

# Cosmology of Bāqillānī — Development of Atomistic Ontology in Sunnite Theology

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## 1, General View

The Sunnite atomistic ontology which proves God to be as a Creator is often regarded one of the remarkable features in the Islamic theology, however, it is still vague who was the founder of this ontology, and by whom it was introduced into the Islamic theology and how it was developed among the Sunnite thought<sup>(1)</sup>.

In my previous paper, I studied the structure of the cosmology in al-Ash'arī, who is called the founder of the Sunnite theology, and inspected his purpose of adapting atomism into his theology, concentrating on the common aspects between the al-Ash'arī's atomism and the Mu'tazilite's<sup>(2)</sup>. It is clear that the early arguments on this ontology are found in the Mu'tazilite theology, but this ontology has its origin in the cosmology of Neoplatonism, though it is not proved enough how it was transmitted from the Greek thought and whose theses were used and introduced to the Mu'tazilite, that was the predecessor of the partisans of the atomism in Islam<sup>(3)</sup>.

As al-Ash'arī inherited the cosmology of his former Mu'tazilite master, al-Jubbā'ī, his atomism is said to be one of the most evident examples of his application of the Mu'tazilite theory to the traditional position<sup>(4)</sup>. It is regarded that he searched and produced the occasionalistic cosmology, and applied it to the traditional Islamic sphere, linking it with God's Creationism.

After the death of al-Ash'arī, little is known about the progress of his school, the Ash'arite (*Ash'arīyah/Ashā'irah*), and its theories must have been attacked by both quarters of traditional and rational. It was some 150 years later that his school received official support from the great minister of the Seljuk dynasty and al-Ghazālī. From that time on until the present days the theories and the teachings of the Ash'arite have been regarded as identical with the orthodoxy, as the Sunnite.

Among the early successors of al-Ash'arī, al-Bāqillānī (?-1013)<sup>(5)</sup>, jurisprudent in Mālikī school, is said to be a major factor and scholar who systematized and popularized the theories and teachings of the Ash'arite. Like the founder of the school, his life history is also obscure and various anecdotes are related to him to praise his skill of disputation but most of them are in question.

Among the list of his works, six of fifty-two are said to be extant. *Kitāb al-Tamhīd*<sup>(6)</sup> is one of the complete editions on the theological polemics that we can access to study his cosmology. I will follow al-Bāqillānī's arguments on the atomistic ontology in *Kitāb al-Tamhīd* and compare them with *al-Shāmil fī uṣūl al-dīn*<sup>(7)</sup> of al-Juwaynī, Imām al-Ḥaramayn, (1028-1085)<sup>(8)</sup>

another Ash'arite theologian after al-Bāqillānī.

The abbreviations used in this paper are:

- Tm. *Kitāb al-Tamhīd*  
 Sh. *Al-Shāmil fī uṣūl al-dīn*  
 Q. *Al-Qur'ān*

## 2, The Things Existent

According to Abū al-Hudhayl, the Mu'tazilite theologian, who first formed the Islamic atomism under the influence of Neoplatonism and introduced it to the Kalām theology<sup>(9)</sup>, the whole universe is composed with the atom (*juz/jawhar*), and the accident (*'araḍ*, pl. *a'rāḍ*) which adheres to atom. In him the atom is defined as the minimal unit or element, or substratum for constitution of the thing existent, cannot be divided further, and is itself homogeneous without any characteristic feature. It is the accident that endows to the atom realization of the character. This theory on the roles of atom and accident is transmitted from Abū al-Hudhayl and al-Jubbā'ī to al-Ash'arī, then developed and elaborated by al-Bāqillānī and al-Juwaynī in the Sunnite Kalām.

Al-Bāqillānī says that the things existent are divided in two species: the eternal that will never perish, and the generated that need the creative acts outside it (Tm., p.41). The existence of the eternal is precedent than any others and any generated thing after it, while the generated is given existence out of non-existence (*'adam*)<sup>(10)</sup>. If the eternal precedes to any other limitlessly and infinitely, it should be God who created the world and generates the thing existent and gives them the sustenance. As the Qur'ān said, "He who originated the creation and repeated it, and He who gives you sustenance from the sky and the earth, is a creator other than God?" (Q. 27/64), the God's power of sustainment is associated with the power of repeating the creation.

Thus the world which was created by God is sustained with the God's power of repeating the creation. It is regarded that this concept of the repeating creation, or the constant creation (*al-khalq al-jadīd*)<sup>(11)</sup>, was introduced into Sunnite Kalām by al-Ash'arī and was developed and completed by al-Bāqillānī. I tried to examine this theory in his *al-Tamhīd*, I found, however, only one sentence there to explain the continuous creation

The accidents cannot continue, they appear in the atoms-*jawāhir* and atoms-*ajsām*, and in the next moment they are invalidated their existence. (Ibid., p.42)

Here, al-Bāqillānī uses both the words *jawhar* (pl. *jawāhir*) and *jism* (pl. *ajsām*) to signify "atom". To this definition follows the proof for the character of the accident as an accident, and the word of God, "You wish the transience (*'araḍ*) of the world, but God wishes the infinity of the here-after" (Q. 8/67). The word "*'araḍ*" is originally to mean the perishability or

unconsistence, and accidental incident. It seems to me that al-Bāqillānī argued the discontinuity of the accident quoting the verse of the Qur'ān, and asserted that the accident cannot last to the following moment in succession while inside the atom. For both of the atom and accident are created by God, it is God who creates and re-creates the accidents in every moment continuously. We will see more about this argument later.

Every world, higher or lower, is limited to two species: atoms (*jawāhir*) and accidents (*a'raḍ*), and it is generated (*muḥdath*) altogether. (Ibid., p.44)

The generated are divided into three species: composite body (*jism mu'allaf*), separate atom (*jawhar munfarid*), and accident (*'araḍ*) that exists in the atoms-*ajsām* and in the atoms-*jawāhir*. (Ibid., p.41)

In al-Bāqillānī, the thing, the body, is also a composite unit just as Mu'tazilite asserted it and al-Ash'arī followed the position. The atom can accept one accident among various sorts of the accident, and when the atom is as such, it is an atom in real sense (Ibid., p.41). He used the funny example to explain the nature of the atom as follows.

The proof of the definition of the atom is ; we know that the elephant is bigger than the mote (*dhurrah*), but if there were not the limit to the quantity of the elephant as well as the quantity of the mote, the former would not bigger in the quantity than the latter, then if it were like this, one of the two would not be bigger than the other, as the one is not bigger in quantity than the other. (Ibid., p.42)

If we intend to compare the size of the elephant and the mote, and there is no limit to heap the quantity, the pile of mote might be bigger than an elephant's. Here the "mote" might represent the atom, the minimal unit to constitute the body, and the elephant a composite body. We could read this story as a metaphor showing that the atom of an elephant is neither bigger than the atom of a mote, nor is different from the other. As we studied before, every atom is homogeneous and has no characteristic feature, and it is accident that gives to the atom realization of the character.

In his *Kitāb al-tamhīd*, al-Bāqillānī explains the nature of atom very shortly and simply as we saw above, and there we have no more detailed arguments concerning the nature and function of atom. His position on this theory is very similar to that of al-Ash'arī, his predecessor whose clear arguments about his own atomism in his works have not survived until the present days, though he is alleged as an originator of the Islamic atomism. We may take it granted that al-Bāqillānī's position on the definition of the atom is almost same as his master's as well as the definition of the accident that we study next.

### 3, The Accident

The accident is also described briefly using the metaphor of motion and standstill that supply the body with motion or standstill.

The definition of the accident is that the motion of the atom (*jism*) after the standstill, and after the motion, comes standstill, and it needs to do by itself or by a cause. If it moves by itself, it is impossible to rest. In the possibility of the standstill after the motion, there is the proof that the atom moves with the cause, and it is the [accident of] motion. (Ibid., p.42)

He continues the same argument on the proof for the definition of other pairs of accidents such as colors, tastes, smells, life and death, knowledge and ignorance, capacity and incompetence, and the others. It is inevitable for the atom to move either by itself or by a cause, and if the atom moves by itself, it comes to be limited only to the motion in the same species at the same time. (Ibid., p.42). In Kalām ontology, the thing existent has potentiality to realize a pair of opposite nature respectively as far as it is existent, and only one of the two natures can be realized at one moment.

Don't you see that the black, if it is black by itself, it is impossible for the non-black in the same species to exist? In the knowledge that there is non-moving thing in the same species of moving atoms-*jawāhir* and atoms-*ajsām*, we have the proof that the moving is not moving by itself, and it is moving by the [accident of] motion. (Ibid., p.42)

According to what proves on this matter, we know that the human being has the capacity for motion in one time, and has incapacity for it in other time. It is already fixed that his capacity needs the relation of object of the capacity. Thus in our position, and even in the apostates' who deny the accidents, the Eternal, the High, is able to move the atom once and to rest it in other time. It is inevitable to ask whether the object of the capacity for moving the atom generates the atom and produces it, or generated the factor (*ma'nā*) in the atom or annihilates atom, or annihilates the factor. (Ibid., p.42-43)

Man can move his body or rest it if there is relation of the object to motion or standstill. There emerges the question whether the atom, the substratum of the motion can generate this object or there be any other factor that produces the object. The capacity of motion is not possible if not related to the object just as the existence of the knowledge is not possible if not related to the object of the knowledge, and the reference is impossible if not related to the object (Ibid., p.43). It comes to another question in contrast whether the object of the capacity is impossible to procreate the atom or to generate it. If atom moves on the second instance from the moment of the existence, it is only with the disappearance of generation in the first moment and the appearance of renewal in the next moment. As it is such, al-Bāqillānī said, the generation of

atom is true and proved, and this affirmation will bring the next proof that the accident is also generated by God.

The accidents are generated, and the proof on the generation is invalidity of the motion when the rest comes. For if the motion is not invalidated upon the coming of standstill, the two come to exist in the atom together, then it is necessary for the atom to move and rest together. This concept is known its impossibility inevitably. (Ibid., p.44)

Just as we saw above that in the Kalām ontology, the thing existent has potentiality to realize a pair of opposite natures respectively as far as it is existent, but both of the two natures cannot be realized together at the same time. This theory of the nature of things is found generally among most of the theological and philosophical schools, either rationalists or traditionalists. They thought that it is ontologically impossible for the things existent to have the two opposite natures together at the same time.

Al-Bāqillānī uses this theory as a criterion to define the generation of the accidents, for the thing existent, if it can realize the two opposite natures in it together at the same time, it should be the eternal, not the temporal. There is no eternal thing other than God in this cosmos.

The proof of the generated nature (*ḥudūth*) of the atoms is that the atoms do not precede the generation (*ḥawādith*) and are not present before it. What does not precede the generated thing (*muḥdath*) is generated as it is. If it is inevitable for [the thing] to be present together with [the other thing] or after it, each of the two things also necessitate its generation. The proof that it is impossible for the atom to precede the generation is that we know necessarily that when the atom exists it is inevitable for the atom to be contacting with each other either collectively (*mujtami'an*) or separately (*mutabāynan*) clearly. (Ibid., p.44)

Only the God, the eternal who precedes the all generation should never be generated, however, what does not precede its generation must be generated. The atom has the time when it is not present, or non-existent. When it is generated, it has contact with two things before it and after it, either collectively so that the thing may appear in smooth continuity, or separately so that the thing may happen unexpectedly.

#### 4, The Continuous Creation of the World

Even though the things of the world appear one after another continuously smoothly, there is no true continuity in this created world. It is inevitable that this world is generated and re-generated ever since the primordial Creation. As we studied above, al-Bāqillānī insists the continuous re-creation of the world, and asserts that the generator or the shaper is necessary

for this generated and shaped world, and the man is not the actor even for his own action. It is proved that the man's capacity for the motion is not possible to be the capacity of his own, and we now know impossibility of man's being factor of his atoms (Ibid., p.44). In al-Bāqillānī, this factor (*ma'nā*) should be the accident, not the atom that is the substratum of the thing existent.

The object of the capacity (*maqḍūr*) is impossible to annihilate the factor from the atom, for this factor is inevitable to be either atom or accident. If the factor is an atom, people consented to the possibility of annihilation of the atom, and therefore, its generation denies the absence of God in our position and their position, too. This is what we intend. If the factor is an accident, people already consented to the existence of the accidents and their annihilation after the existence. This is what we desire the definition. For with the absence of the factor in the atom, nothing will be generated. (Ibid., p.43.)

Here, we can see the same position of Ash'arī's cosmology that this world is made up through the composition of the numerous atoms each of that contains accident in it so that it could realize its nature such as color, smell, weight, knowledge, occupying the space and the others. Though the atom is inevitable minimal part to make up the composite aggregated body<sup>(12)</sup> of a thing existent, it is the factor-accident that provides the characteristic nature to the thing and decides the realization to the thing into the world.

It is interesting for us to compare the roles of the atom and the accident between al-Bāqillānī and al-Juwaynī. We see different positions in the latter as follows.

Know that the atom has inevitable natures (*ṣifāt wājibah*) and possible natures (*ṣifāt jā'izah*). What is inevitable to it is occupation of the space (*taḥayyuz*) and acceptance of the accident (*qabūl al-'araḍ*). --- What is possible to the atom is the existence of the different kinds of accidents in it, and both the generation and existence [of the accidents] are attributed to itself, and the two are not the additional natures. (Sh. p.51)

In al-Juwaynī, the atom is not always homogeneous without any characteristic feature. It has rather the two natures of occupying the space and accepting the accidents as inevitable nature. It is natural for the atom to realize its existence, and it is inevitable for it to occupy the space and to accept the accidents, but we cannot find the clear statements on space-occupying as the specific nature of the atom in both al-Ash'arī and al-Bāqillānī. It is al-Juwaynī who illustrated these two aspects in atom as two essential natures to it. We could read from the quotation above that the atom generates the accident and the nature of generating accident and accepting it is not additional, but might be essential if not inevitable.

If the atom is not described with "life", it stand opposite of the life, and it is same as in color, existence, taste, and smell, and this is what the people agreed. If the life works in [atom], and opposes the death, the species of the accidents work with life, such as

knowledge and one of its opposition, will and one of its opposition, and perception and one of its opposition. (Ibid., p.51)

Further in him the accident is not the decisive factor to realize the existence of the thing, and he gave the atom so crucial role as to generate and make existent the accidents. Then the accident loses its strong power to endow the existence to the atom from the state of the non-existent. On the contrary to the general positions of the scholars before him<sup>(13)</sup>, it seems to be the atom that decides its nature when one nature comes close to the atom, its species of accident begins working to realize the nature. The superiority of the atom to the accident in him shows that it is the atom that commences the making-up and composition of the body in the world.

The atom can continue (*bāqin*) without renewal (*mutajaddid*). Al-Naẓẓām<sup>(14)</sup> insisted the renewal of the atoms in every moment just as the [renewal of] the accidents in our position. (Ibid., p.47)

In him, while the atom can exist and occupy the space, the accident is generated (*ḥādith*) and cannot occupy the space (Ibid., p.40). It is vague here whether both of the atom and accident are generated by God, or one of the two is generated by God and the another by other factor. Though he did not explain clearly whether the atom remains forever or for limited term, he simply asserted the duration of the atom and the renewal of the accident. If he asserted the endless duration of the atom, he would contradict the principle of the *tawḥīd*, oneness of the eternal, oneness of the God.

The above-mentioned quotation from *al-Shāmil fī uṣūl al-dīn* shows us al-Juwaynī's position of his ontology of the world and his re-creation of the things existent. In him the atom, the minimal unit for constitution of the thing and the substratum of the accident, can continue while the accident is generated and re-generated in every moment one after another. In al-Bāqillānī, too, the world which was created by God is always sustained with the God's power of repeating the creation. In him, on the contrary to al-Juwaynī, both atom and accident are depicted to be generated by God (Tm., p.41, 44), but only accident are claimed to be re-created in every moment. As the thing God created in this world should have time and limit, the atom in both al-Juwaynī and al-Bāqillānī should not be durable forever. It seems to me that the nature of the atom in both of the two scholars should not be illustrated as eternal or infinite, even though the definition of each "atom" is not clear enough to understand its description.

As we saw before, it is taken for granted that the concept of the continuous re-creation or constant creation (*al-khalq al-jadīd*) was introduced into Sunnite Kalām by al-Ash'arī and is developed and completed by al-Bāqillānī then elaborated by al-Juwaynī, even though we have only few materials to confirm their ontological arguments. I hope to continue the researches on the atomistic ontology in the Sunnite Kalām and try to clarify this theory in other materials so that we may examine the whole structure of the Islamic cosmology that has been aiming the

criterion for the occasionalism in order to prove the omnipotence of God and the Creation ex-nihilo just as what the Qur'ān, the words of God, tells to the humankind.

The notes

- (1) For the general view of the Islamic atomism, al-Ash'arī, *Maqālāt al-Islāmīyīn* (2<sup>nd</sup> edition, ed., Hellmut Ritter, Viesbaden, 1963); Alnoor Dhanani, *The Physical Theory of Kalām, Atoms, Space, and Void in Basrian Mu'tazilī Cosmology* (Leiden, 1994); Daniel Gimaret, *La doctrine d'al-Ash'arī* (Paris, 1990); Albert Nader, *Le système philosophique des Mu'tazila* (Beirouth, 1956);
- (2) See my article, "Cosmology of al-Ash'arī—Introduction of Atomistic Ontology into Sunnite Kalām" (*Studies in Philosophy*, No.28, University of Tsukuba, 2003), pp.17-28.
- (3) On the Mu'tazilite atomism, see Nader [1956]; Dhanani [1994]; Richard Frank, *The Metaphysics of Created Being According to Abū L-Hudhayl Al-Allāf* (Intanbul, 1966).
- (4) Cf., Shiojiri [2003], pp.18-19.
- (5) The date of his birth is unknown, born in Basra, and is said to visit many countries including the Byzantine. Cf., "AL-BĀKILLĀNĪ" *The Encyclopaedia of Islam* CD-ROM Edition; Gardet & Anawati, *Introduction à la théologie Musulmane* (Paris, 1981), pp.62-64.
- (6) al-Bāqillānī *Kitāb al-Tamhīd* (Beirut, 1987).
- (7) Ed., 'Abd Allāh Maḥmūd M. 'Umar, Beirut, 1999.
- (8) Celebrated under the title of Imām al-Ḥaramayn, once taught al-Ghazālī in the Niẓamiyah Institute. See "AL-DJUWAYNĪ" *The Encyclopaedia of Islam*.
- (9) On the influence of Neoplatonism in Islamic theology, see my article, 「プロティヌスとアブー・フザイルの—者論—新プラトン主義とイスラーム神学」 ("The One" in Plotinus and Abū al-Hudhayl—Neoplatonism and Islamic Theology—) 『哲学・思想論集』 27 (*Studies in Philosophy*, No.27, University of Tsukuba, 2002) and Note (1) (*Ibid.*, p.89)
- (10) The concept of "void" (*ʿadam*) or "non-existence" is derived from the Aristotelian term, and the Mu'tazilite held the void as a condition of the thing or body that has potentiality of existence before the realization of its presence in the world. See Shiojiri [2003], the Note (28).
- (11) Cf. Shiojiri [2003], pp.24-25.
- (12) According to the Mu'tazilite, the thing existent is a composite whole aggregated with the numerous atoms. See Frank [1966].
- (13) Shiojiri [2003], pp.21, 22.
- (14) Abū Isḥāq Ibrāhīm bn Sayyār al-Nazzām (?-835/45), Mu'tazilite theologian who made up unique ontology and influenced al-Ash'arī much. Gimaret [1990], p.49. Shiojiri [2003], Note (24).