

## **Alchemy in Jābir b. Hayyān's Works**

Pierre Lory

I started to study alchemy because my master Henry Corbin encouraged me to study this apparently strange discipline. Corbin was interested in hermeneutics, raising the question: how does man read the sacred books, the Bible, the Koran? He was also interested in the way of studying the "Book of universe". That is the precise purpose of Jābir's alchemy; and that is why he encouraged me to study the books of Jābir. So I will try to give you a glimpse of the thought of Jābir.

The question of Jābir is quite complicated. The first problem is that of the very existence of Jābir. There are many books attributed to Jābir, may be 3000 titles; but as the Czech scholar, Paul Kraus pointed out, it is difficult to assume Jābir as one man wrote all those treatises. Jābir said that he was the disciple of Imam Ja'far Ṣādīq and that all his books were dictated by Imam Ja'far. But the books say that Jābir lived up to the caliphate of al-Ma'mūn, and of course Imam Ja'far died a long time before al-Ma'mūn. Besides, the Shiite biographical literature describes all the people living around the Imams, the Companions of the Imams, and no Jābir ibn Hayyān appears in those biographies. Any way I will not give details about this. I think that we may assume that all those books were written in two centuries or a few more than two centuries. May be it began at the end of the second century of Islam, but it is sure that they were written at the end of the fourth century (see Kraus's introduction, «Le Corpus ...»; Sezgin, p. 133).

The books of Jābir deal with alchemy, philosophy, medicine, *Khawāṣṣ* (the hidden properties of objects), grammar, and linguistics; because all those disciplines were for him the aspects of the unified wisdom that he was searching. Now the question is: what is the alchemy precisely dealing with? Outwardly it is an endeavour to transform metals like lead into silver or gold; but alchemy seems also to have an inward and more spiritual dimension: the transformation of an ordinary man into a wise man, a spiritual man. This second dimension, it seems to me, was the main purpose of Jābirian alchemy

(see Nasr, Chap. 9).

Jābir had an over-all philosophy of world, universe, and cosmology. He said that at the beginning, the Universal Soul penetrated the substance (according to his very terms *nafs kulliyya* and *djawhar*) and then both mixed and entered into a heaven, a sphere where Heat, Dryness, Humidity and Cold were abiding. Then they all melted, and created the world. So everything that is happening in the world, all beings of the world are products of mixing of Substance and Soul and the four elemental Qualities. Now raises the question: how can we know the beings of the world? And the answer is: through knowing the intensity of the Soul in every being. Everything is warm, dry, wet, cold, and has a different intensity of Soul (Kraus, *Jābir ibn Hayyān ...*, pp. 135-185). Jābir called this intensity '*ishk* - the divine love – which suggests links with Sufism. The point is how to know exactly this intensity? This question is linked with the purpose of transformation, because according to Jābirian alchemy, everything can be transmuted into everything: for instance, one may have a mineral which is cold and dry, but one may transmute it by exposing it to more heat and dryness. So one can transform lead (cold + dry) into gold (hot + humid), and you can also transform any metal into any other metal and any plant into any plant, and so on.... Even one can create living beings, according to Jābir ibn Hayyān. We find here a very special way of thinking (Ibid, pp. 97-119).

The thought of Jābir is opposed to some philosopher's cosmologies, for instance of Ibn Sīnā. Ibn Sīnā considers that beings have specific essences, and that they can not be transmuted. In Jābirian thought there is only one big universe displaying infinite transformations; and if the alchemist understands the rules of the universe, its Soul and its Substance, he can shape everything, continuing what divine creation did. If you understand this, he says, you will become *Djābir* (in Arabic: "bonesetter") and *Djabbār* (almighty, a divine name –which suggests that "Jābir ibn Hayyān" may be a symbolic name). How can a human being understand all these about the whole universe? It seems very difficult, of course, for one single limited human being.

To solve this problem, Jābir explains that all what happens in the

world is a mathematical equivalence (*ta'līf 'adadī* in Arabic), a harmony like a musical harmony or like a mathematical order. And therefore he tried to explain the various sciences by the Science of Balances (*'ilm al-mawāzīn*). The *mawāzīn* (the balances) are the mathematical relations making up every being: mineral, plant, animal... So by the means of these balances, he asserts that he knows the intensities of the Qualities: that this mineral has this precise intensity of Coldness, Dryness, Heat, and Humidity. Galen had already exposed some classification of that kind, but Jābir made it much more complicated. For him there were seven degrees for each element and it could have four positions, so there were 112 ( $=7 \times 4 \times 4$ ) possibilities of intensity of Heat, Cold etc. But of course it would be a very long and complicated way if alchemists had to experience every specific intensity. It is impossible in one life to experience all these various possibilities. But Jābir asserts that he had a complete science of the Balances from which all other sciences of the Balances are deriving. It is the Balance of the Letters (*mīzān al-ḥurūf*). According to his odd idea, all the harmony of the universe and the science of the universe are concentrated in human language; because for him the human language does not stem from a mere agreement, a convention between people, but he calls it "a natural substance".

Every name applies to the substance, designates it. So if you say gold, *dhahab* in Arabic, this word *dhahab* expresses the very Balance and secret of the composition of this metal. There is not enough time to explain how these Balances work. They are based on the 28 letters in the Arabic alphabet. Jābir took every letter of the *abjad* and referred every letter to a Quality: cold, dryness etc... So every letter has one of the four elemental Qualities -Heat, Cold, Dryness and Humidity- and these letters express the secret of every mineral. But this happens in specific proportions. The main proportion is that of 1/3/5/8. The four elemental qualities are always distributed according to this proportion. If you have a proportion of one for one Quality, for instance, the other elemental Qualities are three times, five times, and eight times stronger. Of course you see the difficulty: there are several Arabic names which do not correspond to the proportion; if you take *dhahab*, you have only three letters, not four, and the gold,

for instance, is a hot/humid metal, but the letters correspond to Heat and Dryness. So Jābir said: of course we find these Qualities, but there are always outward qualities (*zāhir*) and four inward qualities (in the *bātin*). And he made very complicated computations to get in every metal four Qualities and to maintain this proportion of 1/3/5/8 (Ibid, pp. 187-303). It is very mysterious why the school of Jābir spent so many efforts to find this theory and to apply it, but this group was convinced to have found the secret of the universe. This theory can be applied in pharmacology and medicine as well. So it was a very ambitious endeavour. This was the odd ambition of Jābir. But there was also another dimension of this purpose and that is the quest of a real wisdom and for him, it was probably the most important dimension.

Jābir said in summary: the big world, the universe, is too complicated to be known in itself. Every man is a small world, a micro-cosmos, an *'ālam 'asghar* according to the Jābirian expression. But it is difficult for him to know himself because one can not show to himself his own qualities. Therefore the shortest way of knowledge for him is the middle world, the *'ālam 'awsat*, viz. alchemy. One may know alchemy objectively in a laboratory; it is a science one may observe repeatedly. And so if one understands what happens within the elements, within the substances, one understands the rules by which God created everything, and one gets a science which encompasses all sciences: one knows philosophy, medicine, mathematics, and lastly everything. Alchemy for Jābir is the total science. He says that it is not himself who invented all those principles and applications. Alchemy is for him a divine science that he received it from Imam Ja'far, and which stems from the beginning of the history of mankind. Prophets and Imams were those who revealed alchemy in the elder generations (Lory, *Alchimie ...*, p. 46).

Alchemy is a hidden knowledge, because it is too difficult and too dangerous for being spread. But it is the most divine knowledge on the earth. There were alchemical texts saying that alchemy is the sister of prophecy (*'ukht al-nubuwwa*). It is a phrase attributed to Imam 'Ali in the *Khutbat al-bayān*. And Jābir's theory says that if one understands the science of alchemy one will get the imamic sciences. Of course it

is a very bold affirmation. I think the explanation of such an affirmation is following.

We have several Jābirian works dealing with the succession of Imams and the crisis happening during the Imamship of Imam Ja'far when he designed Ismā'īl as his successor. Ismā'īl died and afterwards Mūsā Kazim was chosen. If I understand correctly the Jābirian text, his theory is following: he accepts that Imam Mūsā was the successor of the Imam Ja'far, but the treatises say nothing about what happened afterwards (Ibid, p. 84). Jābir only says that at the end of time will come the *Kā'im*, and he calls this special Imamic figure *al-Bayān*. *Al-Bayān* is an Imam who will come and explain everything, he will explain all the hidden affairs, and at his time history will be accomplished. But what does happen between the time of Mūsā Kāzim and the time of the coming of the *Bayān*? I think that this must be the very function of the Jābirian treatises: they have to give to the Shiites cognition of an Imamic science, a divine science, and these during the occultation of the Imam. Jābir suggests that after Mūsā there will be no Imam and during the awaiting the coming of the *Kā'im*, his own theories will take this function. He says that people who understand alchemical knowledge reach the Imamic science. He explains this in a treatise that is called the *Kitāb al-Mādjid*. The *Mādjid* is a man who reaches the Imamic knowledge by way of alchemy (Corbin, part III). So we see that the theory saying that Jābir and Jābirian School were Ismaili can not be true, because he took an undoubtedly original theory about the Imamic succession. His theory is an alchemical one. His idea is that the present man is only a beginning, an embryo, that he has not accomplished his own evolution. He has to evolve and he said that at the end of history a new kind of man will come which he calls *al-'insān al-'akbar*. Of course in late Sufism we find the idea of *'insān kāmil*, but it seems that in Jābirian treatises it has a much more concrete meaning: that man has to grow and become more perfect, knowing etc. When people will have grown, *al-Bayān* will come and then history will find its achievement (Lory; «Eschatologie ...», pp. 86-90). As you see the Jābirian theories are wherever original. Of course Jābir had some influence in many fields: in alchemy of course, and also mystics. Ibn

'Arabi mentions him in his work *Futūḥāt al-Makkiyya*, but he rejects his theory, relying according to him on false bases

Anyway his project of universal knowledge, based on the science of the balances, was too huge and precise. Nobody followed completely his too sophisticated theories, as far as I know. The Jābirian treatises are not very well known, and up to now only a minority of his texts has been edited and published; may be one tenth of his texts only. So a lot of work has been left. I think it is an interesting dimension of alchemical thought in Islam, especially when you remember that several of these treatises were translated into Latin and influenced European alchemical thought.

### **Bibliography:**

- Corbin, Henry, *L'Alchimie comme art hiératique*, Paris, 1986.
- Kraus, Paul, *Jābir ibn Hayyān - Contribution à l'histoire des idées scientifiques dans l'Islam - Jābir et la science grecque*, Le Caire, 1942 (rééd. aux Belles Lettres, 1986).
- Idem, «Le Corpus des écrits jābiriens», *Mémoires présentés à l'Institut d'Égypte*, 1943, Imprimerie de l'IFAO.
- Lory, Pierre, *Alchimie et mystique en terre d'Islam*, Lagrasse, 1989.
- Idem, «Eschatologie alchimique chez Jābir ibn Hayyān», dans *Mahdisme et millénarisme en Islam, Revue des mondes musulmans et de la Méditerranée* 91-94, Aix-en-Provence, Edisud, 2000.
- Nasr, Seyyed Hossein, *Science and Civilization in Islam*, Mass., 1968.
- Sezgin, Fuat, *Geschichte des arabischen Schrifttums*, IV, Leiden, 1971.