

IBN SĪNĀ—AL-BĪRŪNĪ CORRESPONDENCE—VI

Translated by Rafik Berjak and Muzaffar Iqbal

This sixth installment of the correspondence between Ibn Sīnā and al-Bīrūnī contains a response to al-Bīrūnī by Abū Saʿīd al-Maʿšūmī, one of Ibn Sīnā's most accomplished students. A note at the beginning of this response suggests that al-Maʿšūmī had been asked by Ibn Sīnā to respond to al-Bīrūnī, and did as instructed by his teacher but his letter was lost and thus he later had to rewrite the answers from his notes. What has survived is a response to seven of the first set of ten questions posed by al-Bīrūnī (answers to questions 3, 5, and 6 have been lost), and answers to all the eight questions from the second set of questions sent to Ibn Sīnā by al-Bīrūnī. In his letter to Ibn Sīnā, al-Bīrūnī had objected to the position taken by the Peripatetics on some of the most fundamental aspects of natural philosophy, for he held an independent position on these matters—a position that ultimately challenged many views of Aristotelian physics. Al-Maʿšūmī's detailed explanation of these questions further elaborates views held by the Peripatetics.

Keywords: Ibn Sīnā–al-Bīrūnī correspondence; Peripatetic natural philosophy; Islamic scientific tradition; history of physics; criticism of Aristotelian physics; natural elements; schools of thought in Islamic scientific tradition.

The answers of Abī Saʿīd Aḥmad bin ʿAlī to the objections of Muḥammad bin Aḥmad al-Bīrūnī on the responses of Ḥujjat al-Ḥaqq Abī ʿAlī al-Ḥussain bin ʿAbd Allah bin Sīnā, to his questions.

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When I found out that what was written by Abī al-Qāsim had been lost, I decided to recopy the response of my master—may Allah lengthen his life—from the original that was still with me, in order to regain his pleasure and love. This [new version] is not as elaborate as the first, due to my many engagements and preoccupations and studies—and this is also my excuse for any shortcomings and mistakes that may be found in it—because I have written it in a hurry and did not have the chance to recheck it, so [I hope that] if [my master] finds any mistakes in it, he will kindly correct and make an extra effort to hide such faults from a person who is indebted to him for his many favors and the one who executed his affairs following his passions, though not partial to any position. And I seek refuge in Allah against decrease and defect after increase and perfection and now return to the questions to say:

On your objection to the first question:

You asked for a detailed explanation about the heavens having neither levity nor gravity. There is [already] enough clarity in the answer of the wise one and I also explained it at length along with all other questions that arise from this [view in the letter written] by Abī al-Qāsim, [and] therefore I am not prepared to repeat that here, but I will briefly point out the main aspects, so I say:

The possibility of presuming two motions for the heavens is only a conjuncture which does not necessitate a decree or change in nature, for it is possible to imagine the impossible, such as the union of two bodies in one place or [the presence of] one body in two different places; it is [likewise] possible to imagine fire being of the coldest substances, but this does not change its natural heat. Similarly, [it is possible to] imagine that water is one of the hottest things; such a case is that of [this formulation of] the motion of the heavens, but [all of this] is impossible to prove, as the wise one mentioned in his answers. [The fact remains, however, that] it is not possible [for either] the totality of the heavens or their parts [to have] either upward or downward movement, because if the heavens were to have this natural conflict, they would never be able to gain actuality, as a result of this idle power, as [such a] conflict does not benefit anything; in nature, there is nothing idle, and nor do we find anything idle in the divine worlds. But, this is not the subject for discussion, for this has been the opinion of the naturalists, [and] is a very popular idea in their tradition from the First Philosophy (*al-falsafa al-ʿulā*). Whoever is interested to gain knowledge about this, established on evidence, should consult *Metaphysics*. Based on this [view] they built

their case for the elements, that they are neither light nor heavy in their totality but are so in their parts, because they are stationed in their centers and are not moving away from them—although it is possible to imagine a movement away from the centers, because it is possible to imagine the earth in the center of ether either by nature or by force, but its existence is impossible in actuality—and that also applies to its parts because they move in actuality.

[Regarding] your saying that “the heavy bodies are in their position and not in their center because they are prevented [from being in there]”, I say that it must be known that the center is not only the center point of the world, but it is also a common noun used to describe the position of any totality in nature. So, all the fire and water is in its center, as is every [other] body, whereas if we were to consider the center to be what you have imagined there would not be any body in its center, because the center is an indivisible point and bodies are divisible and their place is with them. If the fire was not at its center, nor water, then earth too would not be in its center—which is complete corruption of thought, but does not change the law of nature. And if we imagine the earth to be raised—even though this remains impossible—then its place will either (i) remain vacant, that is, will be followed by vacuum, and vacuum is not possible, or (ii) be filled by another body, and if this were the case it would not be filled naturally but by force due to the non-existence of vacuum. And the consideration of the fire is likewise.

On the second question:

It would have been more appropriate if you had used gentler language for your purposes. Well, you asked the Wise One why he was so attached to the sayings of the ancients, and he answered you accordingly, and he says that he responded by way of oration after he had [already] presented proofs and evidence—as he is used to do in his books—and [therefore], he should not be blamed for it. And had you asked the wise one to support his views by arguments, he would have done that for you. It is not his fault if you failed to express yourself [properly]. I will mention to you a simple aspect of Aristotle’s arguments when he argued about this question, although we do not believe in his stance regarding the infinitely pre-existent, and we ask refuge in Allah from bad consequences.

In one of his formidable arguments he says that it is known that the limits and finitude (*nihāyah wa’l mutanāhī*) fall under correlation [*bāb al-*

mudāf], like the [relation between] a father and the son, and a brother and his brother, because we do not find any limit without a limiting [agent], just as we do not find a father without a son, and vice versa. And when one of the two correlations exists potentially (*bi'l-quwwah*), then the second one also [exists] by force. And when one of them exists in actuality (*bi'l-fi'l*), so does the other, without one being prior to the other. If this were correct, we would say that time has an end, and its end is a period [of time] (*Ān*) that is indivisible, like a point on a line.

Time is divisible, while limits and finitude fall under correlations, and we have said that when one of them exist potentially, the other does so as well and when we find one of them in actuality, we also find the other in actuality, so if we draw from these premises, a logical conclusion, we will say: If time has a beginning in existence, its beginning is a period (*Ān*) and this [beginning] will either come into existence simultaneously with time—and in this case time would have a correlation with the period—or the period would have come into existence before time, so that the period will exist [both] in actuality and potentially. However, we have established that the two [entities] in a correlation should coincide in existence—if one of them exists in potentiality, the other should also exist in potentiality, and if one of them exists in actuality, the other should also exist in actuality—therefore, what remains is that the existence of time should coincide with the existence of the period in order for both to exist in actuality, [for otherwise] the existence of the period before the time would require a time in the past before it and this goes on ad infinitum. [Therefore], it is not strange to speak of an infinite action in the past as if it existed in an infinite time, just as we talk about the time in future. But what the Philosopher denies from infinity is the existence of something that does not have an end in an infinite time, as we cannot imagine a day that is not preceded by a yesterday or a chicken that is not preceded by an egg, ad infinitum.

And this is what requires research based on logic and evidence, for the imagination based on senses and daily habits will not accept anything without limits, for it is [used to] the daily experience of things and time with limits. Exempt from this is to imagine the infinite eternal existence of the Creator—the Most High—in eternity, without an end, for this is not objectionable to the intellect. More wondrous is the [thought] that He existed in eternity, where there was neither time, nor light, nor darkness, nor creation. Then an idea comes to Him, so He creates things, and then gives in generosity what He kept from giving

in posterity, so He performs an action with limitless power and then He puts [this creation] in [the realm] of destruction and corruption, then He recreates it from the beginning! Is this not pointless? This is among the strong arguments that they present.

Another proof they provide is that if Allah—the Most High—created the universe [in time], then either He was knowledgeable about it before its existence or He was not. And the majority of them say that He was knowledgeable about it—and it is known that what is known with certainty is the Necessarily Existent (*wājib al-wujūd*) by necessity. What is contingent, [however], can either exist or not, and neither of these two [possibilities] is preferential. So, it is not known with certainty [whether the contingent exists or not], but it remains conjuncture. Yet, we know that the knowledge of Allah—the Most High—is certain, therefore, the existence of the universe is necessary (*wājib*) and not contingent (*mumkin*); and [as for] what is necessary, its doer (*fāʿil*) did not do it by choice but by nature. Therefore, the consequence of the saying of the opponents is that He is a doer by nature [and not by choice].

Another proof [for this same argument]: If the Creator refrained from creating the universe in eternity, it could have been either for the lack of primal substance or for the lack of a pattern and form, or due to confusion of the concept, or for the action being inaccessible, or for [the action being] a folly. Now, the One Who [eventually] created the primal substance was, no doubt, able to create it from eternity, and He did not cause it to have potentiality [subsequently] because He is Immutable, free of incompleteness or addition—just as is the consideration of the pattern and the form. As for the confusion [which surrounds this], it comes about from the lack of knowledge, and He is Greater and above that. As for the [suggestion of] action being impermissible, it is inapplicable here because impermissibility is that which does not emerge into actuality and its existence is essential. Further, the question of committing folly is impossible for *al-Ḥakīm*; He is, therefore, the Effector in eternity.

(*To be continued*)