazālī, *Miʿyār al-ʿIlm fī l-Manṭiq*, p. 232, 134. see also: Al-Sāwī, Zayn al-Dīn, *al-Abṣār al-Nuṣayriyya fī ʿUlūm al-Manṭiq*, p. 233.

⁴⁰) When the middle term is not the cause of the major term, it is called by the theologians the indicative demonstration while the logicians called it the proof of the "if" (*burhān inna*). That is to say, it shows that the major term exists without showing its cause. In other words, this syllogism is the inference made effective through the conclusion, and the inference only shows the existence of the effect and not its cause. For example: We infer the creation of the world through the existence of the creator. see Al-Ghazālī, *Miʿyār al-ʿIlm fī l-Manṭiq*, p. 233.

This is what Ibn Sīnā and others intended as the function of the middle term.⁴¹ Ibn Taymiyya agrees that the function of the middle terms is to prove certain claims to certain people, but it is possible to know these things and to prove them through the senses and not only through the middle term.⁴²

The syllogism is therefore merely intellectual reasoning about something that exists in the external world, but it does not create a real relationship between the intellect and the things that exist in the external world. Therefore logicians use the syllogism to prove a judgment or to reason out the syllogism itself. However, Ibn Taymiyya sees a disagreement among logicians on this matter, because some of them use the “causal demonstration” type of syllogism and others use the “demonstration of fact” type of syllogism, which proves that people differ in their perceptive abilities and that is why they use different types of proof.

This means that there is no single law that is necessary for the knowledge of the essential attributes or the contingent attributes of an object. One can clearly see the relativistic trend in the criticism of Ibn Taymiyya on epistemological truth: human knowledge varies in relation to the level of people and creates different methods for proving a specific thing. Therefore the middle term is not determinate but changes according to the level of people.

c) Arguments against the necessity of two premises in the syllogism

Ibn Taymiyya criticizes the definition of Aristotle’s syllogism, and also the definition of the Muslim logicians who followed Aristotle. The syllogism is an argument that is composed of propositions, and when these propositions are assumed, then another proposition necessarily derives from them. He criticizes Aristotle and the logicians who followed him for

⁴¹) Ibn Taymiyya, *al-Radd ‘alā l-Manṭiqiyyīn*. p. 105.

⁴²) Ibn Sīnā calls both syllogisms the absolute proof (*burhān muṭlaq*). He says that in the “why” syllogism, the middle term constitutes the cause for belief in the conclusion and the cause for its existence because the middle term is the absolute cause for the major term or the cause for the existence of the major term in the minor term. However, in the proof of the “if” syllogism, the middle term is not the cause of the major term in itself, but is the cause of the existence of the major term in the minor term. For example: This tree is burnt, so it was damaged by something hot. see Ibn Sīnā, *al-Najāt fī l-Ḥikma al-Manṭiqiyya wa l-Ṭabī‘iyya wa l-Ilāhiyya*, ed. ‘Abd al-Rahmān Umayra, Beirut, 1992, p.82.

stressing that the syllogism is composed of only two premises. In his opinion, this contradicts the meaning of their definition of a syllogism because their definition does not restrict the syllogism to two premises only. He says that: "If the logicians assert that the syllogism is composed of statements that are propositions, this means that it does not apply only to two propositions because the plural form indicates two or three, or more."⁴³

Ibn Taymiyya also criticizes the syllogism from the linguistic viewpoint by saying: "The syllogism as an expression means estimation and measurement, such as I measured this with this, and the measurement was made with one thing or two things, or three things". Although the basis of the syllogism is singular, if it is measured against two or three things, then there are two or three measurements and not one. These measurements are therefore to be considered as syllogisms and not as a single syllogism. The logicians also asserted that the syllogism composed of more than two premises is considered to be different syllogisms, and if it is composed of less than two premises it is considered as half a syllogism and not a complete one. This does not seem reasonably acceptable.⁴⁴

We see, therefore, that Ibn Taymiyya uses the Arabic language to point out the errors of the logicians. According to Arabic linguistics, there is a contradiction in the words of the logicians who use the term syllogism as a singular noun that expresses the plural, and on the other hand they assert that a single premise is considered to be half a syllogism. However, Aristotle used the Greek term "syllogismos" which means a combination of assertions, therefore the criticism of Ibn Taymiyya cannot be against the syllogism as a Greek term but only against the Arabic term for "syllogism".

According to the logicians, the syllogism necessitates the presence of two premises. But Ibn Taymiyya sees this as completely erroneous because it is possible to attain theoretical knowledge by one or two or four premises, depending on the intellectual level of a person.⁴⁵ Therefore the syllogism is not an arbitrary, artificial matter that can be restricted to two premises. The syllogism is in accordance with the need for premises to create proof, and in this respect people are different rather than similar. Some do not need an inference at all, because they know the inference through necessity, some may need one premise while others need four or more premises.

Ibn Taymiyya gives an example for the necessity of one premise: "A person wishes to know if a certain specific liquor is prohibited or not, when he knows that all liquor is prohibited, but does not know whether this

⁴³) Ibn Taymiyya, *al-Radd 'alā l-Manṭiqiyyīn*, vol. 1, p. 175.

⁴⁴) Ibid. vol. 1, p. 180.

⁴⁵) Ibid. vol. 1, p. 173.

specific liquor makes one drunk or not. In this case, he needs one premise, which is to know that this thing causes inebriation. If he is told that this drink is prohibited and he asks what the proof is, the answer will be that this drink inebriates.⁴⁶ The ‘indicant’ (*dalīl*) (the term used by religious scholars for the middle term) shows that one premise is sufficient for a complete inference and this is what is needed for the judgment. Since the first premise is required for the middle term, and the middle term is required for the third term.⁴⁷ However, the necessary connection between them cannot be known except through the middle term, and the middle term is accompanied by the statement “since ...”.⁴⁸

Ibn Sinā and others dealt with the attributes that are associated with the thing described. They opposed the logicians who distinguished between essential attributes that do not need a middle term and contingent attributes that need it. They claimed that many contingent attributes did not need the middle term to mediate between them and the thing described.⁴⁹

In the opinion of Ibn Taymiyya, if the link between certain attributes and the predicate is clear, then there is no need for the middle term. Therefore conceptualizing the quality and the predicate is sufficient to know that the former proves its association with the latter. When there is a middle term that clearly links both of them, there is no need for an additional middle term. But if one of the two things is not clear, we need a middle term. If neither of them is clear, we need two middle terms. Thus in order to express the middle term, one premise is sufficient.⁵⁰

Whenever we reach a conclusion by one, two, three or many more premises, we must note the order of the premises in spite of their large numbers. This is because when there is opposition to one of the premises, we have to

⁴⁶⁾ Ibid. vol. 1, p. 173.

⁴⁷⁾ These terms used by Ibn Taymiyya are well known in Muslim religious studies, but they parallel the logical terms used by the logicians. He uses the two types of terms in order to express his opinion. For example: “*al-lāzīm*” is a term that parallels the predicate or the quality. The predicate can be related to existence or the essential nature of a thing such as a body’s occupation of space, or the black colour of an African. The predicate is related to the essential nature such as the number being an even number, so that the quality of “evenness” cannot be separated or extricated from the number four. The term “*al-malzūm*” parallels the subject, and the relationship between them is called the “*al-luẓūm*”. See: Ṭahanāwī, Muḥammad, *Kashf Iṣṭilāḥāt al-Funūn*, Dār al-Kutub al-‘Ilmiyya, Beirut, 1998, p. 88.

⁴⁸⁾ Ibn Taymiyya, *al-Radd ‘alā l-Manṭiqiyyīn*, vol. 1, p. 192.

⁴⁹⁾ Ibid., p. 192.

⁵⁰⁾ Ibid., p. 193.

prove it through two methods: the first is through true knowledge based on reliable authority, which is the traditional or the hearsay method, or by experiment with something that is analogous to it. These are the methods of the analogical reasoning.⁵¹ For example, when we taste part of a drink and know that it is inebriating, we judge that the rest of the drink is also inebriating because judgment (*ḥukm*) on the part applies to the whole. This is also valid for all kinds of general experimental and empirical matters such as the knowledge that bread satisfies and water refreshes.

According to Ibn Taymiyya, the intellect requires one thing – the confirmation of judgment or its negation, or the description of a thing by a positive or negative quality, or the relation of predicate to subject either positively or negatively. For example, when it is said that wine is prohibited or not, or a person is sensitive or not. What is required is the proof of the prohibition of wine or its negation, and the proof of the person's sensitivity or its negation. Therefore, if one premise is sufficient to what is required, we have reached the required conclusion.⁵²

At the same time, Ibn Taymiyya opposes the claim of the logicians that what is required cannot exceed two parts and therefore there is no need for more than two premises. He asserts that it is a mistake to think that only two nouns are needed because something may be expressed in various names, and if this is so then the thing required is not one thing but can be three, four, or more. In any case, the subject and predicate may be a proposition composed of two terms or of many definitive terms such as descriptions of manner, place, time etc. If the proposition is restricted by many such definitive terms, it is not composed of two terms but of many terms and many meanings "*maʿnā*".⁵³ Ibn Taymiyya also rejects the opinion of the logicians that the thing required is given only two meanings, whether they are expressed by two expressions or by many.

On the other hand, Ibn Taymiyya thinks that the thing required can have one, two or more meanings according to the wishes of the person who investigates, questions, studies or conducts a dialogue. It may be that each of them requires one, two or more meanings. According to Ibn Taymiyya, this matter depends on the need of the person for meanings.⁵⁴ His reference in this regard is to the conclusion that is derived from the previous premises. Since, in his opinion, there can be more than two premises; the conclusion can have more than two meanings.

⁵¹) Ibid., p. 191.

⁵²) Ibid., p. 177.

⁵³) Ibid., p. 178.

⁵⁴) Ibid., p. 178.

Ibn Taymiyya mentions the dispute between Ibn Sīnā and al-Rāzī (d. 1209) over the question whether the information in the two premises alone is sufficient to reach the conclusion. Ibn Sīnā thinks that a person sometimes needs to recall a third thing in addition to the two premises in order to reach the conclusion. For example, a person knows that the “mule does not give birth”, but sometimes forgets this when he sees a mule with a swollen belly. He asks: “Is it pregnant or not?” and people reply: “Don’t you know this is a mule?” When he responds: “Yes, I do”, then they say: “Don’t you know that the mule does not give birth?” He responds: “Yes, I do” and recalls that the mule does not give birth.

Al-Rāzī opposes the claim of Ibn Sīnā because subjecting one of the two premises to another premise means to create two situations. It either differs from the two premises or is not different from them. The first situation demands the presence of another necessary premise to bring about the conclusion, and then the inquiry will be to find a correspondence between the additional premise and the two other premises in the same manner as the correspondence between these two premises. This will cause circularity. But if it does not differ from the two premises, then it cannot be a condition for bringing about the conclusion because the condition has to be different from the thing that is conditioned. The mistake in these two situations is when only one of the premises was common knowledge. But when both premises are common knowledge it is impossible to cast doubt on the outcome.⁵⁵

Ibn Taymiyya does not accept the claims of Ibn Sīnā and al-Rāzī. He deals with this issue in a different way, and claims that the reason for the dispute is that the logicians think that inferring the conclusion requires the presence of two premises, and that one can obtain what is required by any number of premises. The claims made by Ibn Sīnā and al-Rāzī are based on a situation in which a person is found to be in a state of distraction or forgetfulness. In the opinion of Ibn Taymiyya, the thing that was forgotten was not known at the moment of forgetfulness, but when it was remembered it became known. The indicant here is “the knowledge that the mule does not give birth”, and this premise was not known but was hidden from the mind. It is clear that this cannot be indication, when it does not arise in the mind because of forgetfulness or any other reason, but can only be so when it is known. When a person raises in his mind the relationship of the middle term to the subject he knows that this middle term gives information about the subject. This is true when

⁵⁵) Ibid., p. 194.

the relationship is clear, but in another situation we need one, two or more premises.⁵⁶

This relationship is necessary and therefore one, two or more premises are sufficient since the mediating middle term is the information that connects the subject with the predicate and varies according to the differences between people. Therefore the mediating middle term that is related to the judgment concerning a certain person is not the middle term that necessarily applies to another person, and judgment can be obtained through another middle term.⁵⁷ This method is appropriate for intellectual and empirical subject and also for intellectual subjects that are acquired through transmission.

Ibn Taymiyya thinks that the rule of two premises for an inference confuses the mind. On the other hand, the Muslim method notes the proofs and the premises needed for them, and does not demand that every inference should have two premises as the logicians do.⁵⁸ Ibn Taymiyya quotes al-Rāzī who proved the existence of the Creator in five ways based upon one premise.⁵⁹ And al-Zarkashī mentions al-Ash'arī (d. 935) who says that one can reach a conclusion through one premise.⁶⁰ Qudāma b. Ja'far (d. 913) says that the syllogism can be composed of one, two or more premises depending on the level of understanding. Although in the Arabic language one premise can be sufficient, it is preferable to expand them.⁶¹

Ibn Taymiyya quotes Nawbakhtī,⁶² who says that man can be seen as a substance without ordering the inference in the form of a syllogism, and the proof of this is that he accepts the contradictory things at different times. There is no need to use a second premise – everything that accepts

⁵⁶) Ibid., p. 194.

⁵⁷) Ibid., p. 194.

⁵⁸) Ibid., p. 196.

⁵⁹) Ibn Taymiyya, *Muwāfaqāt Ṣaḥīḥ al-Manqūl li-ṣarīḥ al-Ma'qūl*, 1, ed. 'Abd al-Laṭīf 'Abd Raḥmān, Dār al-Kutub al-'Ilmiyya, Beirut, 1997, p. 459.

⁶⁰) Khayr al-Dīn Ziriklī, *al-A'lām*, Beirut, Dār al-'Ilm lil-Malayin, 1979, vol. 5, p. 8.

⁶¹) Qudāma b. Ja'far, *Naqd al-Nathr*, ed. Ṭahā Hussayn, 'Abd al-Ḥāmid al-'Abādī, Dār al-Kutub al-Miṣriyya, Cairo, 1993, p. 16.

⁶²) Nawbakhtī, who died in the year 913, was considered a theologian and philosopher. The Mu'tazilites and Shī'ites both saw him as belonging to them. He wrote various books in the field of philosophy and *Kalām* such as Aristotle's *On Generation and Corruption*, *Reply to Believers on the Transmigration of Souls*, *The Unity of God and the Creation of the World*, and other works in which he deals with religion and with Shī'ites. see Khayr al-Dīn Ziriklī, *al-A'lām*, vol. 2, p. 224.

the contradictory things at different times is a substance, because the particular is included within the general. One of the two premises is sufficient for an additional premise, and this can be realized in all forms of inference.

In addition, it is not possible to obtain a result through two general premises. For example: Every living creature has a substance, and every person has life. The conclusion is that every person has substance, and this is a circular argument. Therefore one of the two general premises is sufficient, and there is no need for a second one. This is true also when we don't find general premises that do not need proof to show the difference between them.⁶³

The attempt by Ibn Taymiyya to prove the error of the first form of the syllogism that is based on two premises – that is to say, the non-validity of the Aristotelian syllogism, because the first premise of the syllogism is the most complete form and all the other forms can be referred back to the first form – means to expand the intellect and not to limit it by artificial rules.

Criticism on the forms of the Aristotelian Inference

Ibn Taymiyya divides Aristotelian logic into three types:

- a) The general syllogism
- b) Induction
- c) Example⁶⁴

⁶³) Ibn Taymiyya, *al-Radd 'alā l-Manṭiqiyyīn*, vol. 2, p. 85.

⁶⁴) In his *Prior Analytics*, Aristotle speaks about induction through the “example” (in Bk. 2, Ch. 24) as another form of induction. Obtaining the general law is not dependent here upon the listing of isolated cases such as in regular induction, but on one particular case. This particular example induces our minds to infer a general conclusion. The knowledge acquired in this way is associated with concepts derived from experience, but they infer their conclusions without depending on experience. Thus they make statements that are necessarily associated with these concepts and that become manifest to the intellect through a single instance of contemplation. Essentially, induction is for him a process not of reasoning but of direct insight, mediated psychologically by a review of particular instances. But in the *Prior Analytics* his interest in his new discovery, the syllogism, leads him to treat induction as a syllogism, and therefore to treat it in its least important form. that in which the review of particulars is exhaustive. (see Sir David Ross, *Aristotle*, London and New York. 1995.p. 40). In contrast to this, analogy for Ibn Taymiyya is based on empirical rules and principles such as experience, causality, and the various methods of investigation through which one can arrive at correct scientific results. (see above).

Aristotle speaks about syllogism and induction. The first type leads to certainty, and the second can be divided into two parts: complete induction that leads to certainty, and incomplete induction that leads to supposition.

Aristotelian logic deals with these two types in the formal sense, while Ibn Taymiyya refers to the certainty and the supposed inference in the material sense. He thinks that the general and the analogical reasoning are the same thing, if the difference between them is also in relation to their specific material content. When the material content in one of the types is certain, it is also certain in the second type. If the material content is supposed, the second type is also supposed.⁶⁵

According to Ibn Taymiyya, the general syllogism is similar in form to the analogical reasoning, and is composed of three terms: the major, the minor, and the middle terms. The middle term is considered as the cause or as commonly shared quality in the analogical reasoning,⁶⁶ while the major premise in the general syllogism includes the connection between the major term and the middle term. In the analogical reasoning this parallels the discovery of the influence of the commonly shared quality between the original case (*aṣl*) and the assimilated or new case (*farʿ*).

That which shows the truth of the major premise is the very thing that shows the connection with the commonly shared quality for the legal judgment. The connection between the major premise and the middle term parallels the connection between the judgment and the commonly shared quality. For example: *nabīḍ* is forbidden because it is a kind of wine, and wine is forbidden because it inebriates, and the quality of inebriation is found in the wine. This statement is parallel to the proposition – all wine inebriates, and all that inebriates is forbidden, and the conclusion is: *nabīḍh* is forbidden. *Nabīḍh* is the subject and the minor premise, while the expression “forbidden” is the predicate and also the major premise, and the expression “inebriates” is the middle term between the subject and predicate, and also appears in the major and minor premises.

Both methods therefore lead to the same result and through them one can attain certainty when their material content is certain, or one can obtain a supposition when the material content is supposed. The difference between them is in the method of proof and the form of the middle term.⁶⁷ He compares the analogical reasoning to evidence in the empirical sciences, while the general syllogism is compared to hearsay in these sciences. In his

⁶⁵) Ibn Taymiyya *al-Radd ʿalā l-Manṭiqiyyīn*, vol. 1, p. 128.

⁶⁶) Ibid, p.128.

⁶⁷) Ibid, p.132.

opinion, there is no doubt that the evidence is more complete, but the hear-say is broader and more general.⁶⁸

According to Ibn Taymiyya the level of certainty in the analogical reasoning is higher than that in the general syllogism because the judgment (*ḥukm*) is proven and embedded in the original case (*aṣl*). That is to say, the judgment is proven in one of the new cases and the parts are the exclusive truths that exist in the objects. He thinks that the proof of the judgment in one part of the analogical reasoning is not sufficient, and one should not be satisfied with its proof in one part, or depend on the participation of both parts in a certain matter when there is no proof that it is connected with the judgment. However, it should be noted that what is commonly shared between the two parts is connected to the judgment and what is commonly shared is the middle term which is called “the degree of influence by the quality on the judgment”.⁶⁹ In this situation the oppositions will be directed against the commonly shared quality. This method may invalidate the quality of the original case (*aṣl*) or invalidate the judgment of the original case (*aṣl*) or invalidate the description of the part, or negate the quality as the cause of the judgment.

According to Ibn Taymiyya, one should use logical methods such as classification and successive elimination (*al-sabr wa l-taqsīm*) or coextensiveness-cum-coexclusiveness (*dawarān*). By means of these methods one can attain the appropriate cause and also certainty. Certain knowledge is characteristic of the analogical reasoning which is called in theological terms the (*qiyās al-ghā'ib 'alā l-shāhid*), which is the inferring of the unknown from the existing known and differentiates it from the general syllogism. One can see that Ibn Taymiyya reached the same conclusion of the new science according to which if the analogical reasoning is based on the laws of causal induction – called by the Muslim logicians the causal method (*masālik al-'illa*) – it is possible to obtain correct scientific results.⁷⁰

These methods show that the commonly shared quality – the cause – is connected with the judgment. This parallels the general syllogism in which the middle term is connected with the major premise and indicates the truth of the major premise. Since this shows that the commonly shared quality is necessary for the judgment, it is the same thing that indicates that the middle term is necessary for the major premise, and also indicates the truth of the major premise. When the middle term proves the presence

⁶⁸) Ibn Taymiyya, *Naqd al-Manṭiq*, Dār al-Kutub al-'Ilmiyya, Beirut, 1999, p.135.

⁶⁹) Ibn Taymiyya, *al-Radd 'alā l-Manṭiqiyyīn*, vol. 1, p. 128.

⁷⁰) 'Alī Sāmī al-Nashshār, *Manāḥij al-baḥṭh 'inda Mufakkirī l-Islām*, p. 256.

of the cause, this is called the causal demonstration (*burhān ʿilla*), and if the middle term proves the indicant of the cause it is called the demonstration of fact (*burhān dalāla*).⁷¹ These things are valid even if the middle term does not contribute to certain knowledge but only to probable knowledge, and the major premise in this syllogism is only probable and not certain.⁷²

Analogical reasoning is considered as the basis for the general syllogism because the general syllogism is based on a general proposition, and the way to arrive at this proposition is through the analogical reasoning. The knowledge of the general proposition demands the presence of a cause, and when we know the cause through the (*qiyās al-qāʿib ʿalā l-shāhid*) we can judge the things in a similar manner. For example: if we know that this fire burns we know that the fire that is not present also burns – and this is the analogical reasoning.⁷³

According to Ibn Taymiyya, the Muslim theoreticians (*nuzẓār*) used the analogical reasoning in the intellectual sciences (the sciences that are acquired through theoretical speculation, research and inference, such as the natural sciences, mathematics, philosophy and medicine). On the other hand the *faqīh* (lawyer) used the general syllogism because the proof of the connection between the quality and the judgment was considered as proof for all sciences. When one does not succeed in proving through the analogical reasoning, it is not possible to obtain proof through the general syllogism.⁷⁴

Ibn Taymiyya thought that the two syllogisms were true, and that they could be used in the intellectual sciences as well as in religious sciences. This was in opposition to al-Ghazālī and Ibn Qudāma al-Maqdisī (d. 1223), who saw the analogical reasoning as true, and thought that the general syllogism was metaphorical, while Ibn Ḥazm thought that the general syllogism was true.⁷⁵

Ibn Taymiyya accepted the view of the Muslim theoreticians who thought that the (*qiyās al-qāʿib ʿalā l-shāhid*) led to certainty. They used this method to prove the problems that needed certainty. By contrast, al-Juwaynī (d. 1028) said that our imams have proved the validity of these intellects and we prove their invalidity.⁷⁶ On the other hand, supporters

⁷¹) Ibn Taymiyya, *al-Radd ʿalā l-Manṭiqiyyīn*, vol. 1, p. 129.

⁷²) Ibid., p. 129.

⁷³) Ibid., p. 127.

⁷⁴) Ibid., p. 129.

⁷⁵) Ibid., p. 130.

⁷⁶) Juwaynī, Abū l-Maʿālī Imām al-Ḥaramayn, *al-Burhān fī Uṣūl al-Fiqh*, vol. 1, Cairo, 1980, p. 127.

can be found for the idea of the certainty of the (*qiyās al-ghā'ib 'alā l-shāhid*) such as the logician Muḥibb al-Dīn 'Abd al-Shakūr⁷⁷ who does not agree that the analogical reasoning is a weak proof or only a supposition. Al-Shakūr thinks that Ibn Sīnā did not understand the analogical reasoning, and that Naṣr al-Dīn al-Tūsī (d. 1274) was also wrong when he thought that the analogical reasoning did not contribute anything. He thought that the analogical reasoning depended on the *qiyās* itself, and that when the premises were certain then the result was certain and no one could cast any doubt on this. "If we prove that the judgment of the particular is connected to the cause with certainty, and the cause is found in another part with certainty, then there is no doubt that this same judgment is applicable to the second particular with certainty, especially if we know for sure that this cause is applicable to more than one situation. However, in situations where the premises are probable suppositions then the analogical reasoning creates only a probable conclusion. The *qiyās* of the *faqīh* are probabilities because most of their premises are suppositions and this is not evidence of the weakness of the analogical reasoning."⁷⁸

The dispute between the Muslim logicians arises from a misunderstanding between the Aristotelian analogy and the juridical *qiyās* (*qiyās al-ghā'ib 'alā l-shāhid*). The difference between the two inferences is that the first leads to the supposition and the second leads to certainty, and is based on causal means, while the Aristotelian analogy is based on the similarity between the two particulars. Some of the Muslim logicians claimed that the two syllogisms were the same thing, while the Aristotelian Muslims referred to both inferences as analogical and that led to supposition.

According to Ibn Taymiyya, there is no need for the original case (*aṣl*) if the dependence of the judgment on the general and commonly shared quality is proven. But when the matter is a general one that does not exist in the external world, the determination of the source contributes to general knowledge.⁷⁹ This means that when the content matter of the inference is certain, then it is certain for all forms of the inference. In his opinion, people use different kinds of syllogisms: the general, the inductive and the analogical.⁸⁰ That is to say, the particular is inferred from the general, and the general from the particular, and the particular from the particular. Al-

⁷⁷) Muḥibb al-Dīn 'Abd al-Shakūr is an Indo-Muslim logician who wrote a commentary on *Sullam al-'Ulūm*, a handbook on logic by Muḥibbullah Bihārī (d. 1707).

⁷⁸) Muḥibb al-Dīn 'Abd al-Shakūr, *Sharḥ Sullam al-'Ulūm*, in: 'Alī Sāmī al-Nash-shār, *Manāḥij al-baḥth 'inda Mufakkirī l-Islām*, p. 258.

⁷⁹) Ibn Taymiyya, *al-Radd 'alā l-Manṭiqiyyīn*, vol.1, p. 130.

⁸⁰) Ibid., vol. 2, p. 50.

though people do not formulate their propositions and proofs in the form of the syllogistic inference, these propositions are clearer and shorter and there is no difference in meaning. For example: If one says this is a man, and every man is created or is a living creature, or is sensitive or moves at will. On the other hand, this can be expressed in the form of a syllogistic inference: This is a man, and human beings are necessarily associated with all these judgments.⁸¹

The development of the intellect and ideas contributes to the development of propositions, while restriction of the intellect causes curtailment and reduction of ideas and propositions. This is typical of Greek logic that is based on protracted meaningless methods.⁸² In his opinion, Greek logic was composed by a man from Greece (Aristotle) who was associated with the Greek language, and therefore it is forbidden to restrict the methods of human knowledge to one method.⁸³

Conclusion

Ibn Taymiyya tries to prove that one can attain judgment without basing it on the syllogism. In his opinion, judgment can be obtained through various methods and not only through the syllogism. He tries to undermine the basic components of the syllogism and to demonstrate their inaccuracy. He criticizes the definition of the Aristotelian syllogism, and in his view, this definition restricts the syllogism to only two premises. Logicians have claimed that the syllogism is composed of statements that are propositions, and this does not mean only two propositions, but two, three or more.

Ibn Taymiyya does not agree that the syllogism necessitates the presence of two premises, because theoretical knowledge can be obtained by one premise, or three or four premises, depending on the intellectual level of a person. Therefore the inference is not an arbitrary and artificial matter that can be limited to two premises. The inference depends on the need of a person for premises in order to create a proof. In this respect, people differ from each other; some of them do not need an inference at all, because they know the inference as a necessity while others may need one premise or a number of premises.

⁸¹) Suyūti, Jalāl al-Dīn, *Ṣawn al-Manṭiq wa l-Kalām ‘an Fann al-Manṭiq wa l-Kalām*, Beirut 1998, p. 290.

⁸²) Ibn Taymiyya, *al-Radd ‘alā l-Manṭiqiyyīn*, vol. 1, p. 172.

⁸³) Ibid. p. 181.

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