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# Knowledge as a Mental State in Mu‘tazilite Kalām

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## Abstract

It is commonly accepted that the definition of knowledge is not among the main epistemological concerns of the period between Plato and Edmund Gettier. *Kalām* is an exception to the rule. *Kalām* scholars provide a detailed philosophical analysis of the difference between knowledge and mere true belief. In this article, I am focusing on the analysis of knowledge in one tradition of *kalām*, Bahšamite Mu‘tazilism. I will argue that knowledge is a factive mental state for the Bahšamites. I will also show that the Bahšamite definition of knowledge is a combination of internalism and externalism with respect to justification.

## Keywords

analysis of knowledge – Mu‘tazilism – internalism and externalism (justification) – factive mental states

## 1 Introduction

When a contemporary epistemologist hears the word “knowledge,” she immediately thinks of the cluster of philosophical problems related to the standard definition of knowledge as justified true belief (JTB). Since Edmund Gettier’s (d. 2021) “Is Justified True Belief Knowledge?,” the core question of epistemology is how to distinguish between knowledge and those beliefs that happen to be true by sheer luck.<sup>1</sup> Following the line of thought that can already be found

1 Edmund Gettier, “Is Justified True Belief Knowledge?,” *Analysis* 23.6 (1963): 121–3.

in Plato's *Meno* and *Theaetetus*, if I simply assert "There is no life outside the Earth," nobody will call it knowledge even if I happen to be right, unless there are good grounds to assert that there is no life outside the Earth.

According to some scholars, it is widely accepted that the definition of knowledge is not among the main epistemological concerns of the period between Plato and Gettier.<sup>2</sup> Nevertheless, there are a few notable exceptions to the rule. For instance, an Islamic philosopher Abū Naṣr al-Fārābī (d. 950) presents a list of necessary and sufficient conditions (albeit not a definition) that distinguish knowledge from unjustified true belief in his *Conditions of Certainty* (*Ṣarā'if al-yaqīn*). Al-Fārābī's understanding of knowledge combines two theories of epistemic justification: Aristotelian internalist foundationalism and externalist reliabilism.<sup>3</sup>

In addition to al-Fārābī's contribution, an extremely rich debate on the definition of knowledge in medieval Islamic thought can be found in the philosophical tradition of *kalām*. As Josef van Ess, Franz Rosenthal and Mohd Radhi Ibrahim have already highlighted, *kalām* scholars (Ar. *mutakallimūn*) provide a detailed philosophical analysis of the notion of knowledge.<sup>4</sup> The reason why the philosophy of *kalām* requires a definition of knowledge has something to do with its theological background. *Kalām* scholars agree that having knowledge about the existence of God is among the religious duties of Muslims (or at least of Muslim scholars). In other words, it is not enough if we just believe<sup>5</sup> in God. We must *know* that there is God.<sup>6</sup> For instance, suppose I believe that

2 See e.g. Robert Pasnau, *After Certainty: A History of Epistemic Ideals and Illusions* (Oxford: Oxford University Press, 2017), 2.

3 Deborah Black, "Knowledge (*ilm*) and Certitude (*yaqīn*) in al-Fārābī's Epistemology," *Arabic Sciences and Philosophy* 16 (2006): 11–45.

4 Franz Rosenthal, *Knowledge Triumphant: The Concept of Knowledge in Medieval Islam* (Leiden and Boston: Brill, 2007), Ch. IV; Mohd Radhi Ibrahim, "Abd al-Jabbār's Definition of Knowledge," *Al-Shajarah* 18.2 (2013): 229–55; Josef van Ess, *Die Erkenntnistheorie des Aḥmadaddīn al-Īcī* (Wiesbaden: Franz Steiner, 1966), 60–94.

5 Henceforth, I will use the notion of belief and believing in an epistemological sense, not in a religious sense. In other words, belief is *i'tiqād*, not *īmān*. I will explain why I translate *i'tiqād* as "belief" in what follows, esp. fn. 11.

6 For a Mu'tazilite view see Johannes Peters, *God's Created Speech* (Leiden: Brill, 1976), 44 based on Abū l-Ḥasan b. Aḥmad al-Hamaḍānī 'Abd al-Ġabbār, *Al-Muḡnī fī abwāb al-tawḥīd wa-l-'adl*. Vol. XII: *al-Naẓar wa-l-ma'rifa*, ed. by Ibrāhīm Madkūr with the supervision of Tāhā Ḥusayn (Cairo: Wizārat al-ṭāqāfa wa-l-iršād al-qawmī, al-Idāra al-'amma li-l-ṭāqāfa, 1960–69), 347–533; for an Aš'arite view see Richard Frank, "Knowledge and *Taqīd*: The Foundations of Religious Belief in Classical Ash'arism," *Journal of the American Oriental Society* 109 (1989): 37–62 and Khaled El-Rouayheb, *Islamic Intellectual History in the Seventeenth Century* (Cambridge: Cambridge University Press, 2015), Ch. 5.

there is God by merely trusting the statement of another person. Children do it when they acquire their religious beliefs from their parents. The technical notion for that kind of behavior in *kalām* is *taqlīd* (often translated as ‘imitation’ or ‘conformism’).<sup>7</sup> If I believe in God just because I chose to agree with someone who told me that God exists, I do not know that God exists yet, even if my belief is a true belief. Hence, I do not fulfill my religious duty as a Muslim (again, at least if I am a scholar). Hence, *kalām* scholars need to explain the difference between true knowledge and true belief.

In this article, I am going to focus on the analysis of knowledge in one tradition of *kalām*, Mu‘tazilism. Note that there is no such thing as a ‘Mu‘tazilite definition of knowledge.’<sup>8</sup> The debate on the definition of knowledge is largely a debate between the Mu‘tazilites and the Aš‘arites, another major school of *kalām*. However, it is also a debate between different Mu‘tazilite authors. In what follows, I will focus on the analysis of knowledge in what has become known as the Bahšamite school of Mu‘tazilism, the followers of Abū Hāšim al-Ġubbā‘ī (d. 933). My main source will be ‘Abd al-Ġabbār al-Hamaḍānī (d. 1025), an author of *kalām* whose multivolume work *The Sufficient (al-Muġnī)*<sup>9</sup> can be considered the most comprehensive and detailed work of Mu‘tazilite doctrine preserved. In order to clarify the Bahšamite definition of knowledge, I will need to address some further Mu‘tazilite authors, such as: Abū Hāšim al-Ġubbā‘ī, the eponym of the school; Abū l-Qāsim al-Balḥī (d. 931), the head of the rival Baghdad school of Mu‘tazilites; Mānkḍīm Šašḍiw (d. 1034), Ibn Mattawayh (11th century) and Abū Rašīd al-Nīsābūrī (11th century) as helpful sources for the philosophical doctrines of ‘Abd al-Ġabbār’s school; Abū Sa’d al-Ġišūmī (d. 1101), whose *‘Uyūn al-masā’il* provides useful doxographical material on different Mu‘tazilite authors; Ibn al-Malāḥimī (d. 1131), an important source for the doctrines of Abū l-Ḥusayn al-Bašrī (d. 1044), who, in turn, marks a new direction in Mu‘tazilism; and two Aš‘arite

7 That notion has particularly become famous because of al-Ġazālī’s attack against *falāsifa*; see Richard Frank, “Al-Ghazālī on *Taqlīd*. Scholars, theologians, and philosophers,” *Zeitschrift für die Geschichte der arabisch-islamischen Wissenschaften* 7 (1991–92): 207–52 and Frank Griffel, “*Taqlīd* of the Philosophers: Al-Ghazālī’s Initial Accusations in his *Tahāfut*,” in *Ideas, Images, and Methods of Portrayal: Insights Classical Arabic Literature and Islam*, ed. by Sebastian Günther (Leiden and Boston: Brill, 2005), 273–96.

8 I owe this insight and generally a fair warning that one should not generalize when speaking about the Mu‘tazilites to Gregor Schwarz.

9 In what follows, I will refer both to ‘Abd al-Ġabbār’s *Muġnī* and the *Nukat* version of it, since we all have different prints of the *Muġnī* but the *Nukat* is always the same: [Anonymous], *Nukat al-Kitāb al-Muġnī li-‘Abd al-Ġabbār b. Aḥmad al-Hamaḍānī*, ed. by Omar Hamdan and Sabine Schmidtke (Berlin: Klaus Schwarz, 2012).

sources: ‘Abd al-Malik al-Ġuwaynī (d. 1085) and his student Salmān b. Nāṣir al-Anṣārī (d. 1118).

The main thesis of my article is that knowledge, for the Bahšamites, is a factive mental state. According to the Bahšamites, if I know *p*, I am in a certain mental state that involves that *p* is a matter of fact. I could not be in a mental state of knowledge without *p*'s being true. In the first section, I will present the Bahšamite definition of knowledge and argue against some earlier interpretations. Those interpretations claim that certainty in the Bahšamite definition of knowledge indicates a merely subjective point of view. In my understanding, certainty indicates a non-transparent mental state. As a mental state, knowledge is immediately accessible to us; but it is non-transparent, that is, we can be wrong about whether we are in a mental state of knowledge or not. In the second section, I will problematize the relationship between knowledge and belief in the Bahšamite definition of knowledge. The Bahšamite understanding of knowledge as a factive mental state allows for an analysis of knowledge as a combination of one and the same belief with further conditions, unlike the contemporary ‘knowledge first’ analysis of knowledge. According to the Bahšamites, true belief and knowledge might have the same mental content (no matter whether internal or external to our minds) but they differ both in terms of the state of the environment and the mental state of the believer/knower. Finally, in the third section, I will suggest that the Bahšamite definition of knowledge is a combination of internalism (mentalism) and externalism with respect to justification.

## 2 Knowledge and Certainty

Most of our sources provide a set of very similar definitions of knowledge on behalf of Abū Hāšim, the leading figure of the Bahšamite Mu‘tazilites, sometimes together with his father Abū ‘Alī al-Ġubbā‘ī (d. 915). In ‘Abd al-Ġabbār’s and al-Anṣārī’s wording, knowledge is “a belief that *p* in accordance with what it is [and] with certainty”<sup>10</sup> (*i’tiqād*<sup>11</sup> *al-šay’ ‘alā mā huwa bihī ma’a sukūn*

10 Literally, *sukūn al-naḥs* means ‘piece of mind.’ I will explain in what follows why I translate it as ‘certainty.’

11 Peters, *God’s Created Speech*, 42 argues that we must translate *i’tiqād* as “conviction” and not as “belief” because *šakk* (doubt) is not an *i’tiqād* according to the Bahšamites (following van Ess, *Erkenntnislehre*, 72). I cannot agree with this line of reasoning. Peters neglects the fact that when we believe that *p* we do really believe that *p*. We cannot believe that *p* and be actively in doubt whether *p* at the same time. The difference between sheer

*al-nafs*).<sup>12</sup> According to Ibn al-Malāḥimī’s report of Abū Hāšim, knowledge is “a belief that entails the certainty that the object of belief is in accordance with the belief itself (*al-‘itiqād al-muqtaḍī li-sukūn al-nafs ilā annā mu‘taqadahū ‘alā mā ‘taqadahū ‘alayhī*).”<sup>13</sup> In the report of al-Ġuwaynī, knowledge is “a belief that *p* in accordance with what it is [and] with certainty about the believed” (*‘itiqād al-šay’ ‘alā mā huwa bihī ma‘a sukūn al-nafs ilā mu‘taqadihī*).”<sup>14</sup> All these definitions are variations of the same. Knowledge is a combination of three conditions:

- (1) S believes that *p*
- (2) it is the case that *p*
- (3) S is certain that *p*

Al-Ġuwaynī and al-Anṣārī ascribe their versions of the Bahšamite definitions of knowledge to the whole of Mu‘tazilites (as an intermediary stage in the development of Mu‘tazilite thought), probably because al-Ġuwaynī and al-Anṣārī are Aš‘arites themselves and need not make fine distinctions between different Mu‘tazilite doctrines. Al-Ġuwaynī and al-Anṣārī are right to think that some variations between different versions of the Mu‘tazilite definitions of knowledge are insignificant. For instance, ‘Abd al-Ġabbār suggests dropping the notion of belief from the definition of knowledge. For ‘Abd al-Ġabbār, knowledge is “that which entails the certainty of the knower about that which [his knowledge] encompasses (*al-ma‘nā lladī yaqtaḍī sukūn naḥs al-‘ālim ilā mā tanāwalahū*).”<sup>15</sup> ‘Abd al-Ġabbār does not suggest dropping the notion of belief from the definition of knowledge because he disagrees with Abū Hāšim on whether knowledge is belief. As we will see in section two, ‘Abd al-Ġabbār accepts that belief is a constitutive part of knowledge. However, ‘Abd al-Ġabbār is a proponent of a theory of definitions according to which one needs to mention in the definition of *x* only that which distinguishes *x* from all other things (*min ḥaqq al-ḥadd an yufīda mā yubayyanu bihī l-maḥdūd*). In other words, we must mention only the specific properties of *x* in the definition of *x*. As ignorance and conformist beliefs (*taqlīd*) are kinds

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*‘itiqād* and *‘ilm* consists in the possibility of doubt whether *p*, not in the presence of an actual doubt that *p*.

12 ‘Abd al-Ġabbār, *Muġnī*, 12:15.8–9; *Nukat* 199.13; Salmān b. Nāšir al-Anṣārī, *Al-Ġunya fī l-kalām*, ed. by Muṣṭafā Ḥ. ‘Abd al-Hādī, 2 vols. (Cairo: Dār al-salām, 2010), 1:223.1–2.

13 Rukn al-Dīn b. al-Malāḥimī, *Al-Mu‘tamad*, 2nd ed., ed. by Wilferd Madelung and Martin McDermott (Tehran-Berlin: Iranian Institute of Philosophy, Institute of Islamic Studies, Free University of Berlin, 2012), 17.21–22.

14 ‘Abd al-Malik al-Ġuwaynī, *al-Sāmīl fī uṣūl al-dīn*, ed. by Richard Frank (Tehran: Dānišgāh-i Tihārān, Dānišgāh-i Mak Gil, 1981), 75.21.

15 ‘Abd al-Ġabbār, *Muġnī*, 12:13.3; *Nukat* 198.9.

of belief as well, ‘Abd al-Ġabbār concludes that there is no need to mention ‘belief’ in the definition of knowledge.<sup>16</sup> Although ‘Abd al-Ġabbār’s qualification is significant with respect to our understanding of his theory of definition, it does not change anything about his understanding of the nature of knowledge. Hence, al-Ġišūmī is not much mistaken when he ascribes a definition of knowledge to ‘Abd al-Ġabbār that brings the notion of belief back: knowledge is “that which entails certainty for someone with a belief about that which [that belief] encompasses (*al-ma’nā lladī yaqtaḍī sukūn al-nafs al-mu’taqid ilā mā tanāwalahū*).”<sup>17</sup> As Mānkḍīm reports, ‘Abd al-Ġabbār sometimes accepts the traditional Bahšamite definition of knowledge without any modification.<sup>18</sup>

Nevertheless, al-Ġuwaynī and al-Anšārī should not lump all Mu’tazilites together. There are variations between different Mu’tazilite definitions of knowledge that stand for a potential substantial disagreement between different Mu’tazilite authors. One of them is an omission of the third condition from the definition of knowledge, certainty (*sukūn al-nafs*).

As al-Ġišūmī reports, Abū l-Qāsim al-Balḥī, the leader of the Mu’tazilites in Baghdad, does not include certainty into his definition of knowledge. According to al-Balḥī, knowledge is “the establishment of *p* as it is (*itbāt al-šay’ alā mā huwa bihī*).”<sup>19</sup> That means that for Abū l-Qāsim, according to the Bahšamite sources, knowledge must be just true belief. Hence, Abū l-Qāsim (in the interpretation of his rivals) has no means to distinguish between knowledge and a conformist belief (*taqlīd*) that happens to be true. According to al-Ġišūmī and al-Nisābūrī, Abū l-Qāsim bites the bullet and accepts that *taqlīd* “is knowledge if the object of belief is in accordance with the belief.”<sup>20</sup> In other words, if our belief is true, it is knowledge, irrespective of the sources of that belief. More research is needed on the Baghdad school of Mu’tazilites. Preliminarily, I can only mention that Abū l-Qāsim indeed says in his *‘Uyūn al-masā’il* that knowledge is a belief that establishes the reality (*ḥaqīqa*) as it is,

16 ‘Abd al-Ġabbār, *Muġnī*, 12:13.3–14; *Nukat* 198.9–17.

17 Abū Sa’d al-Ġišūmī, *‘Uyūn al-masā’il fi l-uṣūl*, ed. by Ramazan Yıldırım (Cairo: Dār al-iḥsān, 2018), 370.2–3.

18 Šašḍiw Mānkḍīm, *Šarḥ al-Uṣūl al-ḥamsa*, ed. by ‘Abd al-Karīm ‘Uṭmān (Cairo: Maktabat wahba, 1965), 46.3.

19 Al-Ġišūmī, *‘Uyūn al-masā’il*, 370.6–7.

20 Al-Ġišūmī, *‘Uyūn al-masā’il*, 374.12–13 and Abū Rašīd al-Nisābūrī, *al-Masā’il fi l-ḥilāf bayna l-baṣṛiyyīn wa-l-baġdādīyyīn*, ed. by Ma’n Ziyāda and Riḍwān Sayyid (Beirut: Ma’had al-inmā’ al-‘arabī, 1979), 302.12–13. See also al-Ḥasan b. Aḥmad b. Mattawayh, *al-Taḍkira fī aḥkām al-ġawāhir wa-l-a’rāḍ*, ed. by Daniel Gimaret, 2 vols. (Cairo: Institut français d’archéologie orientale, 2009), 2:591.16–17.

without mentioning any other conditions.<sup>21</sup> Al-Ġuwaynī also knows about that definition of knowledge and reports it as an early stage of Mu‘tazilite thought, before Mu‘tazilites added the third condition, certainty.<sup>22</sup> Whether it really means that Abū l-Qāsim made no distinction between knowledge and mere true belief remains open for further discussion.

From the Bahšamite perspective, Abū l-Qāsim’s view is wrong. The main aim of the definition of knowledge is precisely to distinguish between knowledge and other types of belief, such as *taqlid*. A belief based on *taqlid* might be true. Therefore, we cannot define knowledge as true belief.<sup>23</sup> All Bahšamites uniformly state that *sukūn al-naḥs* is an important part of the definition of knowledge. Literally, *sukūn al-naḥs* means ‘peace of mind.’ Other notions with the same meaning include ‘tranquillity of the heart’ (*tuma’nīnat al-qalb*) and ‘delight of the soul’ (*talğ al-šadr*).<sup>24</sup> The usage of those metaphors historically goes back to an early scholar of *kalām*, Ibrāhīm al-Nazzām (d. 835–45). He seems to have been the first in the Mu‘tazilite tradition to define knowledge as peace of mind/heart (*sukūn al-qalb*).<sup>25</sup>

Mu‘tazilite authors understand the knower’s peace of mind as a state of certainty. For instance, ‘Abd al-Ġabbār says: “When the mind is in peace (*sakanat al-naḥs*) about the object of perception amid the lifting of doubts and misleading factors (*wuğūh al-luḥs*), then it has certainty (*al-tiqa*).”<sup>26</sup> Likewise, Ibn Mattawayh says:

*Sukūn al-naḥs* reduces to the distinction which each of us finds in himself between when he believes something and is sure about it (*yaqṭa‘u ‘alayhī*) and when he believes something and is not sure about it.<sup>27</sup>

Later, Ibn Mattawayh states that the way in which we can recognize whether we have epistemic peace of mind is through “the absence of doubt” (*‘adam al-tašakkuk*). We “do not allow (*yuğawwizu*) that the object of belief is different from what [we] believe it to be.”<sup>28</sup> Thus, the criteria for *sukūn al-naḥs* are:

21 Abū l-Qāsim al-Balḥī al-Ka‘abī, *‘Uyūn al-masā’il wa-l-ğawābāt*, ed. by Hüseyin Hansu, Rāğīḥ Kurdī, and ‘Abd al-Ḥamid Kurdī (Istanbul: Dar al-fataḥ and Kuramer, 2018), 573.9.

22 Al-Ġuwaynī, *Šāmil*, 75.19.

23 ‘Abd al-Ġabbār, *Muğnī*, 17.19–21; *Nukat*, 201.10–11.

24 Mānkdim, *Šarḥ al-Uṣūl al-ḥamsa*, 46.2; Ibn al-Malāḥimī, *Mu‘tamad*, 18.10.

25 Josef van Ess, *Theologie und Gesellschaft im 2. und 3. Jahrhundert Hidschra*, 6 vols. (Berlin and New York: Walter de Gruyter, 1991–95), 3:389; van Ess, *Erkenntnislehre*, 72. Originally, it was a “movement of the soul” in al-Nazzām.

26 ‘Abd al-Ġabbār, *Muğnī*, 12:53.1–2; *Nukat*, 226.9–10.

27 Ibn Mattawayh, *Taḍkira*, 587.1–2.

28 *Ibid.*, 588.14–15.



(~*tašakkuk*): S cannot doubt that *p*

(~*tağwīz*): S believes that it is not possible that not-*p*

Ibn al-Malāḥimī emphasizes the no-doubt condition:

By *sukūn al-naḥs*, we mean the tranquillity (*tuma'nīna*) of the soul, such that if someone tried to make someone with a belief doubt, by saying to him: "You have no guarantee that you are not wrong," [the one with that kind of belief] would not be in doubt.<sup>29</sup>

Al-Nisābūrī says:

If someone asks: why do you say that [conformism (*taqlīd*)] does not involve *sukūn al-naḥs*? One replies: For the conformist allows that the smallest doubt would make him doubt.<sup>30</sup>

Based on these passages, I simply translate *sukūn al-naḥs* as certainty.<sup>31</sup> Certainty is that which distinguishes knowledge from true belief. Certainty is that which someone with knowledge has, while others do not have it if they follow the opinions of others, that is, perform *taqlīd*. Mānkḏīm says:

[By *sukūn al-naḥs*], I mean the distinction that each of us finds in himself when one turns to [himself] between the case when he believes that Zayd is at home and observes it and the case when one believes that Zayd is at home based on a report coming from a mortal human being. He finds a feature (*maziyya*) and a state (*ḥāl*) in one case that he does not find in the other case. It is that feature that we mean by *sukūn al-naḥs*.<sup>32</sup>

We might think that Zayd is at home because someone says so. We might even be right about it by sheer luck. But if and only if we find ourselves in a state of certainty, which the Bahšamites call *sukūn al-naḥs*, we can say that we know that Zayd is at home.

At first glance, the Bahšamite emphasis on the condition of certainty and 'peace of mind' seems to go into the direction of epistemological subjectivism.

29 Ibn al-Malāḥimī, *Mu'tamad*, 19.13–14.

30 Al-Nisābūrī, *al-Mas'āl fi l-ḥilāf*, 302.16.

31 Note that the tradition of *falsafa* equally talks about certainty in connection with knowledge under the notion of *yaqīn* (see e.g. Black, "Knowledge and Certitude in al-Fārābī's Epistemology"). However, the Bahšamites do not use *yaqīn* in this context.

32 Mānkḏīm, *Šarḥ al-Uṣūl al-ḥamsa*, 46.13–47.4; cf. Ibn al-Malāḥimī, *Mu'tamad*, 19.18–19.

This is how Josef van Ess, Johannes Peters and Mohd Rahdi Ibrahim interpret it.<sup>33</sup> This is also how early critics of the certainty-definition of knowledge understand it. The most prominent among those critiques is Abū ‘Utmān al-Ġāhiz (d. 868). Back in his time, al-Ġāhiz opposes al-Nazzām’s definition of knowledge as ‘peace of mind’ (*sukūn al-qalb*) or certainty (*tiqa*). Al-Ġāhiz objects that we cannot identify knowledge as certainty because ignorant people are equally certain about their beliefs, even if those beliefs are false. According to al-Ġāhiz, al-Nazzām is forced to accept that whoever has a false belief must be in doubt about it and must be aware that their belief falls short of certainty. Obviously, that is not true. Hence, we cannot identify knowledge based on the presence of certainty.<sup>34</sup>

Al-Ġāhiz’s objection becomes a standard objection against the Bahšamites. ‘Abd al-Ġabbār, Ibn Mattawayh and al-Ġišūmī refer to this objection, explicitly mentioning al-Ġāhiz as its author.<sup>35</sup> However, none of them seems to be impressed by the objection. The usual response is that an ignorant person “supposes himself to [be certain] while in reality (*fī l-ḥaqīqa*) he is not certain.”<sup>36</sup>

Ibn al-Malāḥimī raises a similar objection against the Bahšamite definition of knowledge. Ibn al-Malāḥimī argues that some people would mistake their merely reasonable inferences (Ibn al-Malāḥimī calls them inferences based on *amārāt*) for a real proof (*dalāla*). Hence, they will claim that they have certainty. For instance, someone could argue in favor of accepting a belief by referring to the number of sources for that belief and their credibility (which does not constitute a real proof for Ibn al-Malāḥimī). Hence, one would be certain about that belief.<sup>37</sup> That is one of the reasons why Ibn al-Malāḥimī suggests another (very similar) definition of knowledge: “*p*’s being evident (*zuhūr*) to a living being in a way that it excludes the possibility that it is not the case

33 Van Ess, *Theologie und Gesellschaft*, 3:380; van Ess, *Erkenntnislehre*, 77; Peters, *God’s Created Speech*, 43; Ibrahim, “Definition of Knowledge.” Ibrahim argues that truth is a condition for knowledge as well (hence, the Bahšamites are not subjectivists) but still interprets *sukūn al-nafs* as a condition that would not be enough to guarantee that a belief is objectively true.

34 Al-Ġāhiz, *al-Mašā’il wa-l-ġawābāt fī l-ma’rifā*, in *Rasā’il al-Ġāhiz*, vol. 4, ed. by ‘Abd al-Salām Muḥammad al-Hārūn (Beirut: Dār al-ġil, n.d.), 53.12–17; German translation in van Ess, *Theologie und Gesellschaft*, 6:320–1 (Text XXX.5).

35 ‘Abd al-Ġabbār, *Muġnī*, 12:36.9–12; *Nukat*, 215.7–8; Ibn Mattawayh, *Taḍkira*, 587.5; al-Ġišūmī, *‘Uyūn al-mašā’il*, 377.17–18. This is also the standard Aš‘arite argument against the Bahšamite definition of knowledge (see al-Ġuwaynī, *Šāmil*, 79.6–8; al-Anšārī, *Ġunya*, 1:223.3–4).

36 ‘Abd al-Ġabbār, *Muġnī*, 12:37.4–5; *Nukat*, 216.1–2; Ibn Mattawayh, *Taḍkira*, 587.5–6.

37 Ibn al-Malāḥimī, *Mu’tamad*, 22.7–16.

that *p*, in itself (*fī nafsihī*).<sup>38</sup> When, however, Ibn al-Malāḥimī is asked how the same problem does not apply to his own definition of knowledge, he can only resort to the traditional response. Even if it might seem to someone that their belief is indubitable, “in itself” (*fī nafsihī*) it is not such if it represents a case of a merely reasonable inference.<sup>39</sup> That is the reason why Ibn al-Malāḥimī must add the qualification “in itself” to his definition of knowledge.

All those responses amount to the same idea. It is a mistake to interpret the certainty in the definition of knowledge as an intermittent doxastic attitude. Knowledge is not about whether we believe that we are certain about our beliefs at a given moment. Knowledge is about whether we are certain about our beliefs in reality. Certainty is a natural psychological state that we either have or not. Ibn al-Malāḥimī argues that, in some sense, all our beliefs have a grain of certainty. Otherwise, we would not believe in them. However – he rightfully replies to himself – that ephemeral phenomenological certainty is not the same kind of certainty that the Bahšamite definition of knowledge intends. The phenomenological certainty involves gradation. It can seem to us that we are more or less certain about our beliefs. But the Bahšamites intend a different, special kind of certainty (*sukūn<sup>an</sup> maḥṣūṣ<sup>an</sup>*) in their definition of knowledge.<sup>40</sup> In that sense, one is either certain or not. So, al-Ġišūmī reports on behalf of Abū ‘Alī al-Ġubbārī:

Knowledge is that which necessitates certainty about the object of belief; all [items of knowledge] share it equally. If it does not apply to [them], then they are not knowledge.<sup>41</sup>

In other words, there is no gradation in the Bahšamite notion of certainty. Certainty in the Bahšamite sense does not admit of degrees: it is either present or not.<sup>42</sup> Therefore, certainty in the Bahšamite sense cannot be identical to the ephemeral phenomenological certainty, which does admit of degrees. Therefore, whether we are certain or not has nothing to do with whether it seems to us that we are certain. The presence or absence of certainty is something true in itself.

38 Ibn al-Malāḥimī, *Mu’tamad*, 21.10–11. In his *Fā’iq fī uṣūl al-dīn*, ed. by Wilferd Madelung and Martin McDermott (Tehran and Berlin: Iranian Institute of Philosophy, Institute of Islamic Studies, Free University of Berlin, 2007), 2–3; 35, however, Ibn al-Malāḥimī argues that knowledge should not and cannot be defined. Still, he reproduces the same *no-taġwīz* and *no-tašakkuk* conditions there as well.

39 Ibn al-Malāḥimī, *Mu’tamad*, 23.1.

40 Ibid., 22.22.

41 Al-Ġišūmī, *Uyūn al-masā’il*, 385.18–20.

42 Peters comes to the same conclusion in *God’s Created Speech*, 45, fn. 31.

Al-Ġāḥiẓ knows that his opponents might use this distinction to their advantage:

If they say: The difference between [the ignorant and the knowledgeable] is that the certainty of the one who is right is true in itself (*fi ‘aynihī*) while the certainty of one who is wrong is wrong in itself.

We say: Does that not fail to drive the one who is certain and wrong away from his certainty to hesitation and to make him concerned?<sup>43</sup>

Al-Ġāḥiẓ’s response shows that he does not quite understand the argument. Al-Ġāḥiẓ thinks that if his opponents want to include the notion of certainty in the definition of knowledge, then the presence or the absence of certainty must be something immediately evident to the person with a belief. Al-Ġāḥiẓ’s argument is based on the presupposition that we must immediately know whether we have certainty and, hence, whether we know. However, as Ibn Mattawayh and al-Ġišūmī report to us, for most Bahšamites (especially their later generations), to know *p* is not identical to knowing that one knows *p* (*pace* Abū l-Qāsim al-Balḥī, who appears to be heterodox once again).<sup>44</sup> The Bahšamite analysis of knowledge allows that we do not know that we know *p* and that we do not know that we are certain with respect to our beliefs.

The Bahšamites develop their idea that we can fail to know that we know in response to the “Sophists.” This is how scholars of *kalām* call the proponents of global scepticism.<sup>45</sup> The Sophists deny that there is any difference between knowledge and opinion:

I conceptualize my knowledge in the same way as [I conceptualize] an opinion (*ẓann*) or an assumption. Hence, everything that I allow with respect to [the object of] an opinion I allow with respect to the object of my knowledge. I have my belief in a similar way as a dreaming person believes in what he observes and sees or as someone who opinionated that a mirage is water.<sup>46</sup>

43 Al-Ġāḥiẓ, *al-Maṣā’il wa-l-ġawābāt fi l-ma’rifā*, 54.1–4; German translation in van Ess, *Theologie und Gesellschaft*, 6:321 (Text xxx.5).

44 Ibn Mattawayh, *Taḍkira*, 631; al-Ġišūmī, *‘Uyūn al-masā’il*, 390.17–391.6; al-Nisābūrī, *al-Masā’il fi l-ḥilāf*, 335.5–6.

45 On global scepticism in *kalām* see Abdurrahman Mihirig, “Typologies of Scepticism in the Philosophical Tradition of Kalām,” *Theoria* 88.1 (2022): 13–48.

46 ‘Abd al-Ġabbār, *Muġnī*, 12:43.7–8; *Nukat*, 219.6–7.

The Bahšamite claim that the difference between knowledge and mere belief is that we have certainty about the items of our knowledge. The Sophists do not accept that. They insist that they do not feel any kind of certainty with respect to what is supposed to be their knowledge. They are equally uncertain about their knowledge as they are uncertain about any random assumptions they might have. According to the Bahšamite analysis of knowledge, a dreaming person should not be certain about her belief. But the Sophists refuse to accept that there is any phenomenological difference with respect to certainty between dreaming and waking. Note that the Sophists turn the argument of al-Ġāhiz around. Al-Ġāhiz argues that certainty cannot be the right criterion for knowledge because everyone can say that they are certain about their beliefs. Now, the Sophists insist that no one can be certain about their beliefs, with the same conclusion that certainty cannot be the right criterion for knowledge.

‘Abd al-Ġabbār objects by saying that the Sophists possess knowledge even if they deny that:

We have already explained that certainty (*sukūn al-nafs*) occurs to the knowledgeable person even if he does not think about his states (*aḥwālīhī*) or he believes about himself something different from what he is. For instance, [knowledge] occurs to the Sceptics (*al-mutaġāhila*) even if they believe that their knowledge is sheer opinion and assumption.<sup>47</sup>

In other words, we may be certain about something without even realizing it. It does not matter whether we believe that we are not certain about what we are supposed to know or, conversely, we believe that we are certain about that which we happen not to know. In fact, if we know *p* we are in a state of certainty. If we do not know *p*, we lack the state of certainty. Certainty is a natural psychological state that distinguishes knowledge from belief irrespective of what seems to us to be the case at any given moment.

The objective character of the state of certainty solves the worry that both later Mu‘tazilite authors and modern interpreters, such as Mohd Radhi Ibrahim, share with respect to ‘Abd al-Ġabbār’s definition of knowledge. As

47 ‘Abd al-Ġabbār, *Muġnī*, 12:71.8–10; *Nukat*, 240.1–2. Al-Nīsābūrī, *al-Masā’il fī l-ḥilāf*, 335.10 provides another intriguing example of a man from Nishapur, who followed the philosophers (*al-mutafalsafa*) and denied that testimony (*ḥabr*) provides knowledge. Just like global sceptics, that man has knowledge from testimony even if he does not recognize it himself.

we saw above, ‘Abd al-Ġabbār reduces knowledge to certainty and so identifies it with one of its conditions only. Ibn al-Malāḥimī reports to us that Abū l-Ḥusayn al-Baṣrī protested against it by saying that ‘Abd al-Ġabbār’s definition of knowledge omits the truth condition.<sup>48</sup> However, Abū l-Ḥusayn misses an important point about ‘Abd al-Ġabbār’s understanding of certainty. Being certain about *p* by itself entails that *p* is true. ‘Abd al-Ġabbār says that explicitly in his *Muġnī*:

[Knowledge] acquires that feature [i.e. *sukūn al-naḥs*] if and only if it is a belief and the object of belief is in accordance with the belief (*‘alā mā huwa bihī*).<sup>49</sup>

Conversely, ignorance (that is, false belief) excludes certainty.<sup>50</sup> In other words, every certain belief is a true belief even if not every true belief is a certain belief. The truth condition is embedded in the condition of certainty. But truth has nothing to do with our doxastic attitudes. Truth is a state of affairs. Our beliefs are either true or false, regardless of what we think about them. Therefore, the state of certainty is a state of affairs as well, regardless of what we think about it.

Why all that psychological language of ‘peace of mind’ and ‘tranquillity of the soul,’ if that is the case? The response is that certainty (and knowledge in general) is not an environmental state of affairs. It is not about the world around us. It is a mental state of affairs. It happens in us. By ‘mental,’ I just mean internal to human beings.<sup>51</sup> After all, the Bahšamites are cardio-centrists. They believe that knowledge inheres in our hearts, not in our brains (that is why the notion of ‘heart’ (*qalb*) keeps appearing in the definition of knowledge).<sup>52</sup> However, certainty and knowledge are mental states in a wider sense, in the sense that they are internal to human beings. We are aware that there is such a thing as knowledge because we find it in ourselves. As ‘Abd al-Ġabbār puts it:

48 Ibn al-Malāḥimī, *Mu‘tamad*, 18.3. See further Ibrahim, “‘Abd al-Ġabbār’s Definition of Knowledge.”

49 ‘Abd al-Ġabbār, *Muġnī*, 12:13.4–5; *Nukat*, 198.10; same in al-Ġišūmī, *‘Uyūn al-masā’il*, 370:3–4.

50 Cf. ‘Abd al-Ġabbār, *Muġnī*, 12:12.5–7; *Nukat*, 197.17–19.

51 Cf. Timothy Williamson, *Knowledge and Its Limits* (Oxford: Oxford University Press, 2000), 49.

52 Ibn Mattawayh, *Taḍkira*, 619–21; al-Ġišūmī, *‘Uyūn al-masā’il*, 378.

What proves [the existence] of knowledge is that all of us find ourselves to have beliefs and to be certain about what we believe, such as in the case of sense perception etc. We distinguish between being in that state and being in the state of inquiry, having an opinion, or being a conformist (*muqallid*).<sup>53</sup>

Ibn Mattawayh presents the same thought in a more colorful way:

We have an intuition (*wuğdān*) about that attribute (*ṣifa*) as if inside the chest/heart (*al-ṣadr*). The fact that we establish that feature (*al-maziyya*) in that part among other parts proves that there is something (*ma'nā*) in there, like we said in the case of life when we were establishing its existence.<sup>54</sup>

It is clear that knowledge is an internal mental state for the Bahšamites. They use its mental status to guarantee our immediate acquaintance with it. We find the state of knowledge and certainty right away in ourselves. Hence, we do not need any further proof that there is knowledge. 'Abd al-Ġabbār explains in his response to al-Ġāḥiẓ that "if a perceiver is rational and all reasons and aspects of confusion (*al-luḥs*) are lifted, then he does find himself to believe in that which he perceives and to be certain about it."<sup>55</sup> In other words, certainty is always somewhere in our minds whenever we know something. In an ideal scenario, if all epistemic obstacles are absent, we can always find the state of certainty in ourselves when we know something. If we have a false belief or a true belief based on *taqlīd*, we cannot find that kind of certainty in ourselves. The difference between knowledge and lack of knowledge is not factual. It is modal. The difference is not whether we actually find ourselves certain or not certain at any given moment. It is about our capacity to find certainty in ourselves. If we know *p*, this way or another, we can find certainty in ourselves. If we do not know *p*, we will never be able to find true certainty in ourselves.

To conclude this section, we should note that the Bahšamites have a remarkable position regarding mental states. Unlike many other philosophers, the Bahšamites do not claim that we have a special kind of first-person authority over our mental states that makes our mental states fully transparent to us. The Bahšamites state that we can easily be wrong about our own mental states. That is what happens in the case of knowledge. Both knowledge and certainty are non-transparent mental states. Non-transparent mental states have two

53 'Abd al-Ġabbār, *Muğnī*, 12:23.3–5; *Nukat*, 205.6–8.

54 Ibn Mattawayh, *Taḍkira*, 585.4–5.

55 'Abd al-Ġabbār, *Muğnī*, 12:36.14–15; *Nukat*, 215.9–10.

main characteristics: 1) they are among the psychological states of epistemic subjects; and 2) those subjects can be wrong about whether they are in those states or not. For instance, I can convince myself that I admire someone else’s achievement. So, I truly believe that I do admire that person, but, in fact, deep down, I am jealous. Still, the feeling of jealousy is my own psychological state, even if I fail to recognize it. I have direct access to it. I can find out that I am jealous after careful consideration; and it will be a process different from finding out whether someone else is jealous. The same applies to knowledge and certainty, according to the Bahšamites in my interpretation.

### 3 Knowledge and Belief

The idea that knowledge is a non-transparent mental state has become particularly prominent in contemporary epistemology. According to some modern epistemologists, all previous attempts to define knowledge fail because they try to define knowledge as a correlation between the internal mental content and the environmental state of affairs. According to the traditional accounts of knowledge, we can have one and the same mental content (a belief) both in the case when we know and when we do not know. Some recent philosophers disagree. For them, (1) knowledge is not analyzable into a belief plus further conditions; (2) the mental content of knowledge is external to our minds; (3) knowledge is a factive mental state.<sup>56</sup>

Although the central thesis of my article is that the best way to understand the Bahšamite conception of knowledge is as a factive mental state, it is important to avoid a confusion with the contemporary analysis of knowledge. The Bahšamites may agree with (3) but they agree neither with (1) nor with (2).

The Bahšamite definition of knowledge obviously analyzes knowledge into a belief plus further conditions. Most of our sources list a series of “aspects” (*wuğūh*). If those aspects are added to our beliefs, those beliefs become knowledge. As Ibn Mattawayh puts it:

If it is true that a belief (*‘itiqād*) may sometimes be knowledge and sometimes fail to be knowledge, then there must be something that makes it knowledge. According to us, it becomes knowledge if and only if it occurs in a certain way (*li-wuqū‘ihī ‘alā wağh*).<sup>57</sup>

56 Williamson, *Knowledge and Its Limits*; see also Patrick Greenough and Duncan Pritchard (eds.), *Williamson on Knowledge* (Oxford: Oxford University Press, 2009).

57 Ibn Mattawayh, *Taḍkira*, 2:591.14–15.



Ibn Mattawayh, al-Ġišūmī and al-Nisābūrī commonly mention six aspects through which a belief becomes knowledge:<sup>58</sup>

- (1) when it comes from a knowledgeable agent (that is, God)
- (2) when it comes from a valid inquiry (*naẓar*)
- (3) when it comes from a memory (*taḍakkur*) of an inquiry
- (4) when it comes from an inference from one feature (*ḥukm*) to another
- (5) when it comes from a memory of knowledge
- (6) when a belief becomes knowledge while remaining numerically the same belief

As it becomes clear from the reports of Ibn Mattawayh, al-Ġišūmī and al-Nisābūrī, there was little agreement among the Bahšamites themselves regarding those six aspects. It seems that only the first three aspects were widely accepted by all Bahšamites without objections. ‘Abd al-Ġabbār apparently only accepts the first five.<sup>59</sup> Whereas a detailed analysis of those six aspects goes beyond the scope of this article, we need to focus on a few points that are relevant for our purposes.

First, the very presence of those aspects clearly shows that the Bahšamites analyze knowledge into a combination of belief and further conditions. As a matter of fact, this kind of analysis becomes an alternative to the certainty-definition of knowledge for Abū Hāšim himself. According to ‘Abd al-Ġabbār and al-Ġišūmī, Abū Hāšim defines knowledge as “belief that *p* in accordance with what it is (*‘alā mā huwa*) if it occurs in a certain way (*‘alā waġh*).”<sup>60</sup> This definition might be the source for an Aš‘arite account of a third, still further stage in the development of the Mu‘tazilite definition of knowledge. It defines knowledge as “belief that *p* in accordance with what it is if it comes from a proof (*dalīl*) or is given (*ḍarūra*).”<sup>61</sup> That definition is tantamount to the combination of true belief with the first two aspects listed above (I will say more in the next section about why the first aspect is identical to *ḍarūrī* knowledge).

The Bahšamite analysis of knowledge as true belief that occurs in a certain way is compatible with their alternative definition of knowledge as true belief with certainty. Those six ways in which a belief may occur are the reasons why we possess the mental state of certainty. ‘Abd al-Ġabbār defends a definition that combines both definitions: knowledge is a “belief that *p* in accordance with what it is (*‘alā mā huwa bihī*) in a certain way (*‘alā waġh*) that

58 Cf. *ibid.*, 2:592–3; al-Ġišūmī, *‘Uyūn al-masā’il*, 379–80; al-Nisābūrī, *al-Masā’il fī l-ḥilāf*, 288–9.

59 ‘Abd al-Ġabbār, *Muġnī*, 12:34–35; *Nukat*, 214.

60 ‘Abd al-Ġabbār, *Muġnī*, 12:13.18; *Nukat*, 198.19–199.1; al-Ġišūmī, *‘Uyūn al-masā’il*, 370.5.

61 Al-Ġuwaynī, *Šāmil*, 75.23.

entails (*yaqtaḍī*) certainty (*sukūn al-naḥs*).<sup>62</sup> Due to the complications of the Mu‘tazilite ontology, ‘Abd al-Ġabbār also presents a report of a more sophisticated picture. Knowledge itself must possess a state (*ḥāl*) that causes the knower to be certain, while that state belongs to knowledge because it occurs in a certain way that makes knowledge be knowledge.<sup>63</sup> Regardless of those complications, the core idea may be simplified in the following way:

belief (*i’tiqāḍ*) + way of its occurrence (*waḡḥ*) => knowledge => certainty  
(*sukūn al-naḥs*)

A belief becomes knowledge due to the addition of any among those six aspects; the fact that a belief is knowledge, in turn, involves the mental state of certainty for whoever possesses knowledge. This two-step process will be very important for us in the third section of this article.

When the Bahšamites speak about the addition of one of the six aspects to a belief, so that it becomes knowledge, they do not mean that we literally take numerically one and the same belief, add, for instance, a proof for it and it results in knowledge. We can clearly see that it is not their intention by looking at the discussion of the sixth aspect. Later Bahšamite authors reject the sixth aspect because it presupposes what they call the remaining (*baqā’*) of a belief.<sup>64</sup> Here, we need to recall one of the most famous aspects of the metaphysics of *kalām*, occasionalism.<sup>65</sup> According to occasionalism, properties of things do not persist from one moment to another. They come about completely anew every next moment. The same applies to knowledge and belief, since they are properties of our minds/hearts. If I first believe that *p* without any reason for that, I do not have any knowledge. Afterwards, I have a reason for believing *p* and, therefore, I have knowledge. But the belief that *p* does not remain numerically the same belief in the transition from one moment to another. There is one belief that *p* in the first moment of ignorance; and there is another belief that *p* in the next moment of knowledge. According to al-Ġišūmī and al-Nisābūrī, only Abū Hāšim himself accepts that *p* remains

62 ‘Abd al-Ġabbār, *Muḡnī*, 12:15.11–12; *Nukat*, 200.1–2.

63 ‘Abd al-Ġabbār, *Muḡnī*, 12:30; *Nukat*, 210–1. On the Mu‘tazilite theory of *aḥwāl* see e.g. Jan Thiele, “Abū Hāšim al-Jubbā’ī’s (d. 321/933) Theory of ‘States’ (*aḥwāl*) and its Adaptation by Ash‘arite Theologians,” in *Oxford Handbook of Islamic Theology*, ed. by Sabine Schmidtke (Oxford: Oxford University Press, 2016), 364–83.

64 Ibn Mattawayh, *Taḍkīra*, 593.15–17; 599.9–11.

65 The best brief overview of occasionalism in *kalām* is Ulrich Rudolph, “Occasionalism,” in *Oxford Handbook of Islamic Theology*, ed. by Sabine Schmidtke (Oxford: Oxford University Press, 2016), 347–63.

numerically one and the same belief in the transition from *taqlīd* to knowledge. On the contrary, ‘Abd al-Ġabbār states that the *taqlīd*-belief that *p* perishes while a completely new knowledge-belief that *p* comes about.<sup>66</sup>

Still, the Bahšamites accept that one and same type of belief may be both knowledge and ignorance, depending on whether any of the six aspects are present. Al-Nisābūrī uses the notion of similarity. When two beliefs are associated with one and the same content in the most specific way (*‘alā aḥaṣṣ mā yumkin*), they are similar (*mitlayn*), irrespective of whether they are items of knowledge, *taqlīd* or ignorance.<sup>67</sup> Ibn Mattawayh says in that regard:

If they say: Do you allow that the belief which is knowledge can be not knowledge: or you prohibit it, as Abū l-Qāsim did?

We say: Surely, we allow that. When someone wakes up from sleep, he provides [a belief] and he can provide it even if neither inquiry nor proof precede it. If he provides [that kind of belief] it is not knowledge. Likewise, when we provide a belief that Zayd is at home when we see him, it is knowledge. But if [the same kind of belief] occurred to us without that observation, it would not be knowledge. It is true that whatever fails to be knowledge can be knowledge and whatever is knowledge can fail to be knowledge in some respects.<sup>68</sup>

In this passage, Ibn Mattawayh clearly states that one and the same type of belief can be either knowledge or not knowledge. When someone says to me that Zayd is at home, I believe that Zayd is at home, but I do not know whether Zayd is at home. Afterwards, I go home and see Zayd there. At that moment, I know that Zayd is at home. The belief that I have before and after going home is the same in its content, ‘Zayd is at home,’ even if it is not numerically the same. Al-Nisābūrī says:

If Zayd is not at home and the same type (*mitl*) of belief that was knowledge exists, [even if] it is not the same token of belief (*lā hādā bi-‘aynihī*), and it is connected with Zayd’s being at home, then it is ignorance.<sup>69</sup>

66 Al-Ġišūmī, *‘Uyūn al-masā’il*, 380.8–19; al-Nisābūrī, *al-Masā’il fi l-ḥilāf*, 288.22–289.2 (al-Nisābūrī rejects Abū Hāšim’s position in what follows).

67 Al-Nisābūrī, *al-Masā’il fi l-ḥilāf*, 303.15–16.

68 Ibn Mattawayh, *Taḍkira*, 592.1–5.

69 Al-Nisābūrī, *al-Masā’il fi l-ḥilāf*, 305.1–2.

‘Abd al-Ġabbār expresses the same idea on behalf of Abū Hāšim and his father, Abū ‘Alī:

A belief is knowledge or ignorance with respect to that to which it is connected (*li-muta‘allaq*). It is also possible to imagine that Zayd is not at home while knowing that he is at home and to believe it. Therefore, the belief that Zayd is at home is an intelligible thing (*ma‘nā ma‘qūl*) whether Zayd is at home or not.<sup>70</sup>

In other words, the mental content ‘Zayd is at home’ remains the same whether it is the mental content of knowledge or ignorance. Whether ‘Zayd is at home’ is ignorance or not depends on environmental factors, that is, on whether Zayd is in fact at home or not.

At this point, we should be extremely careful. It might seem, at first glance, that whether the belief that *p* is knowledge or not also depends on environmental factors. Al-Anṣārī presents this interpretation of the Bahšamite position in his critique of their definition of knowledge. The Aš‘arites generally oppose the Bahšamite position that “knowledge is of the kind (*ġins*) of belief.”<sup>71</sup> One of the arguments that al-Anṣārī provides is the following:

When someone believes that Zayd is at home while he is not there, [his] belief is ignorance. If, however, Zayd comes home but that person is not aware of that and continues to have the former kind of belief, then that belief should become knowledge [according to the Mu‘tazilites]; which is false.<sup>72</sup>

Al-Anṣārī thinks that, according to the Bahšamites, an environmental change is sufficient for the transformation of ignorance into knowledge. We have one and the same mental content ‘Zayd is at home.’ ‘Zayd is at home’ is knowledge when Zayd is at home and is ignorance when he is not at home. Al-Anṣārī’s interpretation leads the Bahšamites to an absurd conclusion that our belief that Zayd is at home becomes knowledge even if it was ignorance before and we still have no way to secure the correctness of our belief. Obviously, I do not

70 ‘Abd al-Ġabbār, *Muġnī*, 12:27.13–17; *Nukat*, 208.13–15. Cf. al-Nisābūrī, *al-Masā’il fī l-ḥilāf*, 304.23–26.

71 The Aš‘arites might be in agreement with Abū l-Qāsim al-Balḥī in that respect, according to al-Nisābūrī, *al-Masā’il fī l-ḥilāf*, 300.8; 303.14.

72 Al-Anṣārī, *Ġunya*, 1:224.6–7.

start knowing that Zayd is at home just because Zayd came home, while I am not even aware of that fact.

However, al-Anṣārī's interpretation is not fair to the Bahšamite doctrine. The Bahšamites never say that a belief can become knowledge through an environmental change alone. As we remember, knowledge is a mental state; hence, at least something must happen to our minds as well. For instance, 'Abd al-Ġabbār says:

When a belief is connected (*ta'allaqa*) to something as it is in a way that entails certainty, it is knowledge. When it is connected to something not as it is, it is ignorance. When it is connected to something as it is, but it does not involve certainty, it is neither knowledge nor ignorance.<sup>73</sup>

In other words, al-Anṣārī is right that an environmental change makes a difference between knowledge and ignorance. This is the case because the second condition for knowledge, as we remember, is that a belief is true, while ignorance is defined as untrue belief.<sup>74</sup> However, the environmental change alone does not yet turn a belief into knowledge.<sup>75</sup> Being true is a necessary but not sufficient condition for knowledge. In addition to being true, the knowledge-type of belief must also involve certainty. There must be both environmental and mental changes if a belief is to become knowledge. This is why, in al-Anṣārī's thought experiment, the belief does not automatically turn into knowledge when Zayd comes home.

To conclude this section, we should note that the status of mental content plays no role for the Bahšamite definition of knowledge. The core question of the recent discussions of knowledge as a mental state, that is, whether mental content is internal or external to the mind, remains a desideratum for further research on Bahšamite epistemology. There are signs that at least some Bahšamites would accept the external mental content, as they argue on its basis for the mind-independent reality of all objects of knowledge.<sup>76</sup> The notion of connection (*ta'alluq*) to the object of knowledge, which we found in the passage above, also indicates an externalist theory of mental contents, possibly not only for knowledge but for any true belief. However, other Bahšamites

73 'Abd al-Ġabbār, *Muġnī*, 12:25.15–18; *Nukat*, 207.2–4.

74 Cf. Ibn al-Malāḥimī, *Mu'tamad*, 25.4–22; Ibn Mattawayh, *Tadkira*, 635–6.

75 Cf. 'Abd al-Ġabbār, *Muġnī*, 12:49.6; *Nukat*, 223.6–7: *lā yašīru l-'ilm 'ilm<sup>an</sup> li-kawn ma'lūmiḥ 'alā mā huwa biḥī*.

76 See Fedor Benevich, "The Reality of the Non-Existent Object of Thought: The Possible, The Impossible, and Mental Existence in Islamic Philosophy (11–13th c.)," *Oxford Studies in Medieval Philosophy* 6 (2018): 31–61.

either explicitly say that some objects of knowledge reside in the mind, or even allow for knowledge to occur without any mental content at all (*‘ilm lā ma‘lūm lahū*).<sup>77</sup>

Whether mental content is internal or external to our minds, the Bahšamites accept that it remains the same throughout all epistemic states (other than opinion (*ẓann*) and doubt (*šakk*), which do not involve a belief at all).<sup>78</sup> So, how can we interpret the Bahšamite notion of knowledge as a factive mental state? The answer is that the Bahšamites distinguish between mental content and mental state. If I know that Zayd is at home I may have the same mental content (whether external or internal) as when I believe that Zayd is at home because someone told me so. But I am in different mental states, and only in the first case in a mental state that involves certainty. Knowledge is a combination of internal and external factors for the Bahšamites. That is why we should interpret their notion of knowledge as a factive mental state, even if the Bahšamites would disagree with the contemporary epistemologists on the analyzability of knowledge in terms of belief plus further conditions and would argue that mental content remains the same throughout different mental states.

#### 4 Knowledge and Justification

The Bahšamite definition of knowledge as ‘true belief with certainty’ does not mention justification. However, the idea of justification is not totally alien to Bahšamite epistemology. To understand how justification works in Bahšamite epistemology, we need to turn to the traditional *kalām* taxonomy of *ḍarūrī* and *muktasab* knowledge.

The division of knowledge into *ḍarūrī* and *muktasab* is the core element of *kalām* epistemology, both Mu‘tazilite and Aš‘arite. As has been already noted by Mohd Radhi Ibrahim, there has been some confusion regarding the correct understanding of those two notions.<sup>79</sup> However, if we look at the Bahšamite sources themselves and forget the misleading early modern notions of *a priori* and *a posteriori* for a moment, the idea seems to be quite simple. The notion of *ḍarūrī* by itself may have many meanings, such as ‘necessary’ or ‘immediate,’ as

77 Ibn al-Malāḥimī, *Mu‘tamad*, 356; 590–3; al-Ġišūmī, *‘Uyūn al-masā’il*, 380.

78 That is, because someone with an opinion that *p* or in doubt whether *p* allows that not-*p* is equally possible; on this, see Ibn Mattawayh, *Taḍkira*, 648–9; Ibn al-Malāḥimī, *Mu‘tamad*, 26–27.

79 Mohd Radhi Ibrahim, “Immediate Knowledge According to al-Qāḍī ‘Abd al-Ġabbār,” *Arabic Sciences and Philosophy* 23.1 (2013): 101–15.

Johannes Peters or Mohd Radhi Ibrahim put it.<sup>80</sup> However, the Bahšamites also use another notion, *iḏḏīrār*, when they talk about *ḏarūrī* knowledge.<sup>81</sup> *Iḏḏīrār* is more straightforward. It means ‘enforcement’ or ‘compulsion.’ Mānkḏīm explicitly explains it as *ilḡāʿ* (compulsion).<sup>82</sup> In other words, *ḏarūrī* knowledge is forced upon us. It has nothing to do with the necessity, innateness, immediacy or apriority of our knowledge. Our knowledge is *ḏarūrī* if and only if it is not up to us (*lā min qibalinā*).<sup>83</sup> Conversely, the *muktasab* type of knowledge is up to us. Henceforth, I will translate *ḏarūrī* knowledge as ‘given’ knowledge, by analogy to the usage of ‘given’ and ‘spontaneous’ knowledge in contemporary epistemology.<sup>84</sup> For the *muktasab* type of knowledge, I retain the traditional translation of ‘acquired’ knowledge, but we need to keep in mind that it must involve an active involvement of the knower in the process of the acquisition of knowledge.

There are many different types of given knowledge in Muʿtazilite *kalām*. They also vary from one author to another. Without claiming to provide an exhaustive and non-contested list of all given objects of knowledge, let me just list the most common ones:<sup>85</sup>

- (1) direct sense perception (*idrāk* a.k.a. *al-ʿilm bi-l-mušāhadāt*)
- (2) knowledge of oneself
- (3) knowledge of one’s own mental states (*aḥwāl*) (such as pain, life etc.)
- (4) knowledge of primary principles (*ʿulūm al-bidāʿa*) (such as principle of non-contradiction)

80 Peters, *God’s Created Speech*, 53; Ibrahim, “Immediate Knowledge.” See further Binyamin Abrahamov, “Necessary Knowledge in Islamic Theology,” *British Journal of Middle Eastern Studies* 20 (1993): 20–32.

81 See e.g. ‘Abd al-Ġabbār, *Muġnī*, 12:66; *Nukat*, 236.

82 Mānkḏīm, *Šarḥ al-Uṣūl al-ḥamsa*, 48.6–7. Ibrahim, “Immediate Knowledge,” 102–3 knows about that meaning of *ḏarūrī*, but abandons it for ‘immediate knowledge.’

83 Mānkḏīm, *Šarḥ al-Uṣūl al-ḥamsa*, 48.8 and Ibn Mattawayh, *Taḏkira*, 601.19. Cf. Ibn al-Malāḥimī, *Muʿtamad*, 24.17–25.1.

84 See e.g. John McDowell, *Mind and World* (Cambridge, MA: Harvard University Press, 1994), 5. I have also used those notions in application to the Ashʿarite *kalām* in my “Meaning and Definition: Skepticism and Semantics in Twelfth-Century Arabic Philosophy,” *Theoria* 88.1 (2022): 72–108. Peters, *God’s Created Speech*, 53 also uses the notion of given knowledge, but he drops it afterwards for necessary knowledge.

85 Cf. ‘Abd al-Ġabbār, *Muġnī*, 12:59–67; *Nukat*, 231–7; Ibn Mattawayh, *Taḏkira*, 601–3; al-Ġišūmī, *ʿUyūn al-masāʿil*, 373–4; 383–4; Mānkḏīm, *Šarḥ al-Uṣūl al-ḥamsa*, 50–51; see further Ibrahim, “Immediate Knowledge,” 105–14. Some of those items of given knowledge pertain to *kamāl al-ʿaql* while others do not. *Kamāl al-ʿaql* designates the set of propositions on which intelligent human beings cannot disagree.

- (5) testimonial knowledge (*aḥbār*) (such as that Mecca exists)<sup>86</sup>
- (6) understanding the referents of speech (*qaṣd al-muḥātib*)
- (7) matter-of-fact knowledge (such as that fire always burns)
- (8) skills acquired through repetition (*mumārāsa*)
- (9) knowledge of natural good and evil (such as that injustice is evil)<sup>87</sup>

All those items of knowledge have one thing in common. They are undeniable. If I know *p* and *p* is an item of given knowledge, I cannot deny that *p*. According to Ibn Mattawayh, that is the definition of given knowledge: “if one knows *p*, one cannot deny that *p* even if *p* is considered in isolation (*inḥarada*).”<sup>88</sup> Ibn Mattawayh requires the qualification “even if *p* is considered in isolation” to distinguish between given and acquired knowledge. If *p* is an item of acquired knowledge, I can deny it when I consider it in isolation from the proof that I provide for *p*.<sup>89</sup>

There is another crucial common element for all kinds of given knowledge. According to the Bahšamites, “all given knowledge comes from God.”<sup>90</sup> This is not just a part of traditional *kalām* occasionalism. The Bahšamites argue that a naturalistic explanation of the origination of knowledge fails. The argument focuses on the first type of given knowledge, sense perception (*idrāk*). According to the Bahšamites, sense perception does not generate knowledge by itself. Sense perception is only a way (*ṭarīqa*) to provide knowledge of the perceived, but it is not the cause for that knowledge. ‘Abd al-Ġabbār denies that sense perception either necessitates (*yūġibu*) the knowledge of the perceived or even makes that knowledge possible (*yuṣaḥḥihū*). Rather sense perception is a disposition (expressed through the root of *q-w-y*) for that knowledge.<sup>91</sup>

86 Whether testimonial knowledge is *ḍarūrī* and how to distinguish between reliable and unreliable testimonial knowledge was, of course, a matter of debate. On this, see e.g. Sohaira Z. M. Siddiqui, *Law and Politics under the Abbasids* (Cambridge: Cambridge University Press, 2019), Ch. 5.

87 Whether there are any natural values was, famously, a matter of debate between the Aš‘arites and the Mu‘tazilites; on this see e.g. Ayman Shihadeh, “Theories of Ethical Value in *Kalām*: A New Interpretation,” in *Oxford Handbook of Islamic Theology*, ed. by Sabine Schmidtke (Oxford: Oxford University Press, 2016), 384–407.

88 Ibn Mattawayh, *Taḍkira*, 602.1. See further ‘Abd al-Ġabbār, *Muġnī*, 12:63.17; *Nukat*, 234.4. I still translate *ḍarūrī* as ‘given’ and not as ‘undeniable,’ since it is undeniable because it is given.

89 Ibn Mattawayh, *Taḍkira*, 601.20–23.

90 Al-Ġiṣūmī, *‘Uyūn al-masā’il*, 371.21. See further Siddiqui, *Law and Politics under the Abbasids*, 89; Peters, *God’s Created Speech*, 54.

91 ‘Abd al-Ġabbār, *Muġnī*, 12:60.6; *Nukat*, 231.7–8.



To use the Mu‘tazilite notion of secondary causation, ‘Abd al-Ġabbār argues that sense perception does not generate (*yuwallidu*) knowledge by itself.<sup>92</sup> For instance, a child has the same sense perception as a grown-up but lacks knowledge.<sup>93</sup> Ibn Mattawayh uses the same reference to children but adds the cases of perceptual illusions.<sup>94</sup> All these examples demonstrate that our knowledge of the perceived does not come from perception. It comes from God.

Looking back at the six aspects (*wuġūh*) through which a belief becomes knowledge (see section *Knowledge and Belief*), we can conclude that all types of given knowledge fall under the first aspect, according to which a belief becomes knowledge because it comes from a knowledgeable agent, that is, God. Ibn Mattawayh explicitly connects the first aspect with given knowledge.<sup>95</sup> Conversely, all other aspects stand for the transformation of belief into acquired knowledge. ‘Abd al-Ġabbār clarifies it by noting that all those aspects ultimately amount to the presence of an inquiry (*naẓar*) anyway.<sup>96</sup> Acquired knowledge is knowledge that comes from an inquiry. Unlike sense perception, inquiry generates (*yuwallidu*) knowledge.<sup>97</sup> In application to the two-step scheme from the second section, the whole picture looks as follows:

belief + origin in God => *ḍarūrī* knowledge => certainty

belief + *naẓar* => *muktasab* knowledge => certainty

Now, how does this whole picture relate to justification? There is no explicit notion of justification in Bahšamite epistemology. But there are several aspects of Bahšamite epistemology that look a lot like their solutions to the problem of justification. The first among them is the Bahšamite response to the question how we can know whether we know. As we saw in the first section of this article, the Bahšamites deny that we must know that we know whenever we know.

92 ‘Abd al-Ġabbār, *Muġnī*, 12:77.19; *Nukat*, 244.6–7. On secondary causation and *tawallud* see van Ess, *Theologie und Gesellschaft*, 3:116–21 and Ulrich Rudolph and Dominik Perler, *Occasionalismus: Theorien der Kausalität im arabisch-islamischen und im europäischen Denken* (Göttigen: Vandenhoeck & Ruprecht, 2000), 23–51.

93 ‘Abd al-Ġabbār, *Muġnī*, 12:78.4–8; *Nukat*, 244.9–12.

94 Ibn Mattawayh, *Taḍkira*, 597.15–19. See further al-Ġišūmī, *‘Uyūn al-masā’il*, 389.8.

95 Ibn Mattawayh, *Taḍkira*, 596.22.

96 ‘Abd al-Ġabbār, *Muġnī*, 12:67.19–68.1; *Nukat*, 237.6–8.

97 ‘Abd al-Ġabbār, *Muġnī*, 12:77–78; *Nukat*, 243–4; al-Ġišūmī, *‘Uyūn al-masā’il*, 397.6; Ibn al-Malāḥimī, *Mu‘tamad*, 51–52 (he uses the root of *w-ṣ-l* instead of *w-l-d*); cf. Peters, *God’s Created Speech*, 57–61.

But we still can know that we know. In other words, when I know *p* I should be able to justify my belief in *p*, by proving that my belief in *p* is knowledge. For instance, when I know that Zayd is at home, I should be able to justify why I believe that Zayd is at home, by proving that I know that Zayd is at home and I do not just guess correctly.

At first glance, the Bahšamite analysis of how we can know whether we know strikes us as a paradigmatic case of a mentalist theory of justification. By mentalism, I mean an internalist theory of justification, according to which our beliefs must be justified based on our mental states. Thus, ‘Abd al-Ġabbār argues that we can know whether we know *p*, by finding out whether we possess the mental state of certainty that *p*: “One knows that knowledge is knowledge based on whether it occurs in a way that entails certainty (*sukūn al-nafs*).”<sup>98</sup>

This is part of ‘Abd al-Ġabbār’s program of dealing with global sceptics. Many scholars of *kalām* insist that there is no way to argue against global sceptics because they deny given knowledge.<sup>99</sup> ‘Abd al-Ġabbār disagrees. According to ‘Abd al-Ġabbār, our knowledge that we know is an acquired item of knowledge. ‘Abd al-Ġabbār says: “It is possible for someone with sense perception to know the objects of sense perception in a forced way (*bi-dḡirār*) while not knowing oneself to be knowledgeable in a given way.” Hence, we can argue against sceptics by showing them that their beliefs are knowledge.<sup>100</sup> We do that by indicating that they possess the mental state of certainty with respect to those beliefs.

The same method of justification applies if someone denies acquired knowledge. As I indicated above, a valid inquiry must generate (*tawallada*) knowledge, according to the Bahšamites. Hence, it must generate the mental state of certainty as well. Consequently:

We have already explained the way in which one knows whether his knowledge is knowledge and whether his inquiry is valid. We said: If one knows his own state as being certain about that which he knows, and one has previously learned that [certainty] follows upon knowledge, then one knows that he knows and that the inquiry which generated it (*walladahū*) is valid.<sup>101</sup>

98 ‘Abd al-Ġabbār, *Muġnī*, 12:46.16; *Nukat*, 221.10. See also al-Nisābūrī, *al-Masā’il fi l-ḥilāf*, 335.12–13.

99 See, e.g., Ibn al-Malāḥimī, *Mu‘tamad*, 32.5–6; see further Mihirig, “Typologies of Scepticism in the Philosophical Tradition of Kalām,” section 1.2.

100 ‘Abd al-Ġabbār, *Muġnī*, 12:45.18–46.4; *Nukat*, 221.3–6.

101 ‘Abd al-Ġabbār, *Muġnī*, 12:70.17–19; *Nukat*, 239.8–10. See also Ibn al-Malāḥimī, *Mu‘tamad*, 53.21–22.

In other words, if I see smoke, I conclude that there is fire.<sup>102</sup> Although I arrive at my belief that there is fire based on the premise that there is no smoke without fire, I *do not* justify that there is fire by referring to the premise that there is no smoke without fire. That would not be enough. The Bahšamites are not foundationalists regarding justification.<sup>103</sup> A reference to a self-evident premise does not justify our beliefs yet. Rather, I need to provide my line of reasoning and check in myself whether it makes me certain about the conclusion. As ‘Abd al-Ġabbār says: “One knows the validity of the inquiry after there occurs a belief that made him certain, by reflecting about his own state and examining it.”<sup>104</sup>

To sum up, we justify all our beliefs through a reference to our mental states – in particular, to the mental state of certainty. That sounds like an internalist mentalist theory of justification. But this is not the whole story. As we remember from the first section, certainty is not how we feel, it is how we are. Hence, we can easily be wrong about whether we are certain or not. So, how can we further justify our belief that we truly are in the state of certainty? Al-Ġāḥiẓ has already raised this question:

What guarantees to the one who is right that his certainty is not wrong in itself (*fī ‘ayniḥi*) either, if his certainty cannot be distinguished from<sup>105</sup> the certainty of the one who is wrong?<sup>106</sup>

The dialectical opponent of al-Ġāḥiẓ replies that the one who is right can provide given knowledge as his evidence (*istašhada l-ḍarūriyyāt*).<sup>107</sup> That reply marks a turn back to foundationalism. Our knowledge is justified through the state of certainty. Certainty, in its turn, is justified through undeniable premisses. That is not the reply, however, that the Bahšamites give to al-Ġāḥiẓ themselves. ‘Abd al-Ġabbār just replies that whoever has knowledge finds herself to be in the state of certainty, while whoever lacks knowledge finds herself without certainty “in the course of an inquiry and an examination (*‘inda l-faḥṣ wa-fī l-muta‘aqqab*).”<sup>108</sup>

102 I am taking my example of *naẓar* from Ibn al-Malāḥimī, *Mu‘tamad*, 51.13–15.

103 That is why I call the Bahšamite position on justification ‘mentalistic’ and not just ‘internalist.’ If we called their position ‘internalist,’ the Bahšamites could still be foundationalists, since foundationalism is a kind of internalism. But the Bahšamites are not foundationalists.

104 ‘Abd al-Ġabbār, *Muġnī* XII, 74.20–21; *Nukat*, 242.5.

105 I read “*lā yunfaṣalu*” with the manuscript M (so does van Ess as it seems).

106 Al-Ġāḥiẓ, *al-Masā’il wa-l-ġawābāt fī l-ma’rifā*, 54.5–6; German translation in van Ess, *Theologie und Gesellschaft*, 6:321 (Text xxx.5).

107 Al-Ġāḥiẓ, *al-Masā’il wa-l-ġawābāt fī l-ma’rifā*, 54.9–10.

108 ‘Abd al-Ġabbār, *Muġnī*, 12:37.6–10; *Nukat*, 216.3–6.

‘Abd al-Ġabbār’s reply means that the Bahšamites refuse to provide any justification for the belief that we are in the state of certainty. Certainty is a mental state. Like all other mental states, certainty falls under the third type of given knowledge from the list above. ‘Abd al-Ġabbār confirms: “The knowledge that [you] are certain is given (*darūri*).”<sup>109</sup> Or elsewhere: “We just assert given knowledge that one has a belief and that one is certain.”<sup>110</sup> We need justification only for acquired knowledge. But we do not need any justification for given knowledge. It is undeniable by itself. This is a crucial point of difference. The knowledge that we know is acquired knowledge. We justify that we know based on the mental state of certainty. But the mental state of certainty itself is given knowledge. We do not justify it at all.

So, what do we do with those people who falsely claim certainty without really having it or with those people who falsely deny that they have certainty, like Sophists, that is, global sceptics? As we just saw, ‘Abd al-Ġabbār suggests an inquiry or an examination to test whether those people really have certainty. However, that kind of inquiry does not amount to justification. The Bahšamites use another technical notion for it, *tanbīh* (reminder). The notion of *tanbīh* should be familiar to anyone who studies Avicennian epistemology and philosophy of mind. Avicenna uses it for the cases when someone denies self-evident and undeniable propositions. That person needs to be reminded of the truth of those propositions through thought experiments or examples.<sup>111</sup>

The Bahšamites use *tanbīh* for the same purposes. ‘Abd al-Ġabbār reports on behalf of Abū Hāšim:

If someone questions an item of given [knowledge], he knows that he is wrong. One can neither prove it to him nor debate him by way of an inference (*al-adilla*). However, one can remind him (*yunabbihahū*) [of it], by mentioning things that he knows even if he denies that, to force him into denying those examples and to establish a contradiction in his position.<sup>112</sup>

109 ‘Abd al-Ġabbār, *Muġnī*, 12:42.19; *Nukat*, 218.12–13.

110 ‘Abd al-Ġabbār, *Muġnī*, 12:44.8–9; *Nukat*, 220.5.

111 E.g. Peter Adamson and Fedor Benevich, “The Thought Experimental Method: Avicenna’s Flying Man Argument,” *Journal of the American Philosophical Association* 4.2 (2018): 147–64, esp. 162. The usage of the notion of *tanbīh* might indicate another instance of *kalām*’s influence on Avicenna.

112 ‘Abd al-Ġabbār, *Muġnī*, 12:42.5–8; *Nukat*, 218.6–9. It seems that Abū Hāšim accepts in other contexts that given knowledge can be justified through the “validity of the way it was acquired” (*salāmat al-ṭarīq*), but ‘Abd al-Ġabbār rejects it and insists that the only way to know whether we know is a *tanbīh* of the *sukūn al-naḥs* (*Muġnī*, 12:38–40).

Or later:

If a Sophist says: “I do not believe in what I perceive. I am not certain about [those sensible objects] in which I believe as to whether they exist, whether white is different from black, sweet from sour, long from short,” then he has just denied that which he knows in a forced way (*bi-dṭirār*). Then, we need to remind (*nunabbiha*) [him] of the falsehood of what he says in a way that we mentioned.<sup>113</sup>

In other words, there is no way to prove to the global sceptics that they have certainty about some things. But we can remind them of it. We can do it, by providing examples to them of how they happen to be certain about something even if they deny it. For instance, Ibn al-Malāḥimī says:

We say that they are in self-contradiction (*kāḍibūna ‘alā anfusihim*) by way of a reminder (*tanbīh*), not by way of a proof. So, ask them: “Do you claim that you do not know what you observe?” If they say “Yes,” say to them: “Why then do you keep away from the harmful and fetch the beneficial for yourself?”<sup>114</sup>

Not unlike David Hume, Ibn al-Malāḥimī argues that even if we claim to be sceptical, in our everyday life it is hard to really be such.<sup>115</sup> I can claim as much as I want that I do not believe that if one perceives a lion there really is a lion. But when I see one, I will certainly run away.

The Bahšamites use those reminders to support their view that certainty is an undeniable state of mind. When we are truly certain we cannot deny that we are certain. But the fact that certainty is undeniable does not mean that we are justified to believe that we have it. As it has been rightfully established in the scholarship on David Hume, the fact that we inevitably accept *p* does not mean that *p* is justified.<sup>116</sup> Rather, the Bahšamites are just not interested in the problem of justification of certainty. Our knowledge that *p* is justified through

113 ‘Abd al-Ġabbār, *Muḡnī*, 12:42.20–43.3; *Nukat*, 219.1–3.

114 Ibn al-Malāḥimī, *Mu’tamad*, 32.16–18. Note that Ibn al-Malāḥimī, unlike ‘Abd al-Ġabbār, intends to remind the sceptics that they have knowledge, not that they are certain (because Ibn al-Malāḥimī has a slightly different definition of knowledge), but the idea remains the same.

115 Cf. David Hume, *An Enquiry Concerning Human Understanding*, ed. by Tom L. Beauchamp (Oxford: Oxford University Press, 2000), sections v and xii.

116 Helen Beebe, *Hume on Causation* (London and New York: Routledge, 2006), 38–39.

a reference to the mental state of certainty that *p*, which we inevitably either have or do not have; and that is as far as it gets.

This solution is highly unsatisfactory for someone who defines knowledge as justified true belief. Basically, the Bahšamites fail to provide any ultimate justification for why our beliefs are knowledge. However, at this point, we need to recall that the Bahšamites never define knowledge as justified true belief. In the standard definition of knowledge as justified true belief, justification is the necessary and sufficient condition through which true belief becomes knowledge. This does not apply to the Bahšamite conception of knowledge. As we saw above, a true belief becomes knowledge through the way in which it occurs: either because it is created by God or because it is generated through an inquiry. Everything that we have observed so far in terms of justification of knowledge only applies to how we, the epistemic agents, can recognize whether we have knowledge. It does not apply to how our beliefs become knowledge. Let us recall the diagram from above:

belief + origin in God => *ḍarūrī* knowledge => certainty

belief + inquiry => *muktasab* knowledge => certainty

Both types of knowledge involve a two-step process. First, the combination of belief with a certain origin (God/inquiry) generates knowledge. Second, knowledge entails the mental state of certainty. Justification – both for given and acquired knowledge – is a backwards motion from certainty to knowledge. When I observe Zayd at home, God gives me knowledge that Zayd is at home. From my own perspective, I can start wondering whether my belief that Zayd is at home is knowledge. I justify that my belief is knowledge by finding a mental state of certainty that Zayd is at home in myself. But such a justification is an operation limited to my own perspective alone. Knowledge is already knowledge even before I justify it.

Still, we may insist that the Bahšamites provide us with a theory of justification for our knowledge even if they do not define knowledge as justified true belief. It seems that the Bahšamites tackled this issue as well. As the combination of a belief with its occurrence either from God or from an inquiry generates knowledge, we could suggest something like a backward motion of justification for the first step – from knowledge to its origin – in the two-step scheme above as well. Let us focus on given knowledge, since acquired knowledge must be based on given knowledge anyway. In the case of given knowledge, my knowledge that Zayd is at home is justified because it originates from God. That step in the line of justification would be an externalist

one. According to the externalist theories of justification, knowledge is justified through the process of its origination. Even if that process is not accessible to us (I do not know which process led to the origination of my belief that Zayd is at home), objectively speaking, that process turns my belief into knowledge. In other words, the justification of my knowledge lies beyond the evidence accessible to me, but it still justifies my knowledge.

The externalist interpretation of the first step in the Bahšamite two-step scheme would make the Bahšamite theory of justification an elegant combination of internalism (for the second step) and externalism (for the first step): I am internally justified to believe that Zayd is at home because I find myself to be certain about it; and I am externally justified to believe that Zayd is home because that item of knowledge was given to me by God.

Although there is no direct evidence for this combined interpretation, I am tempted to accept it. One good argument for this interpretation is that the Bahšamites presuppose that given knowledge must originate from an agent which is knowledgeable himself (see the first *wağh* from the second section). That condition only makes sense if the Bahšamites wish to secure the correspondence between given beliefs and reality through the involvement of an external agent (namely God). Why else should that agent be knowledgeable?

However, even if we accept externalism about justification for the first step, we need to add one important qualification to it. The externalist justification of knowledge should not be understood in modal terms. It is not correct to say that my knowledge that Zayd is at home is justified because it comes from God and God could not have created any other belief for me if Zayd is at home. Ibn Mattawayh explicitly accepts that God has a capacity to create false beliefs in us.<sup>117</sup> Mānkdim says that God provides most of our given knowledge spontaneously (*mubtada'an*), such as our knowledge of primary principles or knowledge about the identity of things across time.<sup>118</sup> There is absolutely nothing that would oblige God to provide us with true knowledge. When I see my friend Zayd after ten years of not seeing him, and Zayd's hair in the meantime turned grey, nothing would make God generate the knowledge in myself that I am seeing the same person.

Even when sense perception (*idrāk*) provides a disposition for given perceptible knowledge, God does not seem to be forced to create true beliefs.<sup>119</sup> For instance, God can create perceptible knowledge for someone who lacks

117 Ibn Mattawayh, *Taḍkira*, 597.1.

118 Mānkdim, *Šarḥ al-Uṣūl al-ḥamsa*, 50.14–51.10.

119 Al-Nisābūrī, *al-Masā'il fi l-ḥilāf*, 306.2–5. It seems that al-Nisābūrī accepts that God can avoid creating knowledge in us despite the presence of perception and the elimination of all kinds of perceptive hurdles.

perception (for instance, a vision of Zayd for a blind person).<sup>120</sup> So, why not a false item of perceptible knowledge for someone who has perception? Even when ‘Abd al-Ġabbār says that “it is not possible that [God] does not provide that knowledge of the perceived,” he immediately adds “while the items of [perceptible] knowledge continue [to count as knowledge].”<sup>121</sup> In other words, the only thing that God cannot do is to turn false belief into knowledge. But nothing prevents Him from creating a false belief as such.

Nevertheless, God’s involvement into the origination of given knowledge still seems to account for its external justification. Although God has a capacity to create false beliefs in us, He never executes that capacity. All beliefs that God provides for us are true beliefs *ceteris paribus*. For instance, al-Ġišūmī says that God is not the creator of our dreams because dreams stand for false beliefs.<sup>122</sup> Generally, if God created false beliefs in us, it would violate the core element of Mu‘tazilite philosophy, the theory of divine justice. How could God make it to our religious responsibility to have knowledge of religious matters, if He provided false given knowledge for us, while given knowledge is the basis for all our knowledge?<sup>123</sup> At this point however, we are moving from epistemology to the problem of theodicy, which is an issue that goes beyond the scope of this paper.

### Conclusion

It is commonly assumed that ancient and medieval epistemology is dominated by Aristotelian foundationalism. As Deborah Black has shown in her recent studies on al-Fārābī and Avicenna, this is at least partially true of the major figures of *falsafa*.<sup>124</sup> However, it would be incorrect to accept such a picture in the case of Mu‘tazilite *kalām*. The Bahšamite analysis of knowledge as true belief with certainty has very little (if anything) in common with Aristotelian foundationalism. The Bahšamites never attempt to define knowledge in terms of justification based on primary principles. They define knowledge as a mental state, namely the mental state that involves certainty.

120 Ibn Mattawayh, *Taḍkira*, 615; Mānkdim, *Šarḥ al-Uṣūl al-ḥamsa*, 50.11–12.

121 ‘Abd al-Ġabbār, *Muġnī*, 12:60.20–61.2; *Nukat*, 231.12–232.1.

122 Al-Ġišūmī, *‘Uyūn al-masā’il*, 388.3–5.

123 Cf. e.g. Ibn Mattawayh, *Taḍkira*, 608: *taklif* (religious obligation) is only possible if there is knowledge.

124 Black, “Knowledge and Certitude in al-Fārābī’s Epistemology”; ead., “Certitude, Justification, and the Principles of Knowledge in Avicenna’s Epistemology,” in *Interpreting Avicenna*, ed. by Peter Adamson (Cambridge: Cambridge University Press, 2013), 120–42.



Bahšamite epistemology involves two main perspectives. Let us call them 'naturalist' and 'individual' perspectives. From a naturalist perspective, both knowledge and certainty are facts. Both are mental states, properties belonging to human beings like being tall or short. The mental states of knowledge and certainty come about in a two-step process, in which knowledge is generated either by God or by a valid inquiry, which, in turn, generates certainty. The mental states of knowledge and certainty are factive. It means that when I know  $p$  and I am certain that  $p$ ,  $p$  is true. The Bahšamites secure the factive character of knowledge in two ways. First, they deny that we must always know whether we know (so, knowledge becomes a mind-independent fact). Second, the Bahšamites secure the connection between knowledge and reality through the involvement of God in the process of the origination of knowledge.

From an individual perspective, the Bahšamites hold to an internalist mentalist theory of justification. We can justify our knowledge, by examining whether we are in a mental state of certainty. Certainty is a criterion that is accessible to us. However, we cannot justify why we believe that we are certain through any further evidence. We can only remind ourselves (or the interlocutor) that, in some cases, we inevitably possess that kind of certainty. According to the Bahšamites, these cases will be extensionally identical to those when knowledge comes either directly from God or through a valid inquiry.

Understanding certainty as a mental state is precisely what makes a combination of internalism and externalism in the Bahšamite epistemology possible. As an internal mental state, certainty is accessible to us. Hence, we can use certainty to justify our beliefs. At the same time, certainty remains something external to our beliefs, a natural psychological state, which comes about through further external causes. In that respect, certainty that  $p$  involves that  $p$  is true, just like any other fact about the world would involve another fact about the world. Mental states are simultaneously internal and external to our beliefs, depending on how we look at them. Being one of the mental states, certainty creates a bridge between belief and reality.

I would like to close this article with a historical observation. Up to the middle of the eleventh century CE, we can find a set of typical epistemological topics discussed in both Mu'tazilite and Aš'arite summae of *kalām*: the definition of knowledge (including a discussion of the Bahšamite analysis of knowledge as true belief with certainty); the distinction between knowledge and other kinds of true belief, such as *taqlīd*; responses to global sceptics; distinction between given (*darūri*) and acquired (*muktasab*) knowledge and so on.<sup>125</sup> Some of those topics persist into the post-Avicennian period. For

125 See e.g. Ibn Mattawayh's *Taḍkīra* and Ibn al-Malāḥimī's *Mu'tamad* or al-Ġuwaynī's *Šāmil* and al-Anṣārī's *Ġunya* for the Aš'arite point of view.

instance, the distinction between given and acquired knowledge becomes part of Faḥr al-Dīn al-Rāzī’s critique of real definitions.<sup>126</sup> The debate regarding the definition of knowledge also continues in post-Avicennian philosophy. But it gradually changes its contents. A new topic becomes predominant: whether knowledge is a relation between the knower and the known or the inherence of a form of the known in the mind of the knower.<sup>127</sup> So, for instance, Sayf al-Dīn al-Āmidī (d. 1233) still discusses the Bahšamite definition of knowledge as true belief with certainty and the *falsafa* definition of knowledge as inherence of the form of the known in the knower.<sup>128</sup> However, al-‘Allāma al-Ḥillī (d. 1325), in his *kalām* summa *Nihāyat al-marām*, only discusses the issue whether knowledge should be understood as a relation or simply as inherence of the form.<sup>129</sup> It seems that the interest in the notion of certainty for the definition of knowledge slowly fades. Identifying the reasons for such a change of interests is a topic for further investigations.

### Bibliography

- ‘Abd al-Ġabbār, Abū l-Ḥasan b. Aḥmad al-Hamaḍānī. *Al-Muġnī fī abwāb al-tawḥīd wa-l-‘adl*. Vol. XII: *al-Nazar wa-l-ma‘rifa*. Ed. by Ibrāhīm Madkūr with the supervision of Ṭahā Ḥusayn. Cairo: Wizārat al-ṭaqāfa wa-l-iršād al-qawmī, al-Idāra al-‘amma li-l-ṭaqāfa, 1960–69.
- Abrahamov, Binyamin. “Necessary Knowledge in Islamic Theology.” *British Journal of Middle Eastern Studies* 20 (1993): 20–32.
- Abū l-Qāsim, al-Balḥī al-Ka‘abī. *‘Uyūn al-masā’il wa-l-ġawābāt*. Ed. by Hüseyin Hansu, Rāġiḥ Kurdī, and ‘Abd al-Ḥamīd Kurdī. Istanbul: Dar al-fataḥ and Kuramer, 2018.
- Adamson, Peter and Fedor Benevich. “The Thought Experimental Method: Avicenna’s Flying Man Argument.” *Journal of the American Philosophical Association* 4.2 (2018): 147–64.

126 See Benevich, “Meaning and Definition” and Nora Jacobsen Ben Hammed, “Meno’s Paradox and First Principles in Fakhr al-Dīn al-Rāzī,” *Oriens* 48 (2020): 320–44.

127 This topic is addressed in the forthcoming dissertation of Davlat Dadikhudah (LMU Munich and University of Jyväskylä); see further Fedor Benevich, “Perceiving Things in Themselves: Abū l-Barakāt al-Baġdādī’s Critique of Representationalism,” *Arabic Sciences and Philosophy* 30.2 (2020): 229–64 and Fedor Benevich, “God’s Knowledge of Particulars: Avicenna, Kalām, and The Post-Avicennian Synthesis,” *Recherches de Théologie et Philosophie Médiévales* 76.1 (2019): 1–47.

128 Sayf al-Dīn al-Āmidī, *Abkār al-afkār fī uṣūl al-dīn*, ed. by Aḥmad Muḥammad al-Mahdī, 5 vols. (Cairo: al-Maktaba dār al-kutub wa-l-waṭā‘iq al-qawmiyya, 2004), vol. 1, 73–79.

129 Al-‘Allāma al-Ḥillī, *Nihāyat al-marām fī l-kalām*, ed. by Fāḍil al-Irfān, 3 vols. (Cairo: Maktabat al-tawḥīd, 1998), vol. II, 5–7.

- Āmidī, Sayf al-Dīn al-. *Abkār al-afkār fī uṣūl al-dīn*. Ed. by Aḥmad Muḥammad al-Mahdī. 5 vols. Cairo: al-Maktaba dār al-kutub wa-l-waṭā'iq al-qawmiyya, 2004.
- [Anonymous]. *Nukat al-Kitāb al-Muḡnī li-'Abd al-Ġabbār b. Aḥmad al-Hamaḍānī*. Ed. by Omar Hamdan and Sabine Schmidtke. Berlin: Klaus Schwarz, 2012.
- Anṣārī, Salmān b. Nāṣir al-. *Al-Ġunya fī l-kalām*. Ed. by Muṣṭafā Ḥ. 'Abd al-Hādī. 2 vols. Cairo: Dār al-salām, 2010.
- Beebe, Helen. *Hume on Causation*. London and New-York: Routledge, 2006.
- Benevich, Fedor. "God's Knowledge of Particulars: Avicenna, Kalām, and The Post-Avicennian Synthesis." *Recherches de Théologie et Philosophie Médiévales* 76.1 (2019): 1–47.
- Benevich, Fedor. "Meaning and Definition: Skepticism and Semantics in Twelfth-Century Arabic Philosophy." *Theoria* 88.1 (2022): 72–108.
- Benevich, Fedor. "Perceiving Things in Themselves: Abū l-Barakāt al-Baḡdādī's Critique of Representationalism." *Arabic Sciences and Philosophy* 30.2 (2020): 229–64.
- Benevich, Fedor. "The Reality of the Non-Existent Object of Thought: The Possible, The Impossible, and Mental Existence in Islamic Philosophy (11–13th c.)." *Oxford Studies in Medieval Philosophy* 6 (2018): 31–61.
- Black, Deborah. "Certitude, Justification, and the Principles of Knowledge in Avicenna's Epistemology." In *Interpreting Avicenna*. Ed. by Peter Adamson. Cambridge: Cambridge University Press, 2013, 120–42.
- Black, Deborah. "Knowledge ('ilm) and Certitude (yaqīn) in al-Fārābī's Epistemology." *Arabic Sciences and Philosophy* 16 (2006): 11–45.
- El-Rouayheb, Khaled. *Islamic Intellectual History in the Seventeenth Century*. Cambridge: Cambridge University Press, 2015.
- Frank, Richard. "Al-Ghazālī on *Taqīd*. Scholars, theologians, and philosophers." *Zeitschrift für die Geschichte der arabisch-islamischen Wissenschaften* 7 (1991–92): 207–52.
- Frank, Richard. "Knowledge and *Taqīd*: The Foundations of Religious Belief in Classical Ash'arism." *Journal of the American Oriental Society* 109 (1989): 37–62.
- Ġāhiz, Abū 'Uṭmān al-. *Al-Maṣā'il wa-l-ḡawābāt fī l-ma'rifa*. Ed. by 'Abd al-Salām Muḥammad al-Hārūn in *Rasā'il al-Ġāhiz*. Vol. 4. Beirut: Dār al-ḡil, n.d.
- Gettier, Edmund. "Is Justified True Belief Knowledge?" *Analysis* 23.6 (1963): 121–3.
- Ġišūmī, Abū Sa'd al-. *Uyūn al-masā'il fī l-uṣūl*. Ed. by Ramazan Yıldırım. Cairo: Dār al-iḥsān, 2018.
- Greenough, Patrick and Duncan Pritchard (eds.). *Williamson on Knowledge*. Oxford: Oxford University Press, 2009.
- Griffel, Frank. "*Taqīd* of the Philosophers: Al-Ghazālī's Initial Accusations in his *Tahāfut*." In *Ideas, Images, and Methods of Portrayal: Insights Classical Arabic Literature and Islam*. Ed. by Sebastian Günther. Leiden and Boston: Brill, 2005, 273–96.

- Ġuwaynī, ‘Abd al-Malik al-. *Al-Šāmil fī uṣūl al-dīn*. Ed. by Richard Frank. Tehran: Dānišgāh-i Tihṙān, Dānišgāh-i Mak Ġil, 1981.
- Ḥillī, al-‘Allāma al-. *Nihāyat al-marām fī l-kalām*. Ed. by Fāḍil al-Irfān. 3 vols. Cairo: Maktabat al-tawḥīd, 1998.
- Hume, David. *An Enquiry Concerning Human Understanding*. Ed. by Tom L. Beauchamp. Oxford: Oxford University Press, 2000.
- Ibn al-Malāḥimī, Rukn al-Dīn. *Al-Fā’iq fī uṣūl al-dīn*. Ed. by Wilferd Madelung and Martin McDermott. Tehran-Berlin: Iranian Institute of Philosophy, Institute of Islamic Studies Free University of Berlin, 2007.
- Ibn al-Malāḥimī, Rukn al-Dīn. *Al-Mu‘tamad*, 2nd ed. Ed. by Wilferd Madelung and Martin McDermott. Tehran-Berlin: Iranian Institute of Philosophy, Institute of Islamic Studies, Free University of Berlin, 2012.
- Ibn Mattawayh, al-Ḥasan b. Aḥmad. *Al-Taḍkira fī aḥkām al-ġawāḥir wa-l-a’rāḍ*. Ed. by Daniel Gimaret. 2 vols. Cairo: Institut français d’archéologie orientale, 2009.
- Ibrahim, Mohd Radhi. “Abd al-Jabbār’s Definition of Knowledge.” *Al-Shajarah* 18.2 (2013): 229–55.
- Ibrahim, Mohd Radhi. “Immediate Knowledge According to al-Qāḍī ‘Abd al-Ġabbār.” *Arabic Sciences and Philosophy* 23.1 (2013): 101–15.
- Jacobsen Ben Hammed, Nora. “Meno’s Paradox and First Principles in Fakhr al-Dīn al-Rāzī.” *Oriens* 48 (2020): 320–44.
- Mānkdim, Šašdīw. *Šarḥ al-Uṣūl al-ḥamsa*. Ed. by ‘Abd al-Karīm ‘Uṭmān. Cairo: Maktabat wahba, 1965.
- McDowell, John. *Mind and World*. Cambridge, MA: Harvard University Press, 1994.
- Mihirig, Abdurrahman. “Typologies of Scepticism in the Philosophical Tradition of Kalām.” *Theoria* 88.1 (2022): 13–48.
- Nisābūrī, Abū Rāšīd al-. *Al-Masā’il fī l-ḥilāf bayna l-baṣriyyīn wa-l-baġdādiyyīn*. Ed. by Ma’n Ziyāda and Riḍwān Sayyid. Beirut: Ma’had al-inmā’ al-‘arabī, 1979.
- Pasnau, Robert. *After Certainty: A History of Epistemic Ideals and Illusions*. Oxford: Oxford University Press, 2017.
- Peters, Johannes. *God’s Created Speech*. Leiden: Brill, 1976.
- Rosenthal, Franz. *Knowledge Triumphant: The Concept of Knowledge in Medieval Islam*. Leiden and Boston: Brill, 2007.
- Rudolph, Ulrich. “Occasionalism.” In *Oxford Handbook of Islamic Theology*. Ed. by Sabine Schmidtke. Oxford: Oxford University Press, 2016, 347–63.
- Rudolph, Ulrich and Dominik Perler. *Occasionalismus: Theorien der Kausalität im arabisch-islamischen und im europäischen Denken*. Göttingen: Vandenhoeck& Ruprecht, 2000.
- Shihadeh, Ayman. “Theories of Ethical Value in Kalām: A New Interpretation.” In *Oxford Handbook of Islamic Theology*. Ed. by Sabine Schmidtke. Oxford: Oxford University Press, 2016, 384–407.

- Siddiqui, Sohaira Z. M. *Law and Politics under the Abbasids*. Cambridge: Cambridge University Press, 2019.
- Thiele, Jan. "Abū Hāshim al-Jubbā'ī's (d. 321/933) Theory of 'States' (*aḥwāl*) and its Adaptation by Ash'arite Theologians." In *Oxford Handbook of Islamic Theology*. Ed. by Sabine Schmidtke. Oxford: Oxford University Press, 2016, 364–83.
- van Ess, Josef. *Die Erkenntnislehre des 'Aḥudaddīn al-Īcī*. Wiesbaden: Franz Steiner, 1966.
- van Ess, Josef. *Theologie und Gesellschaft im 2. und 3. Jahrhundert Hidschra*. 6 vols. Berlin and New-York: Walter de Gruyter, 1991–95.
- Williamson, Timothy. *Knowledge and Its Limits*. Oxford: Oxford University Press, 2000.