# ON INTELLECTUAL SKEPTICISM: A SELECTION OF SKEPTICAL ARGUMENTS AND ṬŪSĪ'S CRITICISMS, WITH SOME COMPARATIVE NOTES

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> We have first raised a dust, and then complain, we cannot see.
>
> George Berkeley[1]

In epistemology there are, typically, three main questions: (1) What is knowledge? (2) Can we have knowledge—and if so, what is its scope and extent? and (3) What are the sources of knowledge?[2] Skeptics answer the second question from a negative and pessimistic standpoint. In other words, they either deny that we can know anything at all or consider the dominion of knowledge to be very limited.

Since ancient times, skepticism has been based largely on arguments for doubting the reliability of our various belief sources. The importance of the "skeptical arguments" is not only because of the challenge they offer in lieu of the possibility of gaining knowledge, but also because they help us to deepen our understanding of knowledge. Thus, skeptical arguments have been a central concern of epistemology, as Laurence BonJour interestingly points out: "... if skeptics did not exist, one might reasonably say, the serious epistemologists would have to invent them."[3]

Although the history of skeptical arguments goes back to the ancient Greeks, Descartes is often thought to be the first philosopher who articulated and formulated the new and modern version of the skeptical argument. Here I shall not discuss whether or how much Descartes' skeptical arguments were new or novel; rather I confine myself to focusing on a pre-Cartesian version of the debate.

I wish to introduce and consider a rich skeptical debate provided by two earlier Persian philosophers/theologians: Rāzī (Fakhr al-Dīn al-Rāzī, 544/1149–606/1210) and Ṭūsī (Naṣir al-Dīn al-Ṭūsī, 597/1201–672/1274).[4] Both are among the eminent figures who have had a profound influence on Islamic philosophy and theology.

In section one of his book *al-Muḥaṣṣal* (The compendium), Rāzī devotes a preliminary chapter to a discussion on different views of the possibility and ultimate sources of knowledge. He extensively cites, restates, and classifies various arguments in which three distinct groups of skeptics have tried to weaken the foundations of our reliance on intellect and/or sense perception. Here, we find Rāzī, as a historian of skepticism, reporting various skeptical arguments without mentioning his acceptance or non-acceptance except in one place, at the end of one section of his book,

where he briefly expresses his criticism of radical global skepticism.[5] Ṭūsī, however, considers Rāzī's brief assessment of global skepticism[6] insufficient to deal with the issues of skepticism. So, in his *Talkhīṣ al-Muḥaṣṣal* (The paraphrase of the compendium),[7] which is written as a critical commentary on Rāzī's *al-Muḥaṣṣal*,[8] Ṭūsī gives a detailed critique, and in some cases a point-by-point evaluation and refutation, of the skeptical arguments maintained by different groups of skeptics.

The present essay has three main aims. The first is descriptive: to give a clear exposition of an important epistemological controversy that I believe has not received sufficient attention,[9] and to make it readily accessible to the contemporary scholars of epistemology and medieval philosophy. The second aim is historical: to show that there is a considerable forerunner of the modern and contemporary discussions of skepticism and some related epistemological issues, such as the issue of empiricism, which deserves to be taken seriously by the historians of philosophy. The third aim is comparative: to draw attention to some similarities as well as to some points of divergence between the kind of skeptical debate we are focusing on here and some relevant epistemological discussions in the later traditions in the West.[10] I have chosen to deal only with a specific part of the controversy provided by Rāzī and Ṭūsī that is related to what might be called "intellectual skepticism,"[11] or skepticism regarding the judgments of the intellect, particularly in connection with self-evident principles. I begin by an introduction that helps to locate our discussion within a broader epistemological context.

### Introduction: Conception, Assent, and Some Basic Divisions

According to a well-known basic division, knowledge is divided into conception *(Taṣawwur)* and assent *(taṣdīq)*,[12] and each of these two is further subdivided into "basically evident" and "acquired." A standard way to describe the epistemic dichotomy of conception/assent proceeds as follows: "conception" is the simple apprehension or knowledge of a thing without a judgment being made about it, such as our knowledge of the meaning of the term "triangle," whereas "assent" is the apprehension or knowledge of a thing accompanied by a judgment,[13] as in the case of our knowledge that the sum of the angles of every triangle is equal to the sum of two right angles.[14] Assent, in the context of this debate, is not a content-free mental action; rather, it is propositional in form or has propositional content in the sense that different conceptions are put together in which, for example, an attribute is predicated of a subject. Hence, within this framework, talking about "assent" epistemologically is actually talking about propositions.[15] Putting it this way would make "assent" relevantly similar to what is called "propositional knowledge" (also referred to as "knowing that," "descriptive knowledge," or "factual knowledge") in the dominant contemporary use in epistemology.

The strict distinction and the relationship between "conception," "assent," and "judgment" *(ḥukm)* have for a long time been the subject of discussion in classical Islamic Logic.[16] But here it suffices to mention that for notable thinkers like Rāzī and Ṭūsī and, of course, for Avicenna, assents occupy a central position within the struc-

ture of human knowledge as well as in epistemology. In this respect, Avicenna is very explicit in saying that "the end [and purpose] of conception is [achieved] in assent; and assent is the perfection of conception, since conception is needed for [achieving] assent. And further, the purpose of [granting] definitions is [the attainment of] assent."[17] This, however, is not to say that conceptions are altogether unimportant epistemically. In fact, having conceptions is a requirement and constituent factor for obtaining assent, so that without conception one cannot have assent. The privileged status of "assent" in classical Islamic epistemology finds its parallel in the centrality of "propositional knowledge" in contemporary epistemology. For example, Louis Pojman writes: "epistemology is primarily interested in propositional knowledge."[18] And Richard Fumerton says in his *Epistemology* that "of most interest to the epistemologist are claims to have *propositional* knowledge—knowledge *that* things are so and so."[19] Also Michael Huemer puts this point as follows: "There are several different uses of 'know' ... but the sense that epistemologists have focused on is the sense that refers to *propositional knowledge,* or factual knowledge."[20]

Using this approach, Rāzī focuses primarily on knowledge in the form of assent and gives a historical survey of the views of his predecessors about its possibility and its ultimate foundation(s). He starts out by arguing that assent is subject to a prominent distinction between "basically evident"[21] and "acquired" *(muktasab).* In doing this, first he asserts that it is *evidently* not true that "every assent is basically evident," then he mentions a well-known and historically important argument for the unavoidability of "basically evident assents" that runs as follows: unless some assents are evident and basic, the justification of all assents must inevitably lead either to an infinite justificational regress of arguments or to a circular argument, and this would be absurd. To avoid this absurdity, Rāzī argues that we are forced to admit that in tracing back the inferential chain we arrive at a level of evidently justified assents that stops the regress and, of course, provides an escape from the threat of justificational circularity.[22] In this foundationalist approach, the non-inferentially justified assents, or basically evident assents, are claimed to constitute the foundation of our knowledge upon which the superstructure of "acquired" or "non-basic" assents rests. These foundational and basically evident assents, according to Rāzī, are divided into three main classes:[23]

(a) The perceptual assents *(ḥissiyyāt)* that are propositions perceived by means of our external senses. In this way it would be evident to us, for example, that "the sun is bright" and "fire is hot." These are called perceptual or sensory propositions (i.e., propositions derived from sensory experiences). We can also call them "propositions that are evident to the senses," to borrow a phrase from Alvin Plantinga.[24]

(b) The assents that are propositions derived from our inner feelings *(wijdānīyyāt),* such as my knowledge that "I am feeling hungry or thirsty." This kind of assent, as Rāzī indicates, is epistemologically trivial because its content is about our private conscious experiences, which are essentially unshareable.[25] Hence, Rāzī does not discuss it.[26]

(c) The self-evident *(badīhī)*[27] assents (i.e., self-evident propositions, or self-evident principles, which henceforth I refer to as SEPs), such as: "the whole is greater

than its part," "things equal to one and the same thing are equal to each other," and more significantly, the principle that says that "every *thing* either exists or does not exist and nothing can be both existent and non-existent." Avicenna calls this class the "primary propositions" *(awwaliyyāt)* and describes them as follows:

> The primary propositions are those that are necessitated by the essence and instinct of a clear intellect *(al-'aql al-ṣarīḥ),* and not by any cause *(sabab)* external to it. Thus whenever by its essence the intellect conceives the terms of these propositions, it makes a judgment. Therefore, [intellectual] judgment in these propositions does not depend on anything except on the occurrence of the concept, and the discernment of [its] composition.[28]

Regarding the reliability of (a) and (c) as two kinds of basic propositions, Rāzī claims there are four main positions held by various thinkers in the entire history of thought:[29]

1. Both (a) and (c) should be counted as reliable sources of knowledge. This option has been adopted by the majority.
2. (a) is not trustworthy, and (c) is the only reliable foundation of knowledge.
3. (c) is not trustworthy, and (a) is the only reliable foundation of knowledge. As indicated earlier, in our discussion, I call this position "intellectual skepticism" and refer to its proponents as "intellectual skeptics."
4. Neither (a) nor (c) is eligible to provide any reliable source of knowledge, and thus we are left with global skepticism; in other words, knowledge is not possible.[30]

In what follows, I focus on the third position and shall *selectively* consider some of the arguments cited by Rāzī on behalf of the skeptics, as well as Ṭūsī's criticism in each case. Some relevant historical and comparative considerations will be mentioned, in brief.

## 1. The Argument from the Primacy of Sense-Perception

According to Rāzī's classification, the third group of thinkers (who are not global skeptics) adopt a skeptical attitude toward SEPs. They defend the primacy of "perceptual propositions" as the foundation of human knowledge. They offer a considerable positive argument for their position that runs as follows: intellection (or intellectual cognition) and intellectual propositions, including SEPs, are ultimately subordinated to and based on our sensations or sense perceptions. In this direction, Rāzī quotes a famous dictum:

> Whoever loses a certain sense necessarily loses some certain knowledge *(man faqada ḥiss-an faqad faqada 'ilm-an).*[31]

Thus, because of this foundational status, sense perceptions, and consequently "perceptual propositions," have a greater epistemological force, so that they constitute a privileged class of propositions known with certainty.

Ṭūsī, in opposition to this argument, indicates that

[Even] if sensation *(iḥsās)* is a requirement *(shart)* for some intellectual judgment, it does not entail that sensation is [epistemically] more powerful than intellection *(ta'qqul)*. For [broadly speaking], surely disposition [or potentiality] is a requirement for the realization [or attainment] of perfection *(kamāl)*; however, it is not more powerful than perfection.[32]

This seems to be inspired by and relevant to a well-known metaphysical point which states that although it is true that (1) disposition has priority, *in terms of time,* to perfection or actuality, and (2) matter is a necessary condition for form, neither of these implies any *ontological* primacy for disposition over perfection or for matter over form. Rather, on the contrary, perfection as well as form lie at a higher level of existence and thus deserve an appropriate kind of primacy. In the case of form, for instance, one sees this in Avicenna's *Metaphysics* II.4 of *Shifā'*, "On Placing Form Prior to Matter in the Rank of Existence" *(fī taqdīm al-ṣūrat 'alā al-mādda fī martaba al-wūjūd)*.[33]

It seems clear, then, that Ṭūsī points to a hierarchical structure of human knowledge according to which sensations and sensory or perceptual propositions lie at a lower level that pertains to the attainment of an appropriate and specific capacity in the cognizers, enabling them to evoke "higher-level" knowledge, that is, an intellectual form of knowledge.[34] To some degree, this may be seen as being akin to deploying a hylomorphic explanatory framework in the context of an epistemological discussion of the sensory-intellectual relation. In this view, since the cognizer passes from imperfect and "lower-level" knowledge to a higher and more perfect type of knowledge, he/she has a likeness to generable things; also the relation of the second level to the first level of knowledge would be like the ontological actuality and perfection of the form in relation to the potentiality and disposition of the matter.

## 2. Arguments against SEPs

Apart from the above-mentioned positive argument, this group of thinkers, the intellectual skeptics, provide some negative or critical arguments against the epistemological status of SEPs as the foundation of our knowledge. In what follows, a selection of these arguments as well as Ṭūsī's responses are organized under five main headings:

1. The Argument from the Inconceivability of Non-Existence,
2. The Argument from the Concept of "Coming-into-Being,"
3. The Argument from the Skeptical Hypothesis,
4. The Argument from Conflicting Arguments and the Argument from Changing Beliefs, and
5. The Argument from Relativity Considerations.

### 2.1 The Argument from the Inconceivability of Non-existence
Rāzī states that the intellectual skeptics, in an argument from the inconceivability of non-existence *('adam)*, as we might call it, argue against the evidentness of SEPs

through challenging the very possibility of knowledge of the so-called "primary self-evident proposition" (or, in Rāzī's words, the most evident of all self-evident propositions [ajlā al-badīhīyyāt][35]), to which all other self-evident propositions are supposed to be reducible.[36] He mentions the following principle as the "primary self-evident proposition" (hereafter PSEP): "every *thing* either exists or does not exist[37] and nothing can be both existent and non-existent."[38] Now, the argument runs as follows:[39] clearly our assent to PSEP rests upon the *conception* of "non-existence." However, in Rāzī's words, "people are perplexed *(taḥayyarū)* about this issue,"[40] since on the one hand (1) everything that is conceived *(mutaṣawwar)* must be distinguished from other things, (2) what is distinguishable *(mutamayyiz)* from other things would be individuated *(muta'ayyin)* by itself, and (3) everything that is individuated by itself would subsist by itself. Thus, every *conception* has to be a discrete and subsistent thing. On the other hand, non-existence, being sheer "nothing," has no subsistence whatsoever and hence would be inconceivable.[41] This group of skeptics concludes that given that PSEP is subordinated to the conceivability of "non-existence," and given that it is not possible for "non-existence" to be conceived, then it would not be possible to assent to such a proposition as PSEP, very much less than what is required for a proposition to be self-evident to us. Now, they continue, by paying attention to this problem regarding the foundation of SEPs, that is, PSEP, how can we guarantee the possibility and trustworthiness of what counts as intellectual knowledge, in general, and SEPs in particular?

Ṭūsī bases his response on an important distinction between mental and extra-mental modes of existence/non-existence, as well as between "being a sign" and "being signified." In line with some other philosophers such as Avicenna,[42] Ṭūsī believes that the concept of non-existence is totally different from actual non-existence. The *concept* of non-existence (CNE) is an individuated mental existent that is conceived distinctly and subsists only in the mind, while extramental actual non-existence (ENE) has no form of being or subsistence at all. But how can we think of ENE and talk about it? In this connection, CNE plays the role of a conceptual or linguistic tool, some sort of a name—something roughly like "sign," which has the property of signification and is associated with pointing to something beyond itself, that is, to ENE as a thing signified. So, one cannot say that "non-existence" is absolutely inconceivable, without qualification, "because," Ṭūsī writes, "it [i.e., non-existence] is conceivable inasmuch as it does not exist in extramental reality [i.e., inasmuch as it is CNE], and it is inconceivable not inasmuch as it does not exist in extramental reality [but inasmuch as it is ENE]."[43] He concludes that it is CNE, and not ENE, that our assent to PSEP depends on; hence, no impossibility follows from that.[44]

*2.2 The Argument from the Concept of "Coming-into-Being"*
This argument,[45] like the previous argument (2.1), is designed to show the unreliability of SEPs by undermining PSEP. It is formulated particularly against the first clause of PSEP (i.e., "every *thing* either exists or does not exist"), which excludes the middle

between "existence" and "non-existence." Before dealing with the main argument, Rāzī insists that we should bear in mind that "coming-into-being" *(ḥudūth)*, signifying the "passing from non-existence to existence" *(al-khurūj min al-ʿadam ilā al-wujūd)*, is conceptually distinct, and its meaning is different from the terms "existence" and "non-existence," so that they cannot be substituted for each other. Now, one version of the argument begins as follows: when a thing[46] has moved from non-existence into existence and has come into being, there would be a transitional stage/state *(ḥālat al-intiqāl)* that is prior to its existence and posterior to its non-existence. So, the question is: what is the thing's metaphysical status at this stage? In other words, we ask whether it is existent or not existent during the interval period. According to Rāzī, on behalf of this group of the skeptics, the answer is that it *neither* exists *nor* does not exist. For, insofar as the thing is *coming* into being, it does not yet exist;[47] on the other hand, it cannot be non-existent, since it has moved from non-existence to existence. In Rāzī's words,

> In the transitional state, it [i.e., the thing that has moved from non-existence into existence] must be neither non-existent nor existent, since, [1] if it is some non-existent thing, then it has not started to move yet and still remains in its previous state [that is, the state of non-existence], and [2] if it is some existent thing, then it has reached to the destination of the transition [but, clearly, both of these alternatives lead to contradiction].... Hence, the thing [in the transitional state] is necessarily outside of the limiting point *(ḥadd)*, that is, pure non-existence *(al-ʿadam al-ṣirf)*, and has not reached the [other] limiting point, that is, pure existence *(al-wujūd al-ṣirf)*.[48]

Therefore, from a metaphysical standpoint, the thing seems to hover somewhere between non-existence and existence, and this would invalidate the above-mentioned primary principle, which says that there is no intermediary state between existence and non-existence.[49]

In replying to this argument, Ṭūsī observes that the concept "transition" *(intiqāl)* and related terms such as "starting point," "passing from one point to another," "intermediary stages," and "end point" are, strictly speaking, applicable only where a gradual change takes place among the *existent* things in the world of motion, that is, the physical world. Accordingly, there would be no room for any kind of real transition when "non-existence" has been taken as the starting point, nor is it possible for there to be an objective "interval period" between sheer non-existence and pure existence. Thus, for Ṭūsī, this challenge posed by the intellectual skeptics is irremediably flawed.[50]

### 2.3 The Argument from the Skeptical Hypothesis

Generally speaking, arguments for skepticism about the external world make crucial use of skeptical hypotheses (skeptical scenarios or skeptical alternatives). These are hypothetical situations in which the world is completely different from the way we judge it to be. In other words, as Casey Perin points out, "a skeptical scenario is a story about how I have acquired some or all of my beliefs according to which those

beliefs are false or defective in some other way."[51] Familiar skeptical hypotheses are the dreaming hypothesis, Descartes' evil demon hypothesis, and more recently the "brain in a vat" hypothesis.[52]

This mode of argument can be set out as follows:

1. We don't know that the skeptical hypothesis is false (e.g., we are unable to deny the "brain in a vat" hypothesis).
2. If we don't know that the skeptical hypothesis is false, then we have no knowledge of any mundane propositions about the normal world.
3. We have no knowledge of any mundane propositions about the normal world.

In contrast to this usage of the skeptical hypothesis, which calls the very possibility of knowledge about the external world into question, Rāzī offers a number of skeptical hypotheses or scenarios on behalf of a group of skeptics who really believe that there is an external world and that it is possible to acquire knowledge about it by relying on our sense perceptions. Instead, they have employed the hypotheses in order to undermine the credibility of intellectual certainty as the main step toward denying any foundational role for SEPs in human knowledge. Here, we shall consider four such alternative (local or limited, but not global) scenarios laid down by Rāzī, each scenario explaining how we might be going wrong about the very things of which we think we are certain (jāzim).

## Scenario 1 (S₁)

Imagine you've seen someone called Zayd (in Rāzī's words), for instance, and then you close your eyes for a moment and open them again and see Zayd for the second time (call them Zayd₁ and Zayd₂). In this situation, you are evidently certain that the person you see the second time is the same Zayd you saw the first time. But, this certainty (jazm) is unfounded because it is possible that Zayd₁ has been destroyed, and, at once, someone just like him (i.e., Zayd₂) was brought into existence at the time you had closed your eyes. Therefore, you have, in fact, seen two extremely similar Zayd(s) who appear to be the same person. This scenario can be justified by the Kalām Theologians' belief (Muslims' belief, in Rāzī's words[53]) that God is an omnipotent and absolute free creator, so He could annihilate Zayd₁—directly, suddenly, and altogether—and create immediately someone identical to him. From a non-religious standpoint, however, this possibility can be justified by appealing to the Philosophers' (falāsifa) view[54] that some extraordinary celestial configuration (shakl gharīb falakī) might emerge, although very rarely, that influences the affairs of the terrestrial or sublunary world of generation and corruption ('ālam al-kawn wa al-fasād) and causes bizarre things to happen.[55]

## Scenario 2 (S₂)

When we look at a young or an old man we definitely know that they have not been created all at once (daf'at-an wāḥida) without parents, and we are certain, as well, that someone who is in his old age has already passed his middle age, youth, adolescence, and childhood. In retrospect, it seems clear that our certainty in such cases

would be unwarranted, because it is possible that: (a) the omnipotent God, according to the *Kalām* Theologians, would act opposite to the ordinary processes of nature and create instantaneously mature human beings, and, (b) some extraordinary celestial configurations, according to the Philosophers, would give rise to the sudden emergence of a perfect human person.[56]

## Scenario 3 (S₃)

When I leave my house, I am certain that the dishes will not change into diligent and prudent scholars in Logic and Geometry and that the stones outside will not change into gold and rubies. "I also know," in Rāzī's words, "100,000 Mans (an old unit of weight; each "Man" is approximately 3 kilograms) of rubies do not exist under my feet, and water in the valleys and seas will not change into blood or oil." But we are not justified in these certainty claims because of the counter-possibilities, which cannot be ruled out. If someone says in response, "when we look at the aforementioned objects for the second time, we find them the same way as we did the first time,"[57] it would be unacceptable because, Rāzī writes,

> It is probable that due to the Divine free will or due to some rare extraordinary celestial configuration the characteristics of those objects had changed during our absence [or lack of attention], and then have changed back to their ordinary features when we return [or pay attention to them again].[58]

## Scenario 4 (S₄)

If I address someone—call him Zayd—and he responds appropriately through the use of rhymed speech *(kalām manẓūm)*, then I will be *necessarily certain* that Zayd is alive *(ḥayy)*, rational *('āqil)*, and perceptive. This certainty claim, however, is unfounded because the question still remains: on what grounds could we reasonably justify the alleged certainty? Is it caused by our inference from Zayd's spoken words *(aqwāl)*, or from his *performance* of speech acts? The "spoken words" would not be reliable evidence for us to be certain that Zayd is alive and rational, since spoken words, as such, are simply discrete verbal sounds and their instantiation in an object does not imply that the object is alive and rational. Neither, Rāzī points out, can we infer from Zayd's *performance* of speech acts that he is alive and rational, because it is possible that he does not compose semiotic strings at will to convey his thoughts, and what we observe as his appropriate acts of speech are actually brought about by a Divine free agent or by a rare extraordinary celestial configuration. In other words, according to this scenario, it is quite probable that Zayd, who does appropriately talk to us, is just a divinely controlled automaton without any real apprehension or intention.[59]

The following two points deserve particular mention.

*First.* The local scenarios or hypotheses (S₁ to S₄) presented above, as the moderate versions of the argument from the skeptical hypothesis, are formulated to turn on the point that our intellectual certainties in our actual life are underdetermined by the data we get through "experience." It is important to bear in mind that the hypotheses here are not about sense perception but about intellectual *certainty*. To make this

point clear, we would say that, for instance, in $S_1$, the intellectual skeptic may grant that sense perception is reliable. He may grant that when I see $Zayd_1$, my perception tells me everything about $Zayd_1$ that sight can detect, and that it is all true, and when I see $Zayd_2$, my perception once again functions without any flaw and tells me truthfully everything that sight can see. The problem is: even if my sight and other senses are functioning perfectly well and we have reliable sense perceptions, how can I be certain that $Zayd_1 = Zayd_2$? In $S_1$, the following intellectual principle is challenged: if two perceptual episodes, very close to each other in time, reveal two objects that are perceptually indistinguishable from each other, then the two objects are one and the same identical object.[60]

Incidentally, as a methodological point, I would like to make it clear, that in Razī's *Muḥaṣṣal* the "argument from the skeptical hypothesis" has been invented to attack SEPs in an *indirect* way.[61] In other words, the kinds of propositions that are discussed in the scenarios do not touch directly on SEPs but rather on what some would call "obvious empirical facts" in ordinary life that we claim to know with certainty. Keeping our focus on intellectual certainty, this type of skeptical argument can be rendered in the following form:

1. We don't know that the skeptical hypothesis (or scenario) is false.
2. If we don't know that the skeptical hypothesis is false, then we cannot trust our intellectual certainties.
3. We cannot trust our intellectual certainties.

*Therefore, since the validity of SEPs depends on the credibility of intellectual certainty, there remains no trustworthy ground on which to justify our certainty about SEPs.*

For the intellectual skeptics, the second premise relies on what has been called in contemporary epistemology the principle of universalizability.[62] In its formulation for the current context of our discussion, this principle holds that if your present cognitive/epistemic state is, as far as you can tell, relevantly indistinguishable from another, which was not a state of certainty, you cannot now claim to be in a state of certainty. Accordingly, since undeniably we have made mistakes in our intellectual certainty claims (as shown in $S_1$ to $S_4$) and since it is probable that similar kinds of mistakes would be repeated in other cases, then *all* the certainties produced by our intellectual judgment are to be mistrusted, "because," Razī writes, "the accused cannot be put in the position of the witness *(lā shihādata li-muttaham)*."[63]

*Second.* The skeptic here believes that a specific view about divine action in the natural world can provide the necessary justificatory support for her/his epistemological strategy. This view of divine agency has its close counterpart in a celebrated discussion of causality in Ghazālī's *Tahāfut*. In fact, Ghazālī (Abū Hāmid al-Ghazālī, ca. 448/1056–505/1111) dealt with similar scenarios in his *Tahāfut al-Falāsifa* (The incoherence of the philosophers) and called them hideous or repugnant impossibilities *(muḥālāt shanīʿa)*. They are formulated, on behalf of an imaginary philosophical objector who might suggest these scenarios, in order to make Ghazālī's occasionalism[64] and his criticism of causal necessity look absurd. They are mentioned in the

seventeenth discussion of the *Tahāfut*, where Ghazālī argues against Avicennan necessitarianism and begins the discussion with the following famous declaration of his belief:

> The connection *(iqtirān)* between what is habitually believed to be a cause and what is habitually believed to be an effect is not necessary according to us. But [with] any two things that are not identical and which do not imply one another it is not necessary that the existence or the nonexistence of one follows necessarily out of the existence or the nonexistence of the other.... Their connection is due to the prior decree *(taqdīr)* of God, who creates them side by side, not to its being necessary by itself, incapable of separation.[65]

The objection is that if the causal relation is not necessary and if God creates things and events in accordance with the pure arbitrariness of the divine will, Ghazālī's putative objector remarks, might it not be true that we can "allow the possibility of there being in front of him ferocious beasts, raging fires, high mountains, or enemies ready with their weapons [to kill him], but [also the possibility] that he does not see them because God does not create for him [a vision of them].[66]

The objector adds that Ghazālī's position also renders it possible for any one kind of thing to change into any other kind of thing whatsoever, no matter how unrelated these two kinds of things may be. For example:

> [I]f someone leaves a book in the house, let him allow as possible its change on his returning home into a beardless slave boy ... or into an animal; or if he leaves a boy in his house, let him allow the possibility of his changing into a dog; or [again] if he leaves ashes, [let him allow] the possibility of its change into musk; and let him allow the possibility of stone changing into gold and gold into stone.[67]

This ontological approach (i.e., radical occasionalism) has its epistemological consequences. On this point, consider Ghazālī's exposition, on behalf of the objector, in the following:

> If asked about any of this, he ought to say: "I do not know what is at the house at present. All I know is that I have left a book in the house, which is perhaps now a horse that has defiled the library with its urine and its dung, and that I have left in the house a jar of water, which may well have turned into an apple tree. For God is capable of everything...." Indeed, if [such a person] looks at a human being he has seen only now and is asked whether such a human is a creature that was born, let him hesitate and let him say that it is not impossible that some fruit in the marketplace has changed into a human—namely, this human—for God has power over every possible thing, and this thing is possible.[68]

In response and in opposition to those who believe in occasionalist radicalism, and to those who hold that God may act arbitrary and break the "laws of nature" on an *ad hoc* basis, Ghazālī refutes the objector's claim that such a skeptical position follows from his view by emphasizing the strictly habitual character of Divine actions.[69]

To conclude, while the discussion in $S_1$ to $S_4$, as well as in Ṭūsī's responses (discussed below), is meant to be epistemological in character, ontological considerations

and presuppositions about natural causality and about what is possible for God to create should not be overlooked.

*2.3.1 Argument from Divine Omnipotence in the Later Medieval Tradition.* As we saw, appealing to Divine omnipotence plays an important justificatory role in scenarios $S_1$ to $S_4$. In this section, first, I would like to consider some of its Western counterparts especially in the Later Medieval tradition. After that, I shall give two points of difference between these two traditions.

There is a long tradition of appealing to the principle of the possibility of super-natural intervention, in a manner that has had significant epistemological and par-ticularly skeptical implications, which can be traced back as far as the ancient thinkers. An early version of this line of thinking may be derived from Cicero's *Academica* (more than sixteen hundred years before Descartes' *Meditations*). Consider, for example, the following passage:

> If god has presented a sleeper with an impression that's persuasive, why not also one that's extremely truth-like? Next, why not one that's difficult to discriminate from a true impression? Next, one that can't even be discriminated? And finally, one that doesn't dif-fer from a true impression at all?[70]

As Leo Groarke points out, this step-by-step questioning leads to the conclusion that the deity can make false impressions that are as convincing as those that are genu-inely true. Thus, "the Stoics' view," he writes, "leads to the conclusion that God may deceive us about any impression."[71]

Recent literature on medieval philosophy and theology has made it strikingly clear that a number of medieval Christian philosophers/theologians (at least from the twelfth century onward[72]) took the far-reaching consequences of the theological principle of God's absolute omnipotence seriously in their epistemologies and theo-ries of cognition. For our comparative purpose, in the following, we will very briefly consider the relevant views of four figures in the Later Medieval tradition.

### John Buridan (ca. 1295–1361)

In his second letter to Bernard of Arezzo, Nicholas of Autrecourt (ca. 1300–ca. 1350), John Buridan's colleague at the University of Paris, uses the possibility of divine in-tervention as a source of falsehood and skepticism. Buridan was familiar with and seemed to have been inspired by Nicholas' line of argument based on divine om-nipotence. Buridan provided some reconstructed versions of this mode of skeptical argument that, in some cases, correspond directly to objections raised by Nicholas in the Bernard correspondence. Nevertheless, Buridan defends the possibility of knowl-edge against various skeptical attacks and denies that we have to give up all our knowledge claims.[73]

### Peter Auriol (1280–1322) and William of Ockham (1285–1347)

In his influential critique of Scotus' version of distinction between abstract and intui-tive cognition, Peter Auriol appeals to a priori as well as to a posteriori arguments. His a priori argument for intuitive cognition of a non-existent, against Scotus' view

that intuitive cognition could be attained only in the presence of its object, is based on the fact of God's absolute omnipotence: God can do anything that does not involve a contradiction. To preserve intuitive cognition independent of the object known does not imply a contradiction, and God can separate a thing from its effects while maintaining those effects in the absence of the intuited thing.[74] Thus, Auriol concludes that "God could conserve such an absolute intuition when the relation has been destroyed and the [extramental] thing does not exist in presentiality."[75]

Like Auriol, his younger contemporary, William of Ockham argues that God may at any time intervene and cause or preserve an intuitive cognition of a non-existent or non-present object.[76] In a simplified version of Ockham's analysis, Dallas Denery II writes: "Imagine you are looking at a star. Now imagine that God, who can do anything, destroys the star while conserving your vision of it. What you now see is a nonexistent star. There is no necessary connection between what you see and what exists."[77] Accordingly, as Rega Wood says, "Ockham is not committed to the view that God cannot deceive us. Certainly God could cause false creditive acts according to Ockham; God could cause the belief that something existed in its absence."[78] Nevertheless, Ockham views this possibility of divine deception as epistemologically harmless (using Karger's words[79]) and for him, as Dominik Perler points out, "false beliefs caused by God are to be seen as exceptional cases, comparable to the equally exceptional cases of sensory illusion."[80]

## William of Crathorn (fl. 1330s)

In his *Questions on the First Book of Lombard's Sentences,* William of Crathorn pays specific attention to the skeptical consequences of the possibility of divine intervention and manipulation. He appeals frequently to God's absolute power to deceive us, and "nearly every page," as Charles Bolyard writes, "makes reference, directly or indirectly, to this possibility."[81] In a more challenging hypothetical form, as stated by Robert Pasnau, "Crathorn imagines the possibility of radical deception: that God might constantly deceive us so that none of our sensations have any correspondence with external reality."[82] It should be noted, however, that in the end, Crathorn does not advocate the conclusion(s) of the skeptical argument from divine omnipotence and believes, as a principle known *per se,* that "God or the first cause does nothing groundlessly and supernaturally so as to lead human beings into error," and "everyone of sane mind judges that such an action is incompatible with divine goodness."[83]

I want to draw attention here to two points of divergence between the Later Medieval Latin tradition, as we saw above, and the line of thought cited by Rāzī (in $S_1$ to $S_2$) regarding the skeptical considerations based on divine omnipotence. First, unlike what we find among many Later Medieval Latin authors, in Rāzī's cases, God does not manipulate our cognitive processes. Rather, in them, a very peculiar kind of theological possibility of Divine intervention in some very special *physical* events/ processes has been taken seriously, and ascribed to the Kalām Theologians, without mentioning any purpose of deception or our being deceived by an omnipotent being. Second, it should be noted that the scenarios $S_1$ to $S_4$ have been formulated by the intellectual skeptics to question the reliability of intellectual certainty and,

consequently, to undermine SEPs as the foundations of human knowledge. As we saw, this group of skeptics emphasize strongly that our sense perceptions provide the only reliable sources of knowledge—hence the name "intellectual skepticism."

By contrast, I have not seen such an explicit element of empiricism in the skeptical arguments/hypotheses, based on God's omnipotence and absolute free will, in the Western medieval tradition. We find, instead, sufficient indications that many of them are developed in order to raise doubts about our sensory perceptions. As evidence for this, aside from the aforementioned quotations, I would like to add, first, the following passage, again from Buridan:

> The *senses* can be deceived, as it is commonly said, and it is certain that the species of *sensible* things can be preserved in the sense organs in the absence of these things,... And then we judge that which is not there to be there, and that is why we err on account of the senses. And the difficulty is greatly increased by what we believe in our faith; for God can form in our *senses* the species of sensible things without these sensible things, and can preserve them for a long time and then [if He did so] we would judge those sensible things to be present.[84] (italics mine)

And second, the following restatement of Stephen Patrington's (d. 1417) idea by Leonard Kennedy:

> The second principal reason for claiming that intuition never gives knowledge of the existence of anything outside the person sensing is that the sensation is other in being than the object of sensation; that God, being omnipotent, can keep such a being in existence without the object, and that He can produce without secondary causes whatever He ordinarily produces with them. God can produce or conserve a *sensation* without an external object as easily as a substance can remain when an accident goes. (italics mine)[85]

*2.3.2 Ṭūsī's Responses.* Ṭūsī provides three lines of criticism of $S_1$. *First,* he reminds us that the continuous personal identity of an individual, like Zayd, is an *evident* fact, and this is a point of agreement between the intellectual skeptic and the non-skeptic. In other words, the skeptics' denial, in this area, is not directed against the evidentness of our belief about the continuity of personal identity over time and across different spheres of life; rather, their objection is leveled against the reliability of our certainty in such a case. Now, Ṭūsī argues that the argument based on $S_1$ would be implausible, because the human intellect judges with firm certainty *(jāzim bi-lā-taraddud)*, without any hesitation, that this Zayd that we now observe is the same Zayd just seen a moment ago, and this assent does not depend on being able to reject the alternative or counter-possibility mentioned in $S_1$; otherwise it would not be compatible with its *being evident*.[86]

*Second,* the ascription of the view of annihilation, cited by Rāzī, to the Islamic believers (i.e., the *Kalām* Theologians), without qualification, is spurious. Ṭūsī emphasizes that the *Kalām* Theologians do not unanimously agree that it is possible for an enduring being, like a human individual in our discussion, to be annihilated im-

mediately altogether by direct Divine action. In this connection, Ṭūsī mentions three alternative positions held by some Kalām Theologians:

1. Most of "the Muʻtazilites [one of the two main groups of the Mutakallimūn, or Kalām Theologians] maintained that the annihilation of an existing thing comes about [not directly and without mediation, but only] through creating its contrary; even their masters said that before the Resurrection (qiyāma) God will create an accident ('araḍ), called 'ceasing to exist' (fanā), that occurs in no substrate (lā fī maḥall). This accident is contrary to everything save God; hence, it makes all things, other than God, cease to exist."[87]

2. According to the doctrine of Naẓẓām (d. ca. 835–845), an eminent Kalām Theologian, God, at every moment, creates all bodies (ajsām) and accidents in the world anew, and therefore, when He does not create them anew, they cease to exist. So there is no direct Divine action of annihilation. Ṭūsī adds that the Ashʻarites (another main group of Kalām Theologians) endorse a position similar to that of Naẓẓām, albeit only in the realm of accidents.[88]

3. All the theologians who believe in the "impossibility of the return of what has ceased to exist" (imtināʻ iʻādat al-maʻdūm)[89] have held that bodies do not cease to exist altogether; it is only the composition of parts that will be destroyed.

Thus, after considering these historical evidences, Ṭūsī writes:

> The annihilation of Zayd₁ [directly without mediation and altogether] is *not possible* for most Kalām Theologians, and what is not possible cannot be an object of the power of action of a free agent.[90]

*Third,* the ascription of the position, mentioned in S₁, to the Philosophers is not correct. Ṭūsī points out that for the Philosophers:

1. The extraordinary celestial configurations can only be counted as the efficient cause, and, this alone is not sufficient to produce the effect in the natural world; for there is still a need for another sort of cause, which is called the receptive, or material, cause, the matter from which a natural entity is made. In the realm of Nature, things cannot be brought into existence out of nothing.

2. The matter of Zayd₁ and his soul continue to exist, either together or separately in distinct realms, so it is not possible for them to go totally out of existence.

3. The matter of Zayd₂, from which he comes to be, becomes receptive of its suitable form, the human soul, only after a special bodily "equilibrium" or "balance" between the constituent natural elements is developed. Then, by taking nourishment and growing, and after a considerable passage of time, he gradually becomes a mature, perfect human being (insān kāmil). Thus, Zayd₂ cannot just simply pop into existence out of nowhere, without any previous ground or preparation.[91]

Therefore, Ṭūsī concludes, these ascriptions to the Kalām Theologians and to the Philosophers cited by Rāzī are without foundation. Even if, Ṭūsī contends, we ignore all of these criticisms and admit the ascriptions, our intellect is still absolutely certain that such very remote possibilities must be dismissed as completely irrelevant;[92] hence, we, as rational beings, have no doubt about the self-evident principles.[93] This

latter part of Ṭūsī's response may remind us, in some ways, of the contemporary "relevant alternatives" theory of knowledge, which demands that in order to know, one only needs to rule out *relevant* error-probabilities (or counter-possibilities) in a given situation, not *all* alternatives, even irrelevant ones. This approach, as a promising anti-skeptical strategy,[94] is particularly associated with the work of Fred Dretske and especially with his *Epistemic Operators* (1970).[95]

<div align="center">Ṭūsī's Response to S<sub>2</sub></div>

For Ṭūsī, there are two objections to this scenario.

*First objection.* This type of skeptical hypothesis cannot instill doubt about the usual certainties that we have regarding our ordinary everyday experience (such as the belief in the continued and distinct existence of bodies), although, we admit, there is a difference between our ordinary beliefs and our belief in the self-evident (or first) principles. But this is a difference in degree rather than a qualitative difference; in other words, there are different grades, levels, or degrees of certainty. It should be noted, however, that this vertical difference in certainty does not put the lower grade in the category of mere opinion *(ẓann)*. In this hierarchical picture of certainty and evidentness, the self-evident principles, such as the principle "the whole is greater than any of its parts," afford us the highest level of certainty. Now, apart from the extraordinary possibilities and circumstances mentioned in (S₂), we can be said to have certainty with respect to the proposition(s) we hold on the basis of our ordinary experience, although the degree of belief in the context of everyday life falls short of providing us with the sort of highest grade of certainty and evidentness obtained by the self-evident principles.[96]

As a guiding example, Ṭūsī invites us to consider the epistemic status of the experiential or experimental propositions *(al-qaḍāyā al-tajribiyya)*, which are derived from our repeated sensory experiences. As Avicenna puts it, they are "propositions and judgments that are consequent upon our repeated observations ... thus insuring the formation of a strong belief which is indubitable.... [T]his is exemplified in our judgment that hitting with wood is painful."[97] Our certainty here does not reach the level of certainty in the realm of the first principles; nevertheless it is far from the sphere of the doubtful *(ba'īdat an al-irtīyāb)*.[98]

This is relevantly similar to Buridan's "principle of gradation of the certainty of scientific principles" (as it is dubbed by Klima),[99] in opposition to Nicholas' theory of evidentness and certainty. Nicholas, in his second letter to Bernard, is very explicit in contending that "the certitude of evidentness has no degrees. For example, if there are two conclusions, each of which we are evidently certain about, we are not more certain of one than of the other."[100] Here, Buridan takes his stand against Nicholas' single criterion of evidentness and says: "We shall therefore declare that there are many diverse kinds of certainty and evidentness."[101] Thus, in a position not unlike that of Ṭūsī and Avicenna, "when Buridan explicitly discusses the various degrees of certainty we can have for our various sorts of first principles, he lists without hesitation among the first principles of scientific demonstration ordinary judgments of perception, such as 'This piece of coal is hot' or 'This donkey is eating.'"[102]

This line of thought regarding the gradational character of certainty, held by Avicenna, Ṭūsī, Buridan, and others,[103] is not too far away from the contextualist approach to "knowledge attributions" in contemporary epistemology.[104] "Contextualism," according to Keith Derose, an eminent authority on contextualism, "refers to the position that the truth-conditions of knowledge ascribing and knowledge denying sentences (sentences of the form 'S knows that P' and 'S doesn't know that P' and related variants of such sentences) vary in certain ways according to the context in which they are uttered."[105] Thus, due to the context-dependency element, the contextualist holds that in different contexts or grades the standards for the correct application of terms such as "know," "knowledge," and, in our discussion, "certainty/certitude"[106] change from "strong/high-level" to "weak/low-level" and vice versa.

Further, to use Peter Unger's term,[107] we can say that a thinker such as Nicholas, who believes that there is a single and very high invariant standard that governs the use of the certainty/certitude attribution, would be counted as an "invariantist" regarding certainty.[108]

*Second objection.* As has been indicated earlier, for the Philosophers it is impossible for an old man to be created all at once without any material causes, previous preparations, or nurture.[109]

## Ṭūsī's Response to S₃

Since all the cases mentioned in ($S_3$) are based on the assumption that it is possible that "essential natures" *(Haqāʾiq)*[110] be made other than they are, Ṭūsī criticizes this assumption and says: "for the *Kalām* Theologians, it is *impossible* that 'essential natures' be made other than they are and hence it cannot be an object of the power of action of a free agent."[111] Again, as has been shown already, Ṭūsī adds that in the system of the Philosophers, the transformation of the forms into one another, all at once, without any material process over a period of time, is impossible.[112]

## Ṭūsī's Response to S₄

With respect to the proceeding of rhymed speech, Ṭūsī argues that the skeptic is not correct in her/his ascription to the *Kalām* Theologians of such a view as that quoted in $S_4$. As a part of his response to $S_4$, Ṭūsī puts forward his description of their real position as follows:

> The *Kalām* Theologians said that the proceeding of "rhymed speech" from a *human* individual does necessarily imply that he/she is alive and rational, and this [implication] cannot be refuted by what has been said [in ($S_4$)]. But if the "rhymed speech" is produced by some nonhuman agent it does not imply that the agent is alive and rational. Rather it implies that the [true] source of "rhymed speech" would be a live, intelligent, and powerful free agent.[113]

Regarding the *performance* of action(s) in general, and particularly in connection with the *performance* of speech acts, Ṭūsī emphasizes that both the Philosophers and the *Kalām* Theologians unanimously agree that performing the ordered and precisely disposed actions involves an intelligent, powerful, free agent. Thus, he concludes,

what has been claimed in $S_4$, as the skeptical counter-possibility, would be acceptable neither for the *Kalām* Theologians nor for the Philosophers.[114]

### 2.4 The Argument from Conflicting Proofs and the Argument from Changing Beliefs

*2.4.1 The Argument from Conflicting Proofs.* According to Rāzī's report, the intellectual skeptics invoke a phenomenon known as *takāfu' al-adilla*: the equivalence of (conflicting) proofs.[115] One who engages in rational (or intellectual) arts *(al-ṣanāy' al-'aqlīyya)*, which are theoretical in character, is well aware that in some cases one may have two conflicting proofs for both sides of an intellectual problem in such a way that one is unable to reject either of them, and this incapability *('ajz)* might be permanent or in a particular period of time. Rāzī continues that this, considered as such, shows one's unavoidable position of accepting the truth of all the premises used in the two contrary proofs, which implies the denial of the "Principle of Non-Contradiction," unless it is agreed that one of the proofs is false. From this perplexing situation it follows that human intellectual judgment is untrustworthy, so we cannot rely upon it for justifying our certainty about SEPs.[116]

*2.4.2 The Argument from Changing Beliefs.* Sometimes we come across a particular argument and we have no doubt that the premises it contains are true, and thus we are certain *(jāzim)* about its conclusion. But as time passes by, Rāzī says, the error of some of the premises becomes clear to us and that's why we sometimes see persons change their beliefs or convert from one school of thought to another. This yields further evidence for the unreliability of our intellect's judgment and consequently of our certainty about SEPs.[117]

Ṭūsī responds to both of the arguments above by stating that: (a) some people lack sufficient power to distinguish between good and bad arguments, premises, or conclusions; (b) some people trust in whatever they derive from the authority of their parents, ancestors, or teachers, just because of a high opinion of them; (c) some people doubt some speculative (non-evident) propositions due to the conflicting arguments pro and con; and (d) some people convert from one school of thought to another, because of the preponderance of one of the two contrary arguments over the other. None of these would lead us to conclude that we cannot trust the intellect. Ṭūsī emphasizes that the art of Logic *(ṣina'at al-mantiq)* in general, and particularly the part of Logic which is principally devoted to nature and variants of fallacy *(ṣina'at al-sūfastīqā)*, would help us to know how to distinguish the true and the false and how to avoid errors in processes and ways of thinking.[118] Here, Ṭūsī is pointing to the most important role of *using* Logic in forming adequately grounded true beliefs. In this regard, Avicenna warns that "most of those who pretend to be philosophers learn logic but do not use it, resorting, in the final analysis, to an innate bent, riding it as one who runs without pulling the reins or restraining the bridle."[119]

### 2.5 Argument from Relativity Considerations

According to the intellectual skeptics, as Rāzī cites, the diversity of two factors—(a) constitutions and temperaments *[mizāj]* of body, and (b) habits and customs *('ādāt)* of human individuals—affects our understandings and opinions. They argue that it is

due to the first factor that different people are likely to differ radically in their judgments of the pleasantness or unpleasantness of one and the same object or behavior. As an example of the influence of the habitual factor, Rāzī mentions a person who trained in philosophy and engaged in the philosophical enterprise during his lifetime. On many occasions, it is quite expected that such a person will become confident that all the positions and propositions held by the philosophers, in opposition to the *Kalām* Theologians, are right and true. In the opposite situation, for the one who trained to think as a *Kalām* Theologian and spent his life refuting philosophers' ideas, it is natural to be certain of what the *Kalām* Theologians affirm in contrast to the philosophers.[120] Here we have another relevant case, as Rāzī puts it: "partisans of religions" *(arbāb al-milal)*. Imagine a naive individual, who is among the partisans of certain religions such as Islam and Judaism. Rāzī writes:

> A blind follower of Islam *(al-muslim al-muqallid)* feels, on first consideration [without sufficient study and knowledge], a sense of revulsion for what Jews assert, and, vice versa, a blind follower of Judaism feels repugnance against Muslims' assertions, at first glance [without sufficient study and knowledge]. And this is only because of [different traditional lifestyles, customs, or] habits.[121]

Thus, given the impact of the bodily temperaments and our habits on what we can believe or be certain of, how, then, can we rely on our certainty about SEPs as the secure base for knowledge? Further, perhaps the reliance of all the members of human society (with the exception, of course, of the skeptics) on the SEPs is founded on some basic temperament and/or general custom that is common to all human beings, without any relation to the real state of affairs.[122]

Ṭūsī, in response, insists that the relativistic considerations should not be taken without due pondering and qualification. He says:

> Undoubtedly, bodily nature, habits, and religious traditions have some influence on ordinary folk beliefs *(i'tiqādāt al-'awāmm)*. However, this is not in conflict with the strength and firmness of the Truth *(ḥaqq)*, which is recognized by all rational people *('uqalā)*, even small children, imbeciles, and mentally impaired persons.[123]

By this Ṭūsī means that SEPs, being the strongest form of knowledge, are secured as invulnerable to skeptical attack. In fact, for him, SEPs constitute the entirely unobjectionable as well as the undemonstrable foundation of knowledge. Meanwhile, in regard to lower-level knowledge, which is vulnerable to some degree, Ṭūsī states that the aforementioned effects can and must be avoided. Hence, he writes, "the great masters of knowledge *('ulamā)* warn all the seekers of the truth against following caprices, [bodily] natures, and habits."[124]

## 3. The Intellectual Skeptics' Final Conclusion and Ṭūsī's Final Criticism

After citing the skeptical arguments against SEPs, Rāzī mentions that the intellectual skeptics conclude by addressing their opponents in the following manner:

Either you engage in responding to the challenges we mentioned, or you do not. If you engage in responding, we achieve our purpose, because it means that you have acknowledged, indeed, that there are some problems in accepting the self-evident propositions, which can be solved only by responding to the challenges; and this, in turn, undoubtedly needs subtle [intellectual] speculation. However, what is dependent upon [intellectual] speculation would be speculative *(naẓarī)* [not self-evident], and this is contradictory [since what you assumed as *self-evident* propositions have become speculative propositions]. And if you do not engage in responding, the [skeptical] challenges would remain the same without answer. It is patently clear that if they [i.e., the skeptical challenges] remain unanswered, there would be no certainty about the self-evident propositions [i.e., SEPs].[125]

Therefore, in either of the two alternatives above, the epistemic status of propositions said to be self-evident to us remains subject to doubt.

Ṭusī, in response to the final conclusion, points out that if we choose the second alternative and do not engage in responding, it does not entail that the skeptical challenges have been established. For, Ṭusī emphasizes, these challenges "have no impact on healthy intellects *(al-'uqūl al-salīma),* given their perfect state of certainty."[126] In fact, for Ṭusī, we have two main reasons not to respond to this kind of skeptical argument: (1) there is no room for theoretical disputation or argumentation when the two parties (i.e., the intellectual skeptic and the anti-skeptic) never seem to find any agreed premises, and (2) SEPs have such a privileged epistemic status that they do not need to be supported by argumentation and evidence.[127]

*Conclusion*

Rāzī has been successful in drawing attention to a kind of skepticism that is compatible with (1) metaphysical realism (crudely put, the view that an external world, a cognition-independent reality, exists) and with (2) epistemological foundationalism (the claim that a certain basic level of known propositions that are unmoved movers of the epistemic realm, as Wilfrid Sellars[128] and Roderick Chisholm[129] called them, constitute the foundation upon which the superstructure of non-basic known propositions rests). But we should understand the intellectual skeptics as the foundationalists who restrict the foundations of knowledge to what we have mentioned as perceptual propositions. In other words, for them, as we have seen, our knowledge must be ultimately and exclusively derived from our sensations. Thus, Rāzī has cited and exposed a position that seems to be no less than a medieval version of empiricism. Ṭūsī, in contrast, has presented us with a position that rejects such empiricism. Yet he is a metaphysical realist and advocates a distinctive type of foundationalism as well. For Ṭūsī, the propositions that are self-evident (SEPs), together with the propositions that are evident to the senses (perceptual propositions), provide the secure foundation of knowledge.[130]

Notes

1 – Berkeley, "A Treatise Concerning the Principles of Human Knowledge," p. 69.

2 – See Moser and Vander Nat, "General Introduction," p. 3; and Greco, "Introduction: What is Epistemology," p. 1.

3 – BonJour, *Structure of Empirical Knowledge,* pp. 14–15.

4 – For Ṭūsī's life and works see Dabashi, "Khwājah Naṣīr al-Dīn al-Ṭūsī." A collection of papers on Ṭūsī can be found in Pourjavady and Vesel, *Nasīr al-Dīn Ṭūsī.* For Rāzī's life and works see Griffel, "On Fakhr al-Dīn al-Razī's Life," and Cooper, "al-Rāzī, Fakhr al-Dīn."

5 – But not of "intellectual skepticism," which is the subject of our study. Within philosophical skepticism, we should distinguish *global* from *local* varieties. Global (universal or radical) skepticism maintains that we can know nothing about anything. Local (or domain-specific) skepticism, on the other hand, is restricted to some particular domain. Local skeptics hold that we cannot know *some* class of propositions, such as propositions about the past, other minds, induction, or self-knowledge; in the words of Charles Landesman, "local varieties apply skeptical arguments to restricted domains of human inquiry and interest" (Landesman, *Skepticism: The Central Issues,* p. viii; cf. pp. 3–7, 11–14. In chaps. 13 and 14, Landesman discusses two examples of local skepticism: Hume's doubt about induction and doubts about the possibility of self-knowledge). Also see Bernecker, *Reading Epistemology,* p. 156. Accordingly, it seems to me safe to count what I shall call "intellectual skepticism" as a specific kind of local skepticism, since, as we shall see shortly, it is restricted to the domain of intellectual judgments.

6 – We cannot examine Rāzī's other writings here to find out what his view is on skepticism in general, and on intellectual skepticism in particular. For some aspect of Rāzī's skeptical views, see Shihadeh, *The Teleological Ethics of Fakhr al-Dīn al-Rāzī,* chap. 4. Also see Shihadeh, "The Mystic and the Sceptic in Fakhr al-Din al-Rāzī," pp. 101–122.

7 – It is also known as *Naqd al-Muḥaṣṣal* (The critique of the compendium). See below.

8 – Here I shall use the following edition of Rāzī's al-Muḥaṣṣal: *Kitāb al-Muḥaṣṣal (Muḥaṣṣal Afkar al-Mutaqaddimīn wa-al-Muta'akhkhirīn min al-Ḥukamā*

*wa-l-Mutakallimīn),* ed. H. Atāy (Cairo: Maktabat Dār al-Turāth, 1991). Hereafter this text is referred to as "Rāzī, *Muḥaṣṣal.*" And I shall use Ṭūsī's *Talkhīṣ al-Muḥaṣṣal,* which is printed together with *al-Muḥaṣṣal* plus some other treatises as one book under the title: *Talkhīṣ al-Muḥaṣṣal (which is known as Naqd al-Muḥaṣṣal) with Thirty Philosophical and Theological Treatises,* ed. A. Nurani (Tehran: Institute of Islamic Studies; McGill University—Tehran Branch, 1980; reprinted in Beirut in 1985). Hereafter this text is referred to as "Ṭūsī, *Talkhīṣ.*"

9 – It is noteworthy that the skeptical arguments cited in Rāzī's *Muḥaṣṣal* have been summarized by Ījī ('Aḍud al-Dīn 'Abd al-Raḥmān al-Ījī, d. 756/1355), a Persian theologian, in the first part of his well-known theological book, *Mawāqif;* see 'Aḍud al-Dīn Ījī, *Kitāb al-Mawāqif fī 'Ilm al-Kalām* (Cairo: Maktabat al-Mutanabbi, 1983), pp. 14–21. A German translation of these arguments can be found in Van Ess, *Die Erkenntnislehre des 'Aḍudaddīn al-Īcī,* pp. 172–236. For an English translation, see Fakhry, "Book of Stations in the Science of Theology," pp. 259–265. Some epistemological discussions by Rāzī and Ṭūsī (in German) can be found in Horten, *Die Philosophischen Ansichten von Ràzi und Tusi,* pp. 7–21, 162–169.

10 – In a few cases I shall point out some historical connections with ancient thought as well.

11 – In contemporary and recent literature on classical Islamic philosophy and theology, it is not uncommon to apply the term "skeptic" to any person who admits that we can have *some* kinds of knowledge, but claims that knowledge is not available in this or that selected area. For example: (1) Max Horten (1874–1945), in the epistemological part of his discussion about Ṭusi's philosophical views, named a group of thinkers who question the tenability of the self-evident principles as the skeptics; see Horten, *Die Philosophischen Ansichten von Ràzi und Tusi,* pp. 165–166. (2) Josef Van Ess mentions a specific type of skepticism in Islamic religious thought "which destroyed only the value of speculative reasoning for Islam, not the value of Islam itself." According to him, this type of skepticism "was no radical skepticism[;] ... it was skepticism for belief's sake, skepticism within an accepted conviction which one did not want to give up" (Van Ess, "Skepticism in Islamic Religious Thought," p. 91). Also see Van Ess, "The Logical Structure of Islamic Theology," p. 45. (3) In a recent study on Rāzī's skepticism, Shihadeh writes about his moderate and selective skepticism as follows: "during the last half-decade or so of his life, al-Rāzī arrives at scepticism with respect to the efficacy of rational reflection in metaphysics, which in the context of classical Islamic theology is quite remarkable.... al-Rāzī's turn to Sufism as a result of his scepticism (which, after all, is not absolute) evidently does not come with a wholesale rejection of rational theology" (Shihadeh, "The Mystic and the Sceptic," pp. 109, 116).

12 – Like many other scholars, I prefer to translate *taṣdīq* as "assent" rather than "belief," in contrast to Lameer in *Conception and Belief in Ṣadr al-Dīn Shīrāzī.* Lameer's book is a translation (with introduction and commentary) of Ṣadr al-Dīn al-Shīrāzī [Ṣadrā], "Risāla fi al-Taṣawwur wa al-Taṣdīq," in *Risālatān fī al-Taṣawwur wa al-Taṣdīq,* ed. M. Shariʿati. In my subsequent quotations from Ṣadrā's *Risāla,* I make use, with some modifications, of the translation of Lameer.

13 – In this connection, Ṣadrā (Ṣadr al-Din al-Shirāzī, 979/1571–1050/1635) mentions the dictum that "knowledge takes the form either of a mere conception, or of a *conception* accompanied by a judgment." See Ṣadrā, "Risāla," p. 57. He also quotes the following from the logic part of Avicenna's *Shifāʾ*: "things are known in two ways, one of which is that they are merely conceived.... The second consists in that the *conception* is accompanied by assent" (Ṣadrā, "Risāla," p. 79). It must be noted that the term "assent" *(taṣdīq)* is used equivocally in two entirely different senses: (1) assent as a mental action (or action of the soul), which is roughly equivalent to the act of judging (judgment) or approval-action, which we call "assent$_1$"; and (2) assent as a particular sort of composite conception, that is, a propositional conception, which entails or is accompanied by a judgment, or in fact entails or is accompanied by an assent$_1$, which we call "assent$_2$." Philosophers like Avicenna and Ṣadrā were well aware of these two distinct senses of "assent." Ṣadrā says that in Avicenna's statements, "the expression 'assent' is sometimes applied in the sense of a judgment and at other times to one of the [two main] divisions of knowledge" (Ṣadrā, "Risāla," p. 81). Ṣadrā also warns us that "those who equate assent [i.e., assent$_2$] with judgment [roughly, assent$_1$], which is an action of the soul ... what a stupid view they hold!" (Ṣadrā, "Risāla," p. 54). Therefore, within this framework, it is assent$_2$ that is counted as the subject matter of the most important issues and debates in epistemology. In what follows, my use of the term "assent" refers exclusively to assent$_2$. Tad Brennan, in a private correspondence, has pointed out to me that this usage of the term "assent" corresponds roughly to a combination or bundle of a Cartesian "idea" plus a Cartesian "assent."

14 – These examples are derived from Avicenna, *al-Ishārāt wa al-Tanbīhāt,* vol. 1 (Logic), p. 3.

15 – Undoubtedly, as indicated (see note 13 above), assents are not the same thing as propositions. Every assent has a proposition as its content, but the converse is not true, for you can conceive and understand some proposition without making any judgment about it. Here, I shall use "assent" and "proposition" interchangeably, although the latter will be referred to most frequently. In this usage, what I mean by "proposition" is the proposition involving or accompanied by a judgment.

16 – For more on this issue, see Ṣadrā, "Risāla," pp. 57–75.

17 – Avicenna, *al-Taʿlīqāt,* p. 169.

18 – Pojman, *What Can We Know?* p. 3.

19 – Fumerton, *Epistemology,* p. 1.

20 – Huemer, "The Analysis of Knowledge," p. 435.

21 – What I have here rendered as "basically evident" is *badīhī,* in its broad sense. In this sense, the expression *badīhī,* in contrast to *muktasab,* includes all kinds of non-inferentially justified assents (or propositions; for what we mean by "assent" and "proposition" see notes 13 and 15 above), which are, in the text, classified into (a), (b), and (c) (see below). For this usage of the term, see also Ṣadrā, "Risāla," p. 47; Muhammad al-Tāhanawī, *al-Kashshāf,* vol. 2, p. 1117; and Jabre et al., *Encyclopedia of Arabic Terminology of Logic,* p. 881. There is also a narrow sense of *badīhī,* which refers only to one class of the above-mentioned assents, that is, (c) (see below). In *Muḥaṣṣal,* Rāzī uses *badīhī* in both broad and narrow senses depending on the context; see Rāzī, *Muḥaṣṣal,* p. 86.

22 – Rāzī, *Muḥaṣṣal,* p. 86.

23 – Ibid.

24 – Plantinga, "Reason and Belief in God," p. 43.

25 – Rāzī, *Muḥaṣṣal,* p. 86.

26 – There is a parallel for this in Aristocles' treatment: he discusses the Cyrenaics, who said that the only things that we can know are our inner sensations, for example hunger, thirst, pain, and so on. Aristocles, like Rāzī, considers this kind of foundational assents, namely (b), to be dismissed on the grounds that they cannot be communicated. See Aristocles of Messene apud Eusebius of Caesarea, "Praeparatio Evangelica," bk 14, chap. 19. I owe this point and reference to Tad Brennan.

27 – As indicated earlier (see note 21 above), the expression *badīhī* is used here in its narrow sense, and I have chosen to render it as "self-evident."

28 – Avicenna, *Ishārāt,* pt. 1 (Logic), p. 56; Ibn Sīnā, *Remarks and Admonitions,* pt. 1, p. 119 (with slight modifications).

29 – Rāzī, *Muḥaṣṣal,* pp. 87, 93, 118, 119.

30 – There is a similar four-part scheme developed by Aristocles of Messene, an Aristotelian scholar of the first century after Christ. According to Tad Brennan, Aristocles wanted to consider all of the views that had been held about human knowledge, and he divided previous thinkers into four groups: (1) those who say that we may trust neither reason nor sensation (Pyrrhonists and other extreme skeptics); (2) those who say that we should trust only sensation, not reason (Protagoras and Metrodorus); (3) those who say that we should trust only reason, and not sensation (Xenophanes, Parmenides, and the Eleatics);

and (4) those who say that we should trust both reason and sensation (Aristocles himself, and the Aristotelian tradition). See Brennan, "Pyrrho on the Criterion," pp. 427–429.

31 – Rāzī, *Muḥaṣṣal*, pp. 93–94. We find the same dictum in Avicenna's *Shifāʾ* *(Logic, Demonstration)*, III.5: "It is said, 'Whoever loses a certain sense necessarily loses some certain knowledge,' which is to say that one cannot arrive at the knowledge to which that sense leads the soul" (trans. Jon McGinnis, with a slight modification, in McGinnis and Reisman, *Classical Arabic Philosophy,* p. 152). For the original Arabic text, see Avicenna, *al-Shifāʾ (Logic, Demonstration),* p. 220. This can be traced back to Aristotle's *Posterior Analytics* (I.18, 81a38–39): "It is evident too that if some perception is wanting, it is necessary for some understanding to be wanting too" (Barnes, *Aristotle's Posterior Analytics,* p. 29).

32 – Ṭūsī, *Talkhīṣ,* p. 26.

33 – Avicenna, *al-Shifāʾ (Metaphysics),* ed. Anawati and Zayid, p. 80. Also in Avicenna, *The Metaphysics of the Healing,* p. 63.

34 – It is noteworthy that, contrary to another group of the skeptics—who might be called "sensory skeptics" because they argue against the trustworthiness of perceptual propositions—Ṭūsī is a serious and strong defender of the reliability of such propositions as well. We have not dealt with Ṭūsī's criticisms of "sensory skepticism" here; see Ṭūsī, *Talkhīṣ,* pp. 12–26.

35 – Rāzī, *Muḥaṣṣal,* p. 94.

36 – Due to space limitations I shall not have the opportunity to consider Rāzī's attempts to show that the "primary self-evident principle" has a foundational position in relation to other self-evident propositions; see Rāzī, *Muḥaṣṣal,* pp. 94–97. For a similar approach, see Avicenna, *Shifāʾ, Metaphysics* I.8, and Aristotle's *Metaphysics Gamma* 1005b18–1006a11.

37 – That is, there is no intermediary between existence and non-existence.

38 – Rāzī mentions and uses another version of PSEP as well, which says: "affirmation and negation cannot coexist together, nor be eliminated" (or, there is no intermediary between affirmation and negation). In his discussion of PSEP, Rāzī constantly switches from one version to another and this has the potential for confusing the reader. Meanwhile, it seems that, for him, affirmation and negation stand for existence and non-existence; this, however, requires some further explanation that lies beyond the scope of the present essay.

39 – Rāzī mentions four main arguments (with various modes, subdivisions, and disputations) against PSEP; however, for our discussion, I have chosen only two cases (in this essay, sections 2.1 and 2.2) to be dealt with.

40 – Rāzī, *Muḥaṣṣal,* p. 97.

41 – The inconceivability of the non-existent can be traced back to Parmenides, a pre-Socratic philosopher from Elea (ca. 515–ca. 450). On this point, consider the following passage from Christopher Shields' *Aristotle*: "Now, infers Parmenides, if what exists and what can be thought are necessarily co-extensive, it follows that we cannot think of what does not exist: we cannot, in Parmenides' way of putting the matter, think of non-being. Nor, indeed, can we even speak intelligibly of non-being; for surely we can speak intelligibly only about what we can think" (Shields, *Aristotle*, p. 50).

42 – See Avicenna, *Shifā', Metaphysics* I.5.

43 – Ṭūsī, *Talkhīṣ*, p. 29.

44 – The controversy between Rāzī and Ṭūsī, on the conceivability/inconceivability of 'non-existence' and its relation to our knowledge of SEP, continues and is longer in the texts of *Muḥaṣṣal* and *Talkhīṣ*, which has not been dealt with in this essay.

45 – In *Muḥaṣṣal*, this is cited as the second mode of the fourth argument against PSEP (the first mode is related to the concept of "impossibility"), and has been formulated in two different versions. Here, however, we consider it as the last argument against PSEP and deal only with its second version. See Rāzī, *Muḥaṣṣal*, pp. 106–110.

46 – Here, Rāzī uses the technical term *māhiyya*, which can be translated as "quiddity."

47 – The existent thing does not come into existence, for it already exists.

48 – Rāzī, *Muḥaṣṣal*, p. 109.

49 – Ibid., pp. 109–110.

50 – Ṭūsī, *Talkhīṣ*, p. 39.

51 – Perin, "Descartes and the Legacy of Ancient Skepticism," p. 54.

52 – Hilary Putnam puts the "brain in a vat" scenario in the following way: "Imagine that a human being (you can imagine this to be yourself) has been subjected to an operation by an evil scientist. The person's brain (your brain) has been removed from the body and placed in a vat of nutrients which keeps the brain alive. The nerve endings have been connected to a super-scientific computer which causes the person whose brain it is to have the illusion that everything is perfectly normal. There seem to be people, objects, the sky, etc; but really all the person (you) is experiencing is the result of electronic impulses travelling from the computer to the nerve endings" (Putnam, "Brains in a Vat," p. 527).

53 – What Rāzī means by Muslims, in the context of this debate (scenarios 1–4), as Ṭūsī indicates, is *Kalām* Theologians *(Mutakallimūn)*; hence, I shall use the latter expression in our discussion. The term *Kalām* refers to a particular disci-

pline and system of thought that investigates the theological foundations of religion and provides rational arguments (with special attention to the Qur'ān and Islamic traditions), generally polemical, in defense of the articles of Islamic faith. The constitution of *Kalām* as an autonomous theological discipline came in the early eighth century. For an introduction to *Kalām,* see Wolfson, *The Philosophy of the Kalam,* pp. 1–58; Frank, "The Science of Kalām"; and Murata and Chittick, *The Vision of Islam,* pp. 242–246.

54 – In this and the next three scenarios, the Muslims (or, in this context, the *Kalām* Theologians) are contrasted with those whom Rāzī simply calls the "Philosophers" (like al-Fārābi and Avicenna). To appreciate this, we must remind ourselves of the historic conflict between *Kalām* and Philosophy *(falsafa).* Some major figures in the history of *Kalām* claimed, directly or indirectly, that there are important philosophical doctrines that are fundamentally incompatible with the central Islamic beliefs. Thus, they believed that the Philosophers deserve the charges of irreligion and heresy.

55 – Rāzī, *Muḥaṣṣal,* pp. 110–111.

56 – Ibid., p. 111.

57 – Ibid., p. 112.

58 – Ibid.

59 – Ibid., pp. 112–113.

60 – I am indebted to Tad Brennan for his help in illuminating this point.

61 – Cf. Rāzī, *Muḥaṣṣal,* p. 110.

62 – Dancy, *An Introduction to Contemporary Epistemology,* p. 12.

63 – Rāzī, *Muḥaṣṣal,* p. 114.

64 – To put it briefly, according to the traditional Islamic (or Asha'rite) occasionalism, God is the only true causal agent in this world, and what we normally call a cause (or secondary cause) is simply the occasion for divine action. Thus, there is no such thing as natural causality or causal efficacy among created entities, and they have no power of action whatsoever to bring about real changes in each other. Accordingly, as Ibn Fūrak (d. 406/1015), in his *Mujarrad Maqālāt al-Ash'arī,* states, "everything that is created in time is created spontaneously and new by God exalted, without a reason *(sabab)* that makes it necessary or a cause *('illa)* that generates it" (quoted in Griffel, *al-Ghazālī's Philosophical Theology,* p. 126). Contrary to the standard interpretation of Ghazālī as a traditional Ash'arite occasionalist, Richard Frank, among others, argues that Ghazālī is not committed to Ash'arite occasionalism, but sees the created universe as an integrated deterministic system of entities and events bound together in an interlocking order of secondary causes and intermediaries; see Frank, *Creation and the Cosmic System,* p. 18, and see Frank, *al-Ghazālī and the Ash'arite School,* p. 4. For a similar reading of Ghazālī, see

Goodman, "Did al-Ghazālī Deny Causality?" In contrast to Frank's revisionist view, Michael E. Marmura has defended the standard Asha'rite reading of Ghazālī; see Marmura, "Ghazālian Causes and Intermediaries," pp. 89–100. More recently, Jon McGinnis has proposed that Ghazālī was "a modified occasionalist, allowing to a certain degree natural, secondary causation similar to the medieval Arabic philosophers' view" (McGinnis, "Occasionalism, Natural Causation and Science in al-Ghazālī," p. 463).

65 – Ghazālī, *The Incoherence of the Philosophers*, p. 166.

66 – Ibid., pp. 169–170.

67 – Ibid., p. 170.

68 – Ibid.

69 – According to Ghazālī, as William Courtenay explains, "skeptical inferences of this variety are unwarranted. Although the relationship of cause and effect is not necessary, it operates consistently, and God does not alter that operation by whim or caprice. God will never interrupt the normal operation of cause and effect without good intention and concomitant revelation. We know, says al-Ghazali, either through the repeated uniformity of nature or through special revelation, that God will not do certain things which are possible for Him. Throughout the discussion it is al-Ghazali's assumption that God only acts for the good and in conformity with his wisdom" (Courtenay, "The Critique on Natural Causality in the Mutakallimun Nominalism," p. 87).

70 – Cicero, *On Academic Scepticism*, p. 30. Cicero's reference to divine deception goes back to the *Iliad*. At the beginning of Book 2 of the Iliad, Zeus, who is the king of the gods, sends a deceptive dream to Agamemnon, who is the king of the Greeks. So, for the Greeks, who took Homer as something like the Bible, it was obvious that gods could and did send persuasive and deceptive dreams. I owe this point to Tad Brennan.

71 – Groarke, "Descartes' First Meditation," p. 287.

72 – As Dominik Perler says, "theologians from the twelfth century onwards claimed that God can use his potency not only by acting according to the 'ordained power' *(potestas ordinata)*, which respects the natural laws, but also by making use of the 'absolute power' *(potestas absoluta)*, which is only bound to the law of non-contradiction and does not need to respect the natural laws" (Perler, "Metaphysical Limits to Radical Doubts"). Groarke mentions that the earliest indication of a similar line of thinking in connection with a conception of an omnipotent God occurs in Peter Damian's eleventh-century essay "On Divine Omnipotence" *(De Divina Omnipotentia)* (Groarke, "Descartes' First Meditation," p. 292).

73 – The following passage represents Buridan's formulation of the "skeptical argument by an appeal to God's absolute power":

[S]ome people, wanting to do theology, denied that we could have knowledge about natural and moral [phenomena]. For example, we could not know that the sky is moving, that the sun is bright and that fire is hot, because these are not evident. God could annihilate all these, and it is not evident to you whether He wills to annihilate them or not; and thus it is not evident to you whether they exist. Or God could put the sky to rest or remove light from the sun or heat from fire. And finally, they say that it is not evident to you concerning the stone you see as white that it is such that it is white, for even without the whiteness and the stone God can create in your eye an image [species] entirely similar to the one you have now from the object; and thus you would make the same judgment as you do now, namely, that there is a white stone here. And the judgment would be false, whence it would not be certain and evident; and, consequently, it would not be evident even now, for it is not evident to you whether God wills it so or not. (Buridan, "John Buridan on Scientific Knowledge," p. 148)

74 – See Wood, "Epistemology and Omnipotence," p. 163. Also see Denery, "The Appearance of Reality," p. 40.

75 – Quoted in Tachau, *Vision and Certitude in the Age of Ockham*, p. 111.

76 – For a comparison between Auriol and Ockham on this point, see Wood, "Epistemology and Omnipotence," pp. 166–168.

77 – Denery, "From Sacred Mystery to Divine Deception," pp. 136–137.

78 – Wood, "Epistemology and Omnipotence," p. 168.

79 – Karger, "Ockham and Wodeham on Divine Deception as a Skeptical Hypothesis," p. 225.

80 – Perler, "Skepticism," vol. 1, p. 389.

81 – Bolyard, "Medieval Skepticism."

82 – Pasnau, *Theories of Cognition in the Later Middle Ages*, p. 233.

83 – Ibid.

84 – Buridan, "Scientific Knowledge," p. 143.

85 – Kennedy, "Late-Fourteenth-Century Philosophical Scepticism at Oxford," p. 126.

86 – Ṭūsī, *Talkhīṣ*, p. 40.

87 – Ibid.

88 – Ibid.

89 – This is one of the central issues of 'non-existence' that has been discussed both by the *Kalām* Theologians and Philosophers such as Avicenna; see Avicenna, *Shifā', Metaphysics*, I.5.

90 – Ṭūsī, *Talkhīṣ*, p. 40.

91 – Ibid.

92 – Here, Ṭūsī uses the term *khurāfāt* (sing. *Khurāfa*), which, according to the classical Arabic dictionary *Lisān al-'Arab* (fourteenth century), literally means fictitious tales that are deemed pleasant; see Ibn Manẓūr, *Lisān al-'Arab,* vol. 4, p. 71. In this context, I think it can be appropriately rendered as "completely irrelevant."

93 – Ibid.

94 – It should be noted that there is a considerable connection between the notions of "relevant alternatives" and "contextualism" in the contemporary epistemological literature. For example, Keith DeRose states that "The most popular form of contextualism, I think it is fair to say, is what has been called the 'relevant alternatives' view of knowledge (RA)" (DeRose, "Contextualism and Knowledge Attributions," p. 494). DeRose also writes: "Many relevant alternativists held that the matter of which alternatives are relevant can be sensitive to the conversational context of the attributor of knowledge. This yields a contextualist version of the Relevant Alternatives theory" (DeRose, "Contextualism: An Explanation and Defense," p. 193).

95 – Dretske asks us to consider the following example: "You take your son to the zoo, see several zebras, and, when questioned by your son, tell him they are zebras. Do you know that they are zebras? Well, most of us would have little hesitation in saying that we did know this. We know what zebras look like, and, besides, this is the city zoo and the animals are in a pen clearly marked 'Zebras.' Yet . . . do you know that these animals are not mules cleverly disguised by the zoo authorities to look like zebras?" (Dretske, "Epistemic Operators," pp. 1015–1016). According to Dretske, in claiming that we know that some animals in the zoo are zebras, the possibility that they are cleverly disguised mules is not relevant. Thus, one can truthfully claim to know that they are zebras without requiring that one be able to exclude this fanciful alternative.

96 – Ṭūsī, *Talkhīṣ,* p. 41.

97 – Avicenna, *Ishārāt,* pp. 56–57.

98 – Ibid.

99 – Klima, *John Buridan,* p. 236.

100 – Nicholas of Autrecourt, "Nicholas of Autrecourt on Skepticism about Substance and Causality," p. 138.

101 – Quoted in Klima, *John Buridan,* p. 243.

102 – Ibid., p. 247.

103 – For example, Rega Wood has shown that Adam of Wodeham believes in a gradational view of certainty and evidentness; see Wood, "Adam Wodeham on Sensory Illusions with an Edition of 'Lectura Secunda,' Prologus, Quaestio 3," pp. 160–178. Also, Klima ascribes similar position to Thomas Reid and says: "just like Buridan, Reid explicitly denies that there could be just one first

principle, say, the principle of noncontradiction, and that he is operating with the idea that different principles come with different degrees of certainty" (Klima, *John Buridan,* p. 238).

104 – The contextualist element in Buridan's epistemology has been discussed also by Dominik Perler, in Perler, "Metaphysical Limits to Radical Doubts."

105 – DeRose, "Contextualism: An Explanation and Defense," p. 187.

106 – In our comparative consideration, it deserves to be noted that according to T. K. Scott, "In the Bernard Correspondence, 'certitude' seems to mean 'justified true belief,' so that it is synonymous with 'knowledge'" (Scott, "Nicholas of Autrecourt, Buridan and Ockhamism," p. 23).

107 – As DeRose points out, "Unger uses the term "invariantism" to denote the position that the standards for true knowledge attributions remain constant and very high—as high as they can possibly be" (DeRose, "Contextualism and Knowledge," pp. 492–493).

108 – Mauricio Beuchot writes: "The only thing Autrecourt accepts as known with evident certitude is the principle of non-contradiction (which he regards as the first principle) and what is reducible to it.... Autrecourt argues at length to show that, because the principle of non-contradiction is evident and irrefutable, it is the only thing of which we are certain. All other knowledge, including empirical knowledge, is always threatened by uncertainty.... The certitude that is but of one kind and without gradations belongs only to what has no trace of falsity or doubt, that is, only to the first principle" (Beuchot, "Nicholaus of Autrecourt," p. 460). For more on Nicholas' view on 'knowledge' and 'certitude,' see Scott, "Nicholas of Autrecourt."

109 – Ṭūsī, *Talkhīṣ,* p. 41.

110 – I follow here Frank's translation of the term *Ḥaqīqa* (pl. *Ḥaqāi'q*). He describes it, in the context of *Kalām,* in the following way: "The *ḥaqīqa* of a thing is the total content of the reality of the individual existence *(huwîya)* in its actual existence *(wuğûd)* as that particular act which it is" (Frank, "The Structure of Created Causality According to al-Ash'ari," p. 39); also see Frank, "The Ash'arite Ontology. I: Primary Entities," pp. 184–190.

111 – Ṭūsī, *Talkhīṣ,* p. 41.

112 – Ibid.

113 – Ibid., p. 42.

114 – Ibid.

115 – For a brief history of this in the Islamic world, see Van Ess, "Skepticism in Islamic Religious Thought," pp. 90–92. As a relevant Greek theme, consider Sextus Empiricus' appeal to *isostheneia* (equipollence) of arguments, the equal power of conflicting arguments or appearances: none of them takes precedence over any other as being more convincing; see Sextus Empiricus, *Outlines*

*of Scepticism,* p. 5 (I.10). For more on this, see Barnes, "Some Ways of Scepticism," pp. 206–210; Burnyeat, "Can the Sceptic Live His Scepticism?" pp. 24–25; and Hankinson, *The Sceptics,* pp. 24, 163–165. For a similar skeptical argument developed by Rāzī in a later treatise, see Fakhr al-Din al-Rāzī, "Risālalat Dhamm al-Ladhdhāt al-Dunyā," p. 255 (The Third Argument).

116 – Rāzī, *Muḥaṣṣal,* p. 115.

117 – Ibid.

118 – Ṭūsī, *Talkhīṣ,* p. 43. Franz Rosenthal describes the role of Logic in this way: "Logic was for the Muslims the 'organ' or 'instrument' *(âlah),* the instrument for logical speculation *(âlat an-naẓar),* the instrument for each discipline *('ilm)* and the means enabling the student to get at its real meaning.... It was the canon *(qânûn),* providing the rules and norms that were applicable to all human knowledge and on which all human knowledge rested. It was the science of the scales *('ilm al-mîzân),* weighing the correctness of every statement. It was compared to 'an equilibrating standard' *('iyâr mu'addil)* by which the objects of knowledge are weighed" (Rosenthal, *Knowledge Triumphant,* p. 204).

119 – Avicenna, *Shifā', Metaphysics* I.8; translated by Michael Marmura with slight modifications, in Avicenna, *The Metaphysics of the Healing,* p. 41.

120 – Rāzī, *Muḥaṣṣal,* p. 116.

121 – Ibid.

122 – Ibid., p. 117.

123 – Ṭūsī, *Talkhīṣ,* p. 44.

124 – Ibid.

125 – Rāzī, *Muḥaṣṣal,* p. 118.

126 – Ṭūsī, *Talkhīṣ,* p. 45.

127 – Ibid.

128 – Wilfrid Sellars, "Does Empirical Knowledge Have a Foundation?" p. 265.

129 – Chisholm, *The Foundations of Knowing,* pp. 80, 128. And see Chisholm, "The Directly Evident," p. 252. Also see BonJour, "Can Empirical Knowledge Have a Foundation?" p. 109.

130 – It is important to bear in mind that, as we pointed out in section 1, Ṭūsī pictures these two classes of basic propositions in a hierarchical order.


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