6 Translating from One Domain to Another

Analogical Reasoning in Premodern Islamic Theology (*kalām*)

Hannah C. Erlwein

Premodern practitioners of the science of theology (*ʿilm al-kalām*) prided themselves on not falling into the pitfall of blind adherence to religious dogmas—a pitfall less enlightened groups had stumbled into—but subjecting these to rational investigation and proof.[1] Without that, they argued, one would remain on the level of mere presumption (*zann*), rather than actual knowledge (*ʿilm*).[2] With their minds firmly set on this task, they had recourse to a number of methods. The theologian Māturīdī (d. 944 CE), who will play a prominent role in this chapter, enumerates these "ways to knowledge" (*subul*) and divides them into three categories: the things (*aʿyān*) in this world, which are known by sense perception (*ḥawāss*); reasoning, speculation, and pondering (*istidlāl*, *naẓar*, *tafakkur*) in the case of entities that cannot be reached by sense perception; and finally authentic transmitted traditions (*akhbār*, such as the Quran or Prophetic sayings). These three categories have in common that they comprise "indications" or "signs" (*dalāla*) that, when deciphered correctly, make it possible to attain knowledge.[3]

In this chapter, I focus on only one of these categories, reasoning, and more specifically on one particular form of it: analogical reasoning. The early generations of theologians—at a time when *kalām* was consolidating itself as a branch of science—displayed an affinity for a particular form of analogical reasoning that involved using experienceable phenomena to gain knowledge about phenomena beyond experience. They employed such reasoning to solve a variety of theological problems. An often-cited example is the divine attributes. Some theologians argued that God's attributes (falling under phenomena beyond experience) should be conceptualized in analogy to human attributes (an experienceable phenomenon). Thus, if humans are described as knowing due to knowledge that they possess, God, whom the Quran describes as knowing, must in analogy have an attribute of knowledge as well. It is little surprising that not all theologians agreed with this particular analogy. Some of them, anxiously seeking to uphold God's absolute oneness, could not accept that the single divine essence should be contaminated by such hypostatic attributes (*maʿānin*) of knowledge, power, will, and the like. Instead, the

truth was that God is knowing by Himself, by virtue of His essence (*bi-dhātihi*). They rejected the preposterous notion that there existed an analogy between humans and God in this regard.[4]

Theologians used technical terminology for this sort of analogy. They referred to experienceable phenomena using the term *al-shāhid*, unexperienceable ones as *al-ghāʾib*, and called analogical reasoning between these "using the *shāhid* as evidence for the *ghāʾib*" (*al-istishhād bi'l-shāhid ʿalā al-ghāʾib*) or "indications of the *shāhid* for the *ghāʾib*" (*dalālat al-shāhid ʿalā al-ghāʾib*). The *shāhid* and the *ghāʾib* could thus be labeled two distinct "epistemic domains," which could be connected by way of analogy because one domain contained evidence and indications that pointed beyond themselves to the other domain. The theologian Ibn Fūrak (d. 1015 CE) highlights the idea that analogy between the *shāhid* and the *ghāʾib* is between two different epistemic domains when he glosses them as "what is speculated about and what relates back to what is speculated about, as well as what is known and what one is in doubt about, but seeks to know based on what is known."[5]

Analogical reasoning between these two epistemic domains can be analyzed as a translation process. Just as in linguistic translation, meaning is translated from one language (the source language) in another (the target language), in analogical reasoning in *kalām*, theologians translated between two epistemic domains (the source domain and the target domain), although in their case it was descriptions or judgments about phenomena that were translated. Theologians also faced some of the same problems that translators do. Just as in interlingual translation there is always a "degree of interpretation by the translator,"[6] theologians were confronted with the very real challenge that in purely descriptive terms, there was no single way of translating between the two epistemic domains. Just as translators look for norms of translation that can regulate their activity,[7] these theologians sought to meet the challenge by subjecting their activity to norms of analogy. The sources indicate that they wrestled with each other about what we might call the "epistemic norms" associated with analogy. What sorts of experienceable phenomena could, or indeed should, be used as the starting point for analogical reasoning? What do these experiences have to involve in order to serve as an analogy for unexperienceable phenomena? And what is a valid analogy between experienceable phenomena and phenomena beyond experience?

The disagreement among theologians about the "epistemic norms" was only one of detail, however, and did not affect the general validity of analogy as a way to knowledge. A general critique of analogy as a mode of reasoning in *kalām* emerged only among later generations of theologians, who rejected it outright.

In this chapter, I discuss the three questions mentioned above, regarding theologians' conceptualization and use of analogies between experienceable phenomena and phenomena beyond experience, through the case

of one particular problem: the origin of the world. This problem itself revolves around two questions: First, has the world always existed, or does it have a first beginning for its existence? And second, does the world (which, as theologians could prove, is originated) have a cause for its existence, or did it suddenly come into existence, uncaused and by mere chance, or did it actualize its own existence? For several reasons, this problem was prominent in the thought of premodern Islamic theologians, and it is traditionally investigated at the very beginning of a *kalām* work. It is in response to the problem of the origin of the world that the theologian Māturīdī, one of my study's protagonists, critically engages with different opinions about the norms of analogical reasoning. The theologian Juwaynī (d. 1085 CE), my other protagonist, also reports extensively on disputes among theologians over the way in which Ashʿarī (d. 936 CE), the namesake of a whole theological school, made use of analogical reasoning when considering the origin of the world.

Analogical Reasoning in Theology (*kalām*)

Debating Norms of Analogy: Juwaynī's Account

In his *Kitāb al-Shāmil*, Juwaynī grants an insight into the quarrels among theologians of two different schools over the norms governing analogy. These concerned the question of what the experiences to which both schools had recourse actually entail, or what they should entail in order to fulfill their purpose. Theologians also argued over how to perform the transfer between the two epistemic domains—what the theologian can learn about unexperienceable phenomena by drawing analogies with experienceable ones.

At stake in the disputes that Juwaynī recounts was Ashʿarī's use of analogical reasoning. In the manner of a good practitioner of *kalām* who scrutinizes religious dogmas, Ashʿarī opened one of his works, *Kitāb al-Lumaʿ*, with the question "What is the proof that there is a creator for creation?" To answer this question, Ashʿarī invoked the following experienceable phenomena:

> The proof is that the human being … was once merely a drop of sperm, then became a blood clot, then flesh. We all know [*qad ʿalimnā*] that the human being cannot transform himself from state to state …. We see [*raʾaynā*] that the human being is first a child, then a young adult, then an elderly person, and finally old, and we all know that he does not transform himself from state to state … but that there is one who transforms him from state to state.[8]

Ashʿarī then added other experienceable phenomena:

> What makes this clear is that cotton cannot change into spun thread, then a woven garment, without a weaver or maker. He who takes cotton and expects it to become spun thread and then a woven garment without a maker or weaver—he is out of his mind and in utter ignorance! Likewise, he who looks at a wasteland where there is no castle, and expects clay to turn into a different state and to pile itself up [as bricks], without a maker or builder—he is ignorant![9]

Ashʿarī is evidently using analogical reasoning of the sort that calls on experienceable phenomena to gain knowledge about a phenomenon that cannot be known by experience—in this case, the world's dependence on a cause. As his analogy appears to argue (and I say "appears" because he does not actually spell it out), the experience that all these phenomena depend on a cause for their transformation, and cannot actualize themselves, can be treated as an analogy for the problem under investigation: the whole world (literally, the whole of creation) likewise depends on a cause.

The particular way in which Ashʿarī has recourse to these experiences reveals something interesting: experienceable phenomena in the *shāhid*, such as the transformation of humans, lead to the attainment of an item of knowledge, namely the knowledge that this transformation has an external cause. Experiential phenomena involve sense data ("we see"), but these yield knowledge ("we all know"). The attainment of this knowledge is the prerequisite for analogical reasoning, which in turn leads to the attainment of the same item of knowledge about an unexperienceable phenomenon, such as that the world, too, has an external cause. Unfortunately for us, Ashʿarī is silent about his rationale in asserting that these experienceable phenomena and the world at large behave analogously. What justifies this analogy is not self-evident, and this is one of the objections later theologians made against the usefulness of analogy in theology.[10]

In his *Kitāb al-Shāmil*, Juwaynī offers a rather detailed account of the quarrels among later theologians about Ashʿarī's analogy. His account suggests that a number of points were at issue, some of which I will now set out.

Juwaynī notes that attacks on Ashʿarī's use of analogical reasoning came from the adherents of a rival theological school, the Muʿtazilīs. "One of their criticisms," he writes, was as follows:

> The most absurd thing [Ashʿarī] said was to declare him ignorant who expects a building [to come about] without a builder and a writing without a writer … . According to him, the writing and the building do not actually come about by humans … . There is no point in using as evidence something that contradicts one's own principle! … You [followers of Ashʿarī] are unable to prove the creator [i.e., the problem under investigation: Does the world have a cause?] since

you deny that we humans in the *shāhid* actually bring about [our actions].[11]

The Muʿtazilīs remind the Ashʿarītes that their school's founder was committed to the theological position that rather than humans bringing about their actions, their actions are dependent on God's creative activity. The appearance of true human agency is essentially an illusion.[12] This position on causality had, in the estimation of Muʿtazilī theologians, detrimental consequences for Ashʿarī's analogy between experienceable phenomena and phenomena beyond experience, for if buildings and the like do not actually come into existence due to humans, then Ashʿarī's analogy simply fails. He cannot argue that the world depends on a cause, *in analogy* to the experience that buildings depend on human builders, if the latter is not actually the case for him. Yet "the way to affirm a judgment for the *ghāʾib* is by linking it to the *shāhid*"[13]—as both Ashʿarī and the Muʿtazilīs agreed.

   The criticism expressed by the Muʿtazilīs can be regarded as relating to the norms governing analogical reasoning in theology. First, for theologians it is not enough to invoke a given experience, such as buildings and builders—they argue about what *precisely* a given experience involved, and whether this qualifies it to serve as an analogy in the first place. The disagreement between the Muʿtazilīs and Ashʿarī might best be conceptualized by means of the contemporary category of "theory" in relation to experience: what distinguishes the experience invoked by Ashʿarī, of the connection between building and builder, from the experience invoked by the Muʿtazilīs is their contradictory theories of human causality, which shaped the way they experienced the world.[14] As Ashʿarī had pointed out, experience starts off from sense data—but the Muʿtazilīs' critique highlights that in experience, sense data come together with theory and are interpreted within a given theoretical framework. The resultant difference in experience is not a triviality but has grave consequences for theology's claim to leave behind mere conviction and reach the lofty plains of knowledge.

   Second, they dispute what *precisely* a given experienceable phenomenon reveals about a phenomenon beyond experience. This is essentially the question of the norms governing the process of translation between the two epistemic domains. Translating in the correct way means asking what it is about experienceable phenomena that tells us something about unexperienceable ones. Which known characteristic or attribute of an experienceable phenomenon should also be said of an unexperienceable phenomenon of which the theologian seeks to attain knowledge? The question was raised, Juwaynī reports, by the Muʿtazilīs: "It is your [i.e., followers of Ashʿarī] principle that we humans are connected to our actions by way of acquisition [*iktisāb*]—and that God is high above this and that He is characterized by [proper] creation! … How then can you

use experienceable phenomena [*shāhid*] as testimony for unexperienceable phenomena [*ghā'ib*]?"[15]

The Muʿtazilīs' point was that since Ashʿarī used the experience of human actions, such as buildings, as an analogy to prove that the world has a cause, he should have made the *way* or *mode* in which humans are connected to their actions part of his analogy. Instead, Ashʿarī chose to focus only on the vague claim that there is *some sort of connection* between building and builder. In seeking to establish the world's dependence on God in analogy to a building's dependence on a human builder, Ashʿarī should—had he made correct use of his analogy—have said that God "acquires" His actions just as humans "acquire" theirs. ("Acquisition" was the term used by Ashʿarī and his followers to indicate that humans do not truly create their actions, God does; but still humans can be held responsible for these actions as they "acquire" them from God.[16]) This would, of course, have been an absurd and even sacrilegious conclusion for Ashʿarī, and equally for the Muʿtazilīs. The reason why Ashʿarī did not want to take the analogy as far as the Muʿtazilīs wanted to push him is that his theory of human causality did not allow it. And the reason why the Muʿtazilīs pushed Ashʿarī to go further in his analogy is that they wanted him to concede that his theory of human causality was flawed and that this undermined his whole theological enterprise.

Ashʿarī's later followers, unsurprisingly, refused to accept that their school's founder had been mistaken on so many counts. Juwaynī reports their attempts to "deflect this criticism":

> The writing does not come about unless from [*min*] a writer, for the writing is bound to [*urtubiṭat*] the writer. We therefore declare him ignorant who expects the writing and the building to come about without writer and builder. So, if something is bound to something else, and if the objective is simply to affirm the connection [*taʿalluq*] in general, but not its details, then it does not matter whether this being bound together is [in the mode of] acquisition or true creation. This is so because the reasonable person knows about the connection first, and then comes to know of its details through [further] speculation.[17]

Ashʿarī's followers, then, rejected the Muʿtazilīs' critique as unfounded. The experience that buildings and builders always occur together justifies the conclusion that they are "bound together"; to expect a building to occur without a builder would go against everything we know from experience. This is why Ashʿarī's analogy was valid. The precise nature of the connection between building and builder is a secondary matter, to be established by further pondering, and therefore has no bearing on the translation between the two relevant epistemic realms. Ashʿarī was vindicated.

Juwaynī's account is interesting not only in offering insight into theologians' disagreement about the norms of analogy in their science.

It also bears witness to a fundamental change in attitudes to analogy as a way to knowledge among later generations of theologians, including Juwaynī himself. These later theologians broke with their predecessors (even the then still venerated Ashʿarī) by not merely disagreeing on which norms would guarantee the correct use of analogy but casting doubt on the very validity of analogy in theology.[18]

This is apparent in Juwaynī's own position on analogical reasoning, which he added to his account of the previous generations' disputes. He remarks on the vindication of Ashʿarī's analogy cited above that "this way of going about it is not satisfactory."[19] Instead, he argues, theologians should assert that it is known *necessarily* (*al-ḍarūra*) that originated things come about due to a cause.[20] Without the assertion that "the connection between act and agent" is known by necessity, theologians will never be able to refute an opponent's claim that "originated things do *not* come about due to a cause." Reference to "experienceable phenomena" (*shawāhid*) and "examples" (*amthila*) may help to *clarify* (*awḍaḥa*) this item of knowledge, but unlike in analogical reasoning, these are not required to *establish*, nor *can* they establish, that the world at large actually has a cause.[21] This is why Juwaynī can conclude that

> the connection between originated thing and originator … is confirmed without consideration of experienceable phenomena [*shāhid*] and phenomena beyond experience [*ghāʾib*], for origination, which is possible in itself, depends—precisely because of its possibility—on a particularizer [*mukhaṣṣiṣ*], and it is not necessary to affirm an actual agent in the experienceable domain.[22]

Debating Norms of Analogy: Māturīdī's Account

Like Juwaynī's *Kitāb al-Shāmil*, Māturīdī's *Kitāb al-Tawḥīd* indicates that theologians had a propensity to employ analogical reasoning as a way to knowledge in the science of *kalām*, but also that they were not unanimous on the norms that should govern it. Māturīdī discusses such norms in a section of his work where he deals with differing positions on how knowledge of experienceable phenomena should be translated into knowledge of phenomena beyond experience. The same sort of analogical reasoning also features prominently in Māturīdī's battles on two major theological fronts: his attempt to establish that the world has a temporal beginning, and his attempt to prove that it has a creator. Māturīdī's arguments show how a premodern theologian actually used knowledge derived from experience or experiences in order to gain knowledge about unexperienceable phenomena, by way of analogy—but his use of such analogies can also be read as a prescriptive account of how this should be done.

Māturīdī frames his discussion of the norms of analogy in terms of disagreement among different groups: "People disagree about the way in

which experienceable phenomena are indications of phenomena beyond experience [*wajh dalālat al-shāhid ʿalā al-ghāʾib*]."[23] As is often the case with works of *kalām*, Māturīdī says nothing about the identity of these "people," and only presents their position on a given problem. He simply introduces their disagreement with the words "there are some who say this" and "others who say this."[24]

The first group, Māturīdī explains, holds the following normative position regarding the connection between the two epistemic domains: "They are the same [*mithl*]—for experienceable phenomena are the root [*aṣl*] of what is beyond experience, and the root and its branch [*farʿ*] do not differ. Unexperienceable phenomena [*ghāʾib*] are known by way of experienceable ones [*shāhid*], and through analogy [*qiyās*] between one thing and another."

The second group agrees with the first group about the way in which analogical reasoning should connect the two domains, but evidently things are not quite that clear-cut, for they remark: "[Experienceable phenomena] point to the same [*mithl*]—and to something different [*khilāf*]. The indications found in experienceable phenomena, which point to a difference [with unexperienceable phenomena], are, however, more evident [*awḍaḥ*]."[25]

Māturīdī then gives examples of what the positions taken by these two groups entail. His enumeration shows a striking interest in the question of the origin of the world, indicating the importance of analogical reasoning for this particular issue. The first group's position, in which experienceable phenomena indicate that unexperienceable phenomena are the same, allows them to affirm that the world is past-eternal and has not entered existence. They argue that the *shāhid*, the domain we experience, presents itself as a "world" (*ʿālam*) to us. Since both epistemic domains must be the same, this means that "for every point in time in the past"—the past being the *ghāʾib*, the domain that is only knowable by analogy with experienceable phenomena—there must have been a "world." There was, then, no point in the past when the world did not exist.[26] It is worth highlighting something about the term *ghāʾib* at this point: as Māturīdī's example indicates, this epistemic domain embraces *all* phenomena, past, present, and future, that escape direct experience. Being removed from human experience may mean that an entity (e.g., God) cannot be fathomed by the senses as a matter of principle, but it may also mean that the phenomenon lies in the past (e.g., the existence of the world) and is therefore removed from human experience, while not in principle being beyond human experience.

Turning to the second group, Māturīdī introduces an example that aims to justify why, at times, the connection between the two epistemic domains is not one of similarity. This is evidently directed at the position taken by the first group, for Māturīdī will not accept their conclusion that the world is pre-eternal. The example takes the form of an *argumentum ad absurdum*: if the *shāhid* and the *ghāʾib* were in all cases the same, as

the first group claims, then this would entail that "everyone who looks at himself should think that everything in the world [that is not directly experienced by him] is just like him—but this is absurd!"[27]

Interestingly, "similarity" seems to be understood here such that a given phenomenon in the domain of the *shāhid* must be the very same phenomenon in the domain of the *ghāʾib*. There does not seem to be room for the idea that it is only *some aspects* of an experienceable phenomenon that are translated into the domain of unexperienceable phenomena. This is at the heart of the dispute between the followers of Ashʿarī and Muʿtazilī theologians: How far should analogical translation between the two domains go? How much of what characterizes the "source domain" should be translated into the "target domain"? It is also what the second group criticizes when they object that experienceable phenomena may "point to the same—or to something different," and that the difference is often more evident than the sameness. Māturīdī goes on to explain:

> When someone experiences [*shāhada*] something in this world, he uses it to prove that the world is originated or that it is pre-eternal—but its eternity or its originatedness are not the same as the thing itself [which he experienced]. Then he goes on to prove that the world has an originator or that it exists due to itself—but both of these are something different than the thing itself.[28]

The argument here (which admittedly is not spelled out in the detail we might wish) is that concrete experienceable phenomena do indeed tell us something about the world at large, whether it is pre-eternal or has entered existence, and whether it has a cause or not. However, the second group stresses that knowledge about the world's pre-eternity or originatedness, and its having a cause or not, that is attained by way of a translation between the two epistemic domains is not *ontologically identical* with the experienceable phenomenon. To use the analogy between a building's dependence on a builder and the world's dependence on a creator (which Māturīdī himself also employs quite frequently), the experienceable phenomenon that is the building can be used to attain the knowledge that the world has a cause, but this insight is ontologically speaking not the *same* as the building, but different from it. It therefore involves a different translation process than the one advocated by the first group.

Māturīdī now ventures to put forward a "principle" (*aṣl*), as he calls it, for theologians to read experienceable phenomena correctly, so as to ensure that the translation process in analogical reasoning is valid. This "principle" corresponds to what I called "epistemic norms" of analogy. He explains that experienceable phenomena in the world contain different "aspects," which allow one to draw different conclusions about those

phenomena: "The principle is that the indications found in the world vary in accordance with the difference of aspects [*jihāt*] found in the world."[29] For example, one "aspect" to be considered in relation to a given experienceable phenomenon might be the combination of opposite natures in it (e.g., hot and cold, good and evil), and this particular aspect must be read as an indication of the thing's originatedness. Another might be its ignorance of its own conditions and its inability to correct flaws in itself, and this particular aspect must be read as an indication of its dependence on a cause.[30] It is important, as Māturīdī's explanations show, for theologians to read these aspects and what they indicate correctly when they make experienceable phenomena the basis for knowledge of phenomena beyond experience. The significance of this becomes clear when Māturīdī himself ventures to draw an analogy between human arts and the world: "The writing indicates [its dependence on] a writer. … In the same way, the world with everything in it indicates [its dependence on] an originator. … The same is the case with buildings, weaving, carpentry, and [all other] arts."[31]

The first group discussed by Māturīdī fails to correctly read these "aspects" and their indications when, based on a flawed analogy between the epistemic domain of the *shāhid* and that of the *ghāʾib*, they claim to know that the world is pre-eternal. Māturīdī's account of both flawed and correct ways of using experienceable phenomena as indications for unexperienceable ones may be seen as something of a practical guide, a normative instruction for theologians to disentangle the muddle of aspects in order then to read them correctly.

As well as discussing different positions on the epistemic norms relating to analogy, Māturīdī puts forward his own arguments relating to the concrete theological problem of the origin of the world. Like Juwaynī, he uses analogical reasoning to prove that the world depends for its existence on a creator, rather than having suddenly come into existence or having actualized its own existence. Before proving this central theological dogma, however, Māturīdī presents a number of proofs—once more making use of analogies between experienceable und unexperienceable phenomena—in refutation of the sacrilegious belief that the world might always have existed. Māturīdī's own use of such arguments sheds further light on the norms associated with analogy in *kalām*.

Māturīdī lists a multitude of arguments in the section dealing with the temporal beginning of the world, introducing each new argument by the word "Also." Not all of these take the form of analogical reasoning. For instance, his very first argument is that all material entities making up the world (in *kalām* parlance: "bodies," *ajsām*) are necessarily in a state of either rest or motion. These alternating states come to be and are not eternal. The material entities must be originated, just as these states are that inhere in them.[32] In this line of argument, experienceable phenomena also play a role, but the experiences cited are not used as the starting point of an analogy.

Let us turn to those of Māturīdī's arguments that do invoke analogical reasoning. In the section discussing whether the world is eternal or originated in time, Māturīdī presents the following argument:

> Also, if something does not enter existence unless due to something else that precedes it, and if this is a condition [*sharṭ*] for all of them, then the whole [chain of things] would never enter existence …. Don't you see that he who says to another one "Don't eat this unless you have eaten that!"—and this condition applies to all of them—he will never eat?![33]

The bone of contention here is the argument, put forward by those of Māturīdī's opponents who uphold the pre-eternity of the world, that every single thing in this world originates from another thing preceding it. This, they argue, implies that there must always have existed something.[34] Māturīdī's strategy is to reduce his opponents' position to absurdity, and thus to affirm the only remaining alternative: the world is originated. He does so by introducing an analogy between a particular experience and the issue under discussion, which is not subject to human experience. The knowledge that the world is originated is gained by analogy to the experience of eating, and the analogical translation between the two epistemic domains is valid because they are connected by the impossibility of an infinite regress.[35] Māturīdī's argument implies a judgment that his opponents make use of experienceable phenomena in a flawed way. He would certainly not deny that experience tells us that all originated things are preceded by other things. Yet this is not relevant when drawing an analogy between the two realms—it is a different "aspect," to use his own terminology, that is significant for the theologian's inquiry.

Māturīdī then continues with another consideration: "He who says, 'It is not known [*yuʿlam*] that something could be made from nothing!' judges existents by way of the (external) senses [*ḥiss*], but the things that can be known may be beyond sense experience [*khārija ʿan al-ḥiss*]."[36] Māturīdī's opponents are here once more those who uphold the world's pre-eternal existence. They, too, display an affinity for analogies between the domain of experienceable phenomena and the domain of unexperienceable phenomena, and argue that the religious dogma of *creatio ex nihilo* is not part of human experience. Indeed, the opposite is true: humans know from experience that things derive from other things; this must by analogy also be true of the issue of the world's origin of the world, and it can thus be shown that the world is pre-eternal. Māturīdī considers this analogy flawed and consequently rejects the conclusion (or probably it is the other way round: he rejects the analogy because it leads to an undesired conclusion). He seems to stress that what is true of those existents which are accessible by the senses is not equally true of *all* existents. Once more, the opponents engage in a flawed translation process between the two epistemic domains. Though it may be true that all

experienced existents are preceded by other existents, this judgment is not to be transferred to *all* existents.

As he presents the argument, Māturīdī does not explain why his opponents should be mistaken in transferring the judgment about experienceable existents to unexperienceable existents. He just asserts that the analogy is flawed. It may, however, be the case that we are supposed to read this argument alongside others, such as the previous argument invoking the impossibility of an infinite regress in the past—or that this is one of the instances where Māturīdī wants to draw attention to the fact, as he would have it, that the opponents are incorrectly reading the "aspects" found in experienceable phenomena.

Finally, Māturīdī sets out the following case of analogical reasoning:

> We do not know [*naʿlam*] of a writing without a writer, or of a disintegration without one who causes it, and the same is the case when it comes to composition, as well as to rest and movement. This then is necessarily the case for the whole world, for it consists of things that are composed and things that disintegrate …. It is absolutely true for the world that it does not get disintegrated and combined unless due to another [i.e., a cause]. All composition and every writing in the domain of experienceable phenomena [*fī al-shāhid*] come about due to the one with whom they occur, and in the same way [*mithl*] the whole world [which belongs to the domain of unexperienceable phenomena, i.e., the *ghāʾib*], for it is the way we mentioned.[37]

It is slightly perplexing that this argument appears in the section on whether the world is originated or pre-eternal; it seems that what the argument tries to establish is that the world is the product of a cause. With this focus, the argument fits much more neatly into the subsequent section of Māturīdī's work, which deals with the question of whether the world, in being originated, depends on a cause or not. This curious observation aside, the argument entails an intriguing instance of analogical reasoning: Māturīdī invokes the experience that every writing has a writer, every case of composition one who composes, and every state of rest or movement one who brought it about. Experience leads humans to the knowledge ("we … know") that these states depend on a cause. Since theologians know that experienceable phenomena are "indications" (*dalāla*) of unexperienceable phenomena, Māturīdī transfers this judgment from one epistemic domain to the other. He even has good reasons for doing so, which relate to norms of valid analogical reasoning, for the analogical transfer is justified by the observation that both epistemic domains contain things characterized by composition and disintegration.

Now that Māturīdī has successfully refuted the preposterous notion that the world could have existed in pre-eternity, he takes it upon himself

to eradicate any last doubts that the world is indeed God's product. The section on the proof that the world has a cause contains several arguments, two of which are of interest here as they contain an analogy. The first is this:

> If the world were due to itself, it would be necessary that it came to exist after it already existed [for its existence would be caused by itself]—but this means that it cannot be due to itself since it comes to exist due to another … . Also, evidence [*sh-h-d*] to what we said is found in buildings, writings, and ships: They do not exist unless due to an existent agent, and the same [*mithl*] is true in our present case.[38]

The second runs:

> Also, if it were possible that the world began to exist by itself at a point, then it would be possible that all of it came to exist in one way. But this is not the case, and it is rather the case that it contains all sorts of differences, and these differences, such as that it contains things that are living and dead, disintegrated and combined, small and big, evil and good, only change due to another. This is then true for the whole world, which exists due to another. If, however, [one were to say] that [the aforementioned hypothesis, i.e., that the world began to exist due to itself] is possible, then it would in consequence also be possible that the colors of a garment change by themselves, and not because of the dyer, or that a ship becomes what it is by itself. But since this is not the case, it is necessary that these things are brought about by someone …, and this is also the case with our present concern![39]

It is interesting to note that in both arguments, Māturīdī seems to treat the analogy between experienceable phenomena and phenomena beyond experience as an *addition* to a purely rational argument. That is to say, the crucial point both arguments intend to make—namely that one encounters an absurdity and contradiction when assuming that the world might have actualized its own existence—can stand without the additional reference to buildings, ships, and garments. This attests to Māturīdī's view that the problem can be solved successfully by reference to reason-based arguments, which do not necessarily have to take the form of analogical reasoning. At the same time, however, he does not seem to treat the analogy between the two epistemic domains as a purely rhetorical device, with a merely persuasive function. This is indicated by his emphasis that buildings, writings, ships, and the like contain actual "evidence" to the point he seeks to make—namely, that things enter existence due to a cause—and that this is an actual indication that the world, too, must depend on a cause. As noted above, the root of the Arabic word for "bearing evidence" (*yashhadu*) is the same as that of the term *shāhid*,

which indicates the domain of experienceable phenomena. Analogy is one form of reasoning and rational argument, which like others can yield knowledge of the origin of the world.

Both arguments also bear witness to Māturīdī's affinity for the *argumentum ad absurdum*. His method of proving that the world owes its existence to a cause is to reduce to absurdity the notion that the world caused its own existence. Both the analogies he presents underscore this point, but their focus is slightly different. In the first analogy, which invokes such experienceable phenomena—commonplace ones, we might add—as buildings, writings, and ships, the focus is on the observation that they come to *exist* only due to a cause which must be existent prior to them; the second analogy, which invokes garments and ships, revolves around the notion that the actual *characteristics* they display, which could conceivably be different, depend on a cause. In both cases, whether entering existence or changing characteristics, the point is that this is not actualized by the thing itself, but requires a cause. The insight that this applies to the experienceable phenomena is then translated into the domain that is beyond experience, by way of analogy.

On the face of it, there is no particular reason why Māturīdī chose buildings, writings, ships, and garments as the starting point for his analogy between the *shāhid* and the *ghāʾib*. The feature that connects them is their—evident, as Māturīdī would have it—dependence on a cause. Yet if this was what Māturīdī sought, he could have chosen any one of a whole range of experienceable phenomena to make the same point. Seeing that his actual selection coincides with the experienceable phenomena invoked by other theologians, such as Ashʿarī and his followers, but also Muʿtazilī theologians, we must conclude that these human products had become something of a *topos* for analogical reasoning in *kalām*. This also tells us something about the norms associated with analogy: although from a purely logical perspective many analogies could work, it was only some that were actually used.

This in fact raises a much more fundamental question: What is it about human arts and products that informed theologians' clear preference for them as analogies, in particular since they served to make a point about something that is definitely not a human product, the world? Māturīdī and his fellow practitioners of *kalām* do not tell us, but it seems plausible that it has to do with theologians' goal of conceiving of God as a creator and agent endowed with such attributes as will, knowledge, and power.[40] The analogy between the world and human products lent itself to this goal, as theologians generally held that human products indicate the attributes of will, knowledge, and power in humans (despite differences in their theories of causality, as discussed above). This implies something interesting about the norms governing the use of analogy: human products as the starting point of an analogy allowed theologians to conclude that God is the agent and creator of the world—yet this particular analogy would not have been employed if it had not implied the desired conclusion. After

all, *kalām* was an apologetic enterprise that sought to provide proofs for already accepted dogmas. In a way, this means that the conclusion of this sort of analogy prefigured and determined what experiences were selected for analogical reasoning.

Conclusion

This chapter has shed light on one facet of the significance of experience of the natural world in premodern Islamic theology. As I showed, theologians frequently invoked experienceable phenomena—some of which became theological *topoi*—to attain knowledge of phenomena that are beyond human experience, by way of drawing analogies between them. I suggested that this sort of analogical reasoning can usefully be viewed through the lens of translation: theologians engaged in translation between two epistemic domains, one accessible by experience, the other not. In my analysis, I used "translation" as analogous to interlingual translation, in order to make two points: first, that the concept of translation is applicable to a variety of contexts and goes beyond its arguably most frequent association with linguistics; and second, that the concept of translation gives us relevant tools to flesh out some of the intricate details of the conceptualization of analogical reasoning in *kalām*. Comparably to linguists' endeavors to define norms of translation, we have seen, theologians quarreled over what might be called the epistemic norms governing the correct use and conditions of analogy in theology. Regarding the origin of the world, for example, much of their disagreement concerned the question of what precisely experienceable phenomena have to entail in order to serve as analogies, and which characteristics of experienceable phenomena should be translated into the domain of unexperienceable phenomena. Despite dissent on the epistemic norms, the relevance of this sort of analogy as a way to knowledge in *kalām* remained unquestioned until later generations of theologians doubted its effectiveness altogether—but that story must wait to be told in another article.

Notes

1 I use the term "science" here as the actors' category *ʿilm*, which is a systematized form of knowledge-making. See Akasoy and Fidora, "Structure and Methods."
2 Al-Shawkānī, *Irshād*, 1:1085; see Frank, "Knowledge and *Taqlīd*," esp. 43–44.
3 Al-Māturīdī, *Kitāb al-Tawḥīd*, 69–74. At *subul*, the Arabic text reads *sabīl*, which seems wrong.
4 See Gimaret, *Les noms divins*.
5 Ibn Furak, *Maqālāt*, 302. Here and throughout, translations are my own.
6 Nida, "Principles of Correspondence," 126.
7 Toury, "Nature and Role of Norms."
8 Al-Ashʿarī, *Kitāb al-Lumaʿ*, 18.
9 Ibid., 18.

10 Ashʿarī's silence might have to do with the nature of his text, which is very concise and was probably accompanied by an oral commentary in a teaching context. It might also be that Ashʿarī simply treats the analogy between buildings and the world as common knowledge among theologians. Ghazālī raises this sort of critique in his *Miʿyār al-ʿilm*, 167.

11 Al-Juwaynī, *Al-Shāmil*, 276–77.

12 See Griffel, *Al-Ghazālī's Philosophical Theology*, ch. 5.

13 Al-Juwaynī, *Al-Shāmil*, 277.

14 Compare the contemporary debate on the theory-laden nature of observation: Brewer and Lambert, "Theory-Ladenness"; Kuhn, *Structure of Scientific Revolutions*; Hanson, *Patterns of Discovery*; Fodor, "Observation Reconsidered."

15 Al-Juwaynī, *Al-Shāmil*, 277.

16 See Frank, "Structure of Created Causality"; Frank, *Early Islamic Theology*; Frank, *Classical Islamic Theology*; Abrahamov, "Re-Examination."

17 Al-Juwaynī, *Al-Shāmil*, 283–84.

18 Though not of legal analogy, which remained an acknowledged "source of law." See Hasan, *Analogical Reasoning*; Hasan, "Principle of Qiyas"; Kamali, *Principles of Islamic Jurisprudence*.

19 Al-Juwaynī, *Al-Shāmil*, 284.

20 See Abrahamov, "Necessary Knowledge."

21 Al-Juwaynī, *Al-Shāmil*, 282–83.

22 Ibid., 285.

23 Al-Māturīdī, *Kitāb al-Tawḥīd*, 92. See Rudolph's detailed study of Māturīdī, especially Part Three on his theology, including the origin of the world and analogical reasoning: Rudolph, *Al-Māturīdī*, 219–348.

24 Al-Māturīdī, *Kitāb al-Tawḥīd*, 92.

25 Ibid.

26 Ibid.

27 Ibid., 93.

28 Ibid., 92–93.

29 Ibid., 94.

30 Ibid.

31 Ibid., 93.

32 Ibid., 78.

33 Ibid., 80.

34 This position is discussed in more detail in a later section ("Beliefs of Those Who Claim that the World Is Eternal"), which presents the various—evidently highly problematic—versions of the position that the world is pre-eternal. Al-Māturīdī, *Kitāb al-Tawḥīd*, 94–102.

35 It is important to bear in mind that Māturīdī subscribes to an occasionalist, atomist position of causality, according to which all occurrences are instances of "coming to be." This is why he can draw an analogy between things *entering existence* (the world) and things *happening* (eating). See Pines, *Studies in Islamic Atomism*; Sabra, "Simple Ontology"; Wolfson, *Philosophy of the Kalam*.

36 Al-Māturīdī, *Kitāb al-Tawḥīd*, 81.

37 Ibid., 81–82.

38 Ibid., 84.

39 Ibid., 84–85.

40   Theologians posed another kind of cause as well, one that causes necessarily
     by virtue of its essence. This kind of cause was called *ʿilla* or *sabab*, while the
     agent cause was called *fāʿil*. See, e.g., al-Bāqillānī, *Kitāb al-Tamhīd*, 53.

Bibliography

Primary Sources

Al-Ashʿarī, Abū ʾl-Ḥasan. *Kitāb al-Lumaʿ fī al-radd ʿalā ahl al-zīgh waʾl-bidʿ*,
    edited by Ḥammūda Ghurāba. Cairo: Maṭbaʿat Miṣr, 1955.
Al-Bāqillānī, Abū Bakr Muḥammad. *Al-Tamhīd fī al-radd ʿalā al-mulḥida
    waʾl-muʿaṭṭila waʾl-rāfiḍa waʾl-khawārij waʾl-muʿtazila*, edited by Maḥmūd
    Muḥammad al-Khaḍīrī and Muḥammad ʿAbd al-Hādī Abū Rīda. Cairo: Dār
    al-Fikr al-ʿArabī, 1947.
Al-Juwaynī, Abū ʾl-Maʿālī ʿAbd al-Malik b. Yūsuf. *Al-Shāmil fī uṣūl al-dīn*, edited
    by ʿAlī Shāmī al-Nashār. Alexandria: Munshaʾāt al-Maʿārif, 1969.
Al-Māturīdī, Abū Manṣūr. *Kitāb al-Tawḥīd*, edited by Bekir Topaloğlu and
    Muhammed Aruçı. Beirut: Dār Ṣādir, Maktabat al-Ishāra, n.d.
Ibn Fūrak, Muḥammad b. al-Ḥasan. *Maqālāt al-shaykh Abī al-Ḥasan al-Ashʿarī*,
    edited by Aḥmad ʿAbd al-Raḥīm al-Sāyiḥ. Cairo: Maktabat al-Thaqāfa al-
    Diniyya, 2005.

Secondary Sources

Abrahamov, Binyamin. "Necessary Knowledge in Islamic Theology." *British
    Journal of Middle Eastern Studies* 20, no. 1 (1993): 20–30.
Abrahamov, Binyamin. "A Re-Examination of al-Ashʿarī's Theory of *kasb*
    according to *Kitāb al-Luma*." *Journal of the Royal Asiatic Society of Great
    Britain and Ireland* 121, no. 2 (1989): 210–21.
Akasoy, Anna A., and Alexander Fidora. "The Structure and Methods of Science."
    In *The Routledge Companion to Islamic Philosophy*, edited by Richard C.
    Taylor and Luis Xavier López-Farjeat, 105–14. London: Routledge, 2016.
Al-Shawkānī, Muḥammad b. ʿAlī. *Irshād al-fuḥūl ilā taḥqīq al-ḥaqq min ʿilm al-
    uṣūl*. 2 vols. Riyadh: Dār al-Faḍīla, 2000.
Brewer, William F., and Bruce L. Lambert. "The Theory-Ladenness of Observation
    and the Theory-Ladenness of the Rest of the Scientific Process." *Philosophy of
    Science* 68, no. 3 (2001): S176–S186.
Fodor, Jerry. "Observation Reconsidered." *Philosophy of Science* 51, no. 1
    (1984): 23–43.
Frank, Richard M. *Classical Islamic Theology: The Ashʿarites*, edited by Dimitri
    Gutas. Aldershot: Ashgate, 2008.
Frank, Richard M. *Early Islamic Theology: The Muʿtazilites and al-Ashʿarī*,
    edited by Dimitri Gutas. Aldershot: Ashgate, 2007.
Frank, Richard M. "Knowledge and *Taqlīd*: The Foundations of Religious Belief
    in Classical Ashʿarism." *Journal of the American Oriental Society* 109, no. 1
    (1989): 37–62.
Frank, Richard M. "The Structure of Created Causality According to Al-
    Ashʿarī: An Analysis of the 'Kitāb al-Luma,' §§82–164." *Studia Islamica* 25
    (1966): 13–75.

Gimaret, Daniel. *Les noms divins en Islam: Exégèse lexicographique et théologique*. Paris: Cerf, 1988.

Griffel, Frank. *Al-Ghazālī's Philosophical Theology*. Oxford: Oxford University Press, 2009.

Hanson, Norwood Russell. *Patterns of Discovery: An Inquiry into the Conceptual Foundations of Science*. Cambridge: Cambridge University Press, 1958.

Hasan, Ahmad. *Analogical Reasoning in Islamic Jurisprudence: A Study of the Juridical Principle of Qiyas*. Islamabad: Islamic Research Institute, 1986.

Hasan, Ahmad. "The Principle of Qiyas in Islamic Law—An Historical Perspective." *Islamic Studies* 15, no. 3 (1976): 201–10.

Kamali, Mohammad Hashim. *Principles of Islamic Jurisprudence*. Cambridge: Islamic Texts Society, 2003.

Kuhn, Thomas. *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press, 1962.

Lameer, Joep. *Al-Fārābī and Aristotelian Syllogistics: Greek Theory and Islamic Practice*. Leiden: Brill, 1994.

Nida, Eugene. "Principles of Correspondence." In *The Translation Studies Reader*, edited by Lawrence Venuti, 126–40. London: Routledge, 2000.

Pines, Shlomo. *Studies in Islamic Atomism*, translated by Michael Schwarz, edited by Tzvi Langermann. Jerusalem: Magnes Press, 1997.

Rudolph, Ulrich. *Al-Māturīdī und die sunnitische Theologie in Samarkand*. Leiden: Brill, 1997.

Sabra, A. I. "The Simple Ontology of *Kalām* Atomism: An Outline." *Early Science and Medicine* 14 (2009): 68–78.

Toury, Gideon. "The Nature and Role of Norms in Translation." In *The Translation Studies Reader*, edited by Lawrence Venuti, 198–211. London: Routledge, 2000.

Wolfson, Harry Austryn. *The Philosophy of the Kalam*. Cambridge, MA: Harvard University Press, 1976.