As a "science" or "art" which has been practiced and written about for more than two millennia by a plethora of individuals from the most varied religious, philosophical and other backgrounds with diverse aims, intentions and world views, it is hardly possible to define what is alchemy. Anyone who takes the trouble to read alchemical texts and treatises representative of Greco-Roman, Jewish, Christian, Islamic or other dimensions of alchemy will readily come to realize that alchemy has long been much more than a mere `prelude to chemistry' indulged in by credulous souls whose main aim was to get rich quick by the making of much gold.

In generalized and simplistic terms `exoteric alchemy' has to do with the attempt to prepare the `philosophers stone', the `elixir' or `tincture' which was (and is by some) believed to be endowed with the power to `perfect everything in its own nature'. It could, for example, transmute such "base" metals as lead, tin, copper, iron or mercury into
precious silver or gold. Closely related historically to medicine and pharmacology the `exoteric' alchemical task could also be viewed as the attempt to restore or `perfect' human health and prolong life. `Esoteric alchemy', often thought to be part and parcel of `exoteric alchemy', may include the mystic experience and contemplation of alchemical processes and secrets in terms of the receipt of true gnosis and the attainment of inner realization, spiritual progress and eternal life. Though much of the natural philosophy presupposed in alchemical texts has been superseded by "modern science" there is a great deal that is of interest in alchemical texts to scholars working in such fields as the "history of ideas" (magical, philosophical, occult), the "history of philosophy" the "history of science" and the "history of religions".

Only a small proportion of the many thousands of alchemical works written during the last two millennia have been the object of scholarly analysis. Though practical and esoteric alchemy are by no means extinct in either the Muslim world or our modern western "secular" society, scholarly interest in this admittedly difficult area has been minimal to the degree that even the numerous extant Arabic alchemical writings of [Pseudo-] Zosimus of Panopolis (an important
Alexandrian alchemist who lived around 300 CE) remain imperfectly edited and largely unstudied. So too the bulk of the several hundred alchemical and related writings attributed to Jābir ibn Ḥayyān (7th-8th cent CE? See App.1).

For academics interested in the scholarly study of alchemical texts from the history of religions perspective, it is small comfort indeed, if we are to believe the authors of the pre-glassnost Psychic Discoveries Behind the Iron Curtain (1970), that a good many Soviet scientists attribute "a close connection between traditional alchemy and avant-garde science" and that in Prague, at least, such scientists are eagerly studying long forgotten tomes that have all but inclined them to a modern neo-hermeticism (1970:306f).

In his article al-kimīya ("the Islamic alchemical tradition"; EI²:110-115) Ullmann laments the fact that though "very many manuscripts are preserved" alchemical studies have been much neglected; adding that "a vast and fertile field lies here open to research". More recent writers, including Raphael Patai in his The Jewish Alchemists, A History and Source Book (Princeton Univ. Press, 1994) and Syed Nomanul Haq in his important contribution to alchemical scholarship and Jabirean studies, Names, Natures and Things : The
In this paper I shall be drawing attention to another largely neglected and virgin field; namely, Shaykhī- Bābī and Bahā'ī alchemy and various Arabic and Persian writings considered sacred texts representative of its sometimes messianically charged alchemical gnosis. It will be evident that this constitutes an important neo-Shī`ī and messianic alchemical subfield, if one may so characterize this stream of religious thought. This to some degree post-Islamic alchemical tradition further enriches a neglected field of enquiry. Various previously unpublished and largely unstudied texts will be mentioned below and the need for further detailed research highlighted. In this paper, in other words, I shall attempt no more than to outline in the most cursory manner, something of the history of Greco-Islamic alchemy and then turn to a consideration of its place and significance within the history of the still evolving Bābī-Bahā'ī religious tradition.

FROM HELLENISTIC TO ISLAMIC ALCHEMY
Western alchemy came into being in Hellenistic Egypt during the first few centuries BCE. Bolos of Mende (fl. 200 BC?), perhaps the `[Pseudo-] Democritus' whose *Physica et Metaphysica* came to be viewed as the cornerstone of Greek alchemy, and Maria the Jewess (fl.1st-3rd cent. CE?), a reputed student of the Persian Ostanes (an associate of a possibly mythical Agathodaimon?) are traditionally and by some modern scholars believed to be historical figures and to be ranked among key alchemical initiates of antiquity. From the historical point of view they may be viewed as the "father" and "founding mother" of the western alchemical tradition.

Between the time of Maria the Jewess and the rise of Islam many other philosophers, sages and mystics wrote upon or were believed by later generations of Muslim thinkers, to have been alchemists. Apollonius of Tynana (1st cent. CE), the Cappadocian, Neopythagorean sage and alleged wonder-worker became a frequently quoted alchemical adept for many generations of Muslim alchemists. The undoubted alchemist Zosimos of Panopolis (fl. 300 CE ?) was the author of an alchemical encyclopedia and one to whom a score or more Arabic treatises are attributed. (1) Complete treatises extant in Greek mss were written by the alchemists Synesius
(fl.c.350 CE) and Olympiodorus (5th cent. CE) as are writings attributed to a plethora of other pre-Islamic historical or allegedly mythical alchemists including Moses, Comarius (1st cent. CE?), Cleopatra, Hermes, Pammenes [Phimenas of Sais], Chymes (an ancient authority of Zosimus), Pibechios (= Apollo Biches mentioned by Zosimus), Ptesis (Petasius; allegedly a contemporary of Hermes again mentioned by Zosimus), Julius Sextus Africanus (d. 232 C.E.), Heliodorus (4th cent. CE) and the British monk Pelagius (d.c. 410 C.E.). Certain of these figures along with many others are quoted or referred to in the writings of medieval Muslim alchemists.

Alchemical expertise was attributed to a multitude of Jewish, Christian, Islamic and other figures going back thousands of years; including, for example, a number of key biblical figures such as Moses and Solomon, various Persian heroes, Greek gods, sages and philosophers. The concrete historicity of a good many of these figures as alchemists and the authenticity of many alchemical writings attributed to them is often either without foundation or something very doubtful. Many alleged ancient alchemists are mythical figures on whom alchemical gnosis and writing were later associated. Many alchemical writings are obviously
pseudepigraphical. Worth noting, however, at this point is the fact that Islamic alchemical literatures preserve a fair amount of important and sometimes otherwise lost aspects of the literary heritage of antiquity. These alchemical writings are often informed by Platonic, Aristotelian, Stoic, Gnostic, Hermetic, Neo-Pythagorean, Neo-Platonic and other streams of ancient thought worthy of serious attention and analysis.

Within a century of the death of the Prophet Muhammad (570-632) his followers and heirs had established a vast empire stretching from the Pyrenees to the Indus. By the early 9th century enlightened Muslims manifested a great thirst for learning. They were in control of such major centres of learning as Alexandria and Harran and came to absorb and develop much of the learning of antiquity including, Greek philosophy, astronomy, medicine and, of course, alchemy. According to the Shīʿī book dealer Abu 'l-Faradh Muhammad b. Abī Ya'qūb Ishāq al-Warrāq al-Baghdadi, best known as Ibn al-Nadim (d. c. 385/995 or 388/998?), Khalid ibn Yazid (ibn Muʿāwiya c. 668- c.704 CE) was "the first person for whom books on medicine and the stars and also books on alchemy were translated" (II:851). Later legend has it Khalid ibn Yazid studied alchemy with a Byzantine monk named Maryanos
(Morienus) a disciple of Stephen of Alexandria (fl. 1st half of
the 7th cent. CE) who was a public lecturer at the court of
Heraclius (610-641 CE) and the author of De Chrysopoeia, a
lengthy Greek treatise on alchemy. Most modern scholars
doubt these assertions and regard the "Book of the Paradise
of Wisdom" (a large diwān of alchemical poems) and other
works attributed to Khalid as later forgeries. It was yet the
case, however, that the Paradise of Wisdom was an important
and influential pseudepigraphon. It contains the names of
more than 70 (mostly Greek) individuals who were (allegedly)
alchemists.

It was most probably during the late 8th and 9th
centuries CE that alchemy took root and was practised in the
Muslim world. This in large measure due to the transmission
of learning from such centers as Harran, Nisibin and Edessa in
western Mesopotamia as well as from Alexandria and various
Egyptian cities where alchemical learning and
experimentation had flourished. There were also the possibly
early influences of the Indian (Hindu) and Chinese (Taoist)
alchemy upon its nascent Muslim practise.

Jābir ibn Ḥayyān (fl. mid. 8th cent. CE?)
For some modern academic scholars Jābir ibn Ḥayyān was a fictitious disciple of the 6th Shīʿī Imam, Jaʿfar al-Ṣādiq (fl. mid 8th cent. CE). He is the reputed author of hundreds of alchemical treatises and a master of the occult sciences. For centuries he has also being considered identical with the Latin Gerber (? see Holmyard, bib.). Jābir ibn Ḥayyān has been the focus of much scholarly debate during the last 100 years, the details of which cannot be gone into here. It much suffice to note that much of the massive and highly-influential Jabirian corpus may well be pseudepigraphical, having originated in "extremist" Shīʿī circles during the late-9th and 10th centuries CE (Holmyard, 1922/6/8/57; Nomanul Haq, 1994/6).

The Jabirean corpus of writings have much in common with the Ismaʿīlī inspired Rasāʾil Ikhwān al-Safaʾ (Epistles of the Brethren of Purity), reflect Aristotelian physics, the Sabian scholarship of Harran, Neo-Pythagorean mysticism, Shīʿī gnosis and to quote Kraus [Plessner], "all the sciences of the ancients which passed to Islam" (EI² 1:358).

The Jābirian corpus is made up of individual books and groups of books. In the latter category are

- [1] The Seventy Books,
- [2] The One Hundred and Twelve Books,
- [3] The Five Hundred Books,
- [4] The Ten Books of Rectifications,
- [5] The Seventeen Books and

Only a few of these and other Jābirian writings have been translated into European languages (Appendix 1). The Latin alchemical writings of the 13th-14th centuries CE, that exist under the name of Gerber are not translations from Arabic originals though the Liber de Septuaginta is a translation of [Pseudo] Jabir's The Seventy Books (by Gerhard of Cremona?).

In the Arabic Jābirian writings the Aristotelian notion of the four elements (Fire, Air, Earth & Water) is accepted but related to a theory linking the four "natures" (hotness, dryness, coldness, moistness) with substance. This gave rise to compounds of the first degree = Hot, Cold, Moist & Dry. Thus, it is reckoned that:

- **Fire** = Hot + Dry + Substance
- **Air** = Hot + Moist + Substance
- **Water** = Cold + Moist + Substance
- **Earth** = Cold + Dry + Substance.

In this light "metals" have two "external" and two "internal" natures. e.g.

- **Lead** = Cold + Dry externally -- Hot and Moist internally.
- **Gold** = Hot and Moist externally-- Cold+ Dry internally.
The 7 metals recognized by (Pseudo-) Jabir are (1) gold, (2) silver, (3) lead, (4) tin, (5) copper, (6) iron and (7) "Chinese iron". These "metals" were formed in the earth as a result of astral influence upon ("ideal") "Sulphur" (= fundamentally Hot + Dry) and "Mercury" (= fundamentally Cold + Moist ). Different metals are basically "sulphur" and "mercury" in various proportions and with differing levels of "purity". Gold is the perfect metal having a complete natural equilibrium. It is by treating such non-perfect metals as silver, lead, tin and iron with elixirs that they can be perfected in nature and equilibrium, can be transmuted into gold.

Jabirian elixirs are not exclusively mineral but may include substances belonging to the vegetable and animal kingdoms i.e. the marrow, blood, hair, bones and urine of foxes, oxen, gazelles and donkeys (Holmyard, Alchemy, 77). This was apparently a departure from the alchemical operations of Alexandrian and Harranian alchemists. The complexities of the Jabirian theory of the mīzān al-ḥurūf (the "balance of the letters") cannot be gone into here. It was essentially a mathematical and cabbalistic attempt to calculate the equilibrium figures for gold and other metals and substances based on the number series 1:3:5:8 (= 17) and
Twenty-eight 28 is also the number of letters in the Arabic alphabet. The transmutation of metals involved the adjustment through elixirs of the ratio of their latent and manifest constitutions. Elixirs are numerous but the `Great Elixir' was thought to be capable of effecting all manner of transmutations. As will be noted, in certain scriptural Tablets Baha'-Allah sums up Jabirean alchemy and refers to the complexities of the science of the balances. His spiritual transmutative power is occasionally referred to by himself as a potent Elixir deriving from the Holy Spirit (al-ruh al-qusa) or 'Most Great Spirit' (al-ruh al-a`zam).

Though the Ikhwan al-Safâ' ("Brethren of Purity") did not have much to say about alchemy, the sulphur-mercury theory expressed in the Jabirian corpus is accepted in these treatises as is the possibility of the transmutation of metals (Nasr ICD:89f). In this respect "sulphur" is the active and masculine principle while "mercury" is the passive and feminine principle. A knowledge of Jabirian alchemy and gnosis along with aspects of the teachings expounded in the Rasa'il of the "Brethren of Purity" throws great light on certain of the more arcane aspects of the Bābī-Bahā'ī alchemical texts and symbolism.
The alchemical al-iksīr ("elixir")

A brief note about the term elixir might at this point be useful especially since both the Bāb and Bahā'ī-Allāh defined, commented upon and variously utilized this term. Historically and etymologically speaking this English word is a latinized form of the Arabic al-iksīr which is related to the Greek xerion ( ) indicative of restorative or curative medicinal powders as well as that which effects alchemical transmutation[s]. The term elixir was first used by alchemists to describe the "substance" sometimes known as the "philosopher's stone" (Coudert, Enc. Rel. 5:96) which is also, as will be seen, the subject of comment in Islamic, Shaykhi and Bābī- Bahā'ī literatures.

The many dimensions of post-Jabirean Islamic alchemy cannot be entered into here. It must suffice to note that alchemy "occupied a considerable place in the attentions of the Muslim savants" (Lewis SSI:500), though a fair number of scientists and intellectuals including al-Masudi (Muruj VIII. 175-7 ) and [the mature?] Avicenna disputed or rejected the possibility of the transmutation of metals by alchemical treatment. There follows a brief suvey of the names and
contributions of a few major Islamic alchemists who prepared the way for Bábí- Bahá'í expressions of alchemical gnosis.

**Abu Bakr Muhammad ibn Zakariyya, al-Razî (d. 925 CE)**
Abu Bakr al-Razî (d. 925 CE) was more interested in practical chemistry and medicine than in alchemy though he wrote some twenty books on the subject and defended alchemy against the attacks of such doubters as al-Kindî. He claimed to have prepared the "Philosophers Stone".

**Muhammad ibn Umayl (d. 960)**
Ibn Umayl was the author of complex allegorical and vastly erudite alchemical odes and treatises, including the Epistle of the Sun to the Crescent Moon [an ode ] and The Silvery Water and the Starry Earth [a commentary on the former work ]. Both these works were translated into Latin in the Middle Ages. Hermetic philosophy is important for him. His writings contain sayings of Hermes who was, for many Muslims, the first alchemist.

**`Abu al-Qasim al-`Iraqî (13th cent. CE.)**
`Iraqî wrote an important treatise entitled `Knowledge Acquired Concerning the Cultivation of Gold' which was translated by Holmyard in 1923. This work gives "a good picture of contemporary Islamic alchemical ideas" (Holmyard Alchemy:100). His Kitab al-aqalim al fā cllm al-Mausum bi'il-
Sanca ("Book of the seven Climes on the Science known as the Art [of Alchemy]") is a commentary "in the form of tales and parables struck out by informative pictures" on his earlier alchemical output. al-`Iraqi underlined the need to keep alchemical gnosis secret lest all become rich and the social order be disrupted. In his al-kanz al-afkhar (The Most Glorious Treasure) he sets forth an alchemical parable apparently modelled on sayings of Ibn al-`Arabī, (1165-1240), Jābir ibn Hayyān, Plato and Dhu'l Nūn al-Misri.

`Izz al-Din Aydamir b. `Alī al Aydamir al-Jildaki (d. c. 1342 CE?)

al-Jildaki was an outstanding and widely traveled Egyptian alchemist. His works are very numerous, largely unstudied and the fruit of sebenteen years journeying in search of alchemical mss. and adepts. In his The End of Search he quotes from no less than forty two works ascribed to Jabir as well as other writings of Ibn Umayl, Avicenna, [Ps-] al-Majriti, [Ps-] Khalid and al-Razi. His Book of the Proof contains a commentary on a Book of the Seven Idols ascribed to Apollonius of Tyana.

Such then, were a few leading Muslim alchemists. Bearing in mind that alchemy lived on after Jildaki and is still alive today
EARLY SHAYKHĪ ALCHEMY

A massive amount of Arabic early Shaykhi writing exists about alchemy. Both Shaykh Aḥmad al-Ahsā’ī (1753-1826), and Sayyid Kāẓim Rashtī (d.1259/1843) wrote a good deal in clarification of its exoteric and esoteric dimensions. The Bābī and Bahā'ī religions have their immediate and most central doctrinal roots in early al-Shaykhiyya ("Shaykhism"), a school of Shī ī philosophy and Islamic gnosis which derives from Shaykh Aḥmad al-Ahsā’ī (1753-1826), an extremely erudite and prolific writer who spent many years in Qajar Persia and claimed special direct inspiration from certain of the occulted (Twelver) Shī ī Imams. He claimed comprehensive knowledge and achieved a remarkable synthesis Shī ī traditional learning, philosophy and theology as well as all manner of `ırfānī gnostic-esoteric sciences. He came to be considered one adept in many religious and occult sciences including those named after the Arabic letters which derive from the acrostic of "It is all a mystery" (kulluhu sirr);

• [1] Kimiya = alchemy;
• [2] Limiya = talismanry or the composition of drugs;
• [3] Himiya = the science of spells;
• [4] Simiya = the science of "signs", possibly number-letter divination by gematria.
• [5] Rimiya = the science of conjuring ?.

These five occult sciences are mentioned in his Sharḥ al-ziyāra. Therein alchemy is defined as the science of the cultivation and bringing to exalted perfection of gold, silver and such "vital essences" or "spirit laden gems" as the precious stones diamond, ruby, garnet, emerald, turquoise and pearl. Elsewhere Shaykh Aḥmad al-Ahsa'i sets forth very complex alchemical theories informed by and correlated with his notion of the existence of a hierarchy of gross to spiritual human bodies and spirits and related to his notion of the `alam al-mithal, an interworld of similitudes and the sphere of hurqalyā.

(On Shaykhism, see further, http://www.hurgalya.pwp.blueyonder.co.uk/SHAYKHISM/SHAYKHISM.htm

Lambden, on the Ishrāqī-Shaykhī term (Ar.) هورقليا hūrqalyā and a survey of its Islamic and Shiʿī-Shaykhī uses

In his Dalīl al-mutaḥayyirīn ("The Proof regarding Matters Perplexing") (1st ed. [Tabriz?], 1276/1859-60) his major disciple and successor Sayyid Kāẓim Rashti responds to issues
surrounding the differences between the person and doctrinal positions of Shaykh Aḥmad al-Ahsāʿī and other Shīʿī Muslims. Completed near Kufa (Iraq) on the 11th Rabī al-Thānī [II] 1258/ May 22nd 1842 this work bears striking testimony to Shaykh Aḥmad's mastery of alchemical gnosis and related sciences:

"And regarding the knowledge of the elixir (al-iksir) and alchemy (al-kimiya') he [Shaykh Ahmad] made evident the bases of [this] knowledge, its various levels (marāṭib) and parts (arbā`a) as well as what is within every aspect (rub`) of the wonders of these [alchemical] sciences (fi kull rub` min `ajā`ib al-`ulūm)... He made mention of the inner dimension (bāṭin) of this [alchemical] science (`ilm), its mysteries (asrār) and its intricacies. This despite the fact that possessors of intellects and understanding were confounded over the comprehension of that eminent one (jināb) [Shaykh Ahmad]! for he did indeed divulge these things being taught by the Commander of the Faithful (amīr al-muminīn) [= Imam `Alī d. 40/661, an alchemical initiate) those deep inner things (bāṭin) through the melody of that orator (bi-laḥn al-khiṭāb) [= `Ali] as accords with his [Imam `Ali's] saying-- upon him be peace -- "We are the `ulamā' (learned) and our [Shi`i] party are the
supremely learned (muta`allimūn)" as well as his saying, "ADD HERE ..." (trans. from the 2nd (Arabic) ed. Kirmān: Maṭba`at al-Sa`adat, n. d. [197?], p. 26).

Aside from alchemical speculations contained in various of his major and minor works al-Ahsa`i wrote a treatise in explanation of such alchemical operations as the `differentiation of matter', the alchemical "marrying", the `differentiation of elements (arkan) and natures' and the final alchemical act of fusion or coagulation (Ibrahami, Fihrist No 93 p.352). His Risāla yi Rashtiyyya was written in reply to 33 questions posed by Mulla `Alī ibn Mirza Jan Rashtī (written 1226/ 18XX) and largely deals with Sufi and gnostic matters arising out of the esoteric writings of al-Buni. Included in this work are expositions of such alchemical operations as,

- Q.20 = "The manner of the alchemical whitening of the mawlud- i falsafi ("philosophical Birth")..
- Q.21-27= On diverse alchemical matters;
- Q.31 = On an alchemical allusion of Muhammad Qamari [?].

The gnostic dimension of Shaykh Aḥmad's alchemical thought is indicated in the following extract from his Hikma al-
arshiyya (The Wisdom of the Throne) a critical commentary on Mulla Sadra's magnum opus:

"Of the operation of the Elixir (`amal al-iksīr) the wise have made a mirror in which they contemplate all the things of this world, whether it be a concrete reality (\`ayn) or a mental reality (ma`na). In this mirror the resurrection of bodies is seen to be homologous with the resurrection of spirits."

(II.11.14 trans Corbin, SBCE:99).

The alchemical uniting of contrarieties illustrates the unitative nature of the material and spiritual poles of being. Through alchemical meditation, meditation operating alchemically, things gross become subtle and things subtle gross within the reality of the gnostic contemplator. Alchemical operations may be carried out by the true gnostic in the interworld. This is not to say though, that Shaykh Aḥmad outruled the possibility of concrete alchemy. For he also taught that the knowledgeable Sages dissolve and coagulate the "Stone" with a part of its "spirit" and repeat the process several times. The "Stone" becomes a living metal-mineral after being treated three times with the "White Elixir" and nine times with the "Red Elixir". It is then a living body which gives life to metals or transmutes them; it "resurrects"
metals from the "dead" (Ibid). The subtle senses given by Shaykh Aḥmad to the Qur'anic doctrine of bodily resurrection are informed and illustrated by means of alchemical wisdom and processes.

Sīyūd Kāẓm Rashtī (d. 1260/1844)

Shaykh Aḥmad's successor Sīyūd Kāẓim Rashtī (d. 1259/1843) was also a prolific writer and one especially learned in the traditional as well as the more arcane aspects of Shi‘ism. His unpublished works include a commentary on a Qaṣīda (Ode) rhyming in "B" (al-bā’) on the Particles of Gold and on an alchemical poem by a certain `Alī Mūsā Andalusī which begins:

"Take the Reddish Egg and remove its shell; for beneath the shell there is for this a core".

This work was written in 1239/1823-4 in a village near Hamadan (Iran).

1. Also unpublished are two Treatises of Sayyid Kāẓim al-Rashtī which contains replies to alchemical questions:
   - (1) a Risāla written for Mullā Kāzim Māzandarānī which includes an explanation of Shaykh Aḥmad’s alchemical teachings and
   - (2) a Risāla for Mullā Mihdi Rashtī in which comment is made on aspects of the alchemical "whitening" or purification process.

Hajjī Mīrzā Muhammad Karīm Khān Kirmānī (1810-1871)

The `third Shaykh' of the Kirmānī Shaykhīs, Karīm Khān Kirmānī (1810-1870) was a major and lifelong opponent and
rival of the Bāb and Bahā-Allāh. Disdainful of the claim to waḥy (divine inspiration) of the foregoing founders of the Bābī-Bahā’ī religions he was an extraordinarily knowledgeable and prolific polymath. Karim Khan wrote at least 270 Arabic and Persian books and epistles covering the whole range of Shī′ī learning, not neglecting to set forth his views on, for example, medicine, optics, theories of light, colour and music. He had a special interest in exoteric and esoteric alchemy and wrote in excess of 450 pages in this area. His alchemical works include:

**ADD LIST**

According to the Bahā’ī writer Hajji Mirza Haydar ʿAlī Isfahani (d. Haifa 1921) Karim Khan claimed to possess the true knowledge of the alchemical elixir (QI. III:1324 citing Bihjat al-sudur). An examination of his alchemical writings shows that he was very well read in Islamic alchemical literature referring to a large number of the writings of Jabir ibn Hayyan and also, for example, to the works of Aiydamir al-Jildaki. Details cannot be gone into here.

**ALCHEMICAL WRITINGS OF THE BĀB**

Siyyid Ali Muhammad Shirazi, entitled the Bāb (lit. "Gate"), was born in 1819 in Shiraz (Iran), towards the beginning of the 19th century. On May 22nd 1844/1260 he
claimed to be the successor to Siyyid Kāzim Rashti and one in communication with the occulted twelfth Imam whom he sometimes referred to as al-Dhikr (Ar. "Remembrance") or al-Dhikr al-akbar / al-a`zam ("The Most Great Remembrance"). Influenced by Shaykhī teachings, though a remarkably creative and original thinker, the Bāb communicated hundreds of revelations during the course of the six years of his turbulent life as a messianic claimant (1819-1850). He was executed for heresy on July 9th 1850 in Tabriz (N. Iran) having claimed a few years earlier to be the expected Qā'im (= "Ariser") or Mahdī (Guided One), the Messiah figure expected by Muslims and ultimately a manifestation of Divinity (mazhar-i ilahi). His extant Arabic and Persian writings are numerous perhaps exceeding 500,000 verses. They largely remain unpublished and unstudied and are again sometimes ungrammatical and abstruse.

Alchemical terminology crops up in many of the Bāb's writings including his early Qayyūm al-asmā' (loosely "Subsistence of the Divine Names", mid. 1844), Sahifa bayn al-ḥaramayn (Epistle between the Two Shrines, Dec. 1844) and other major and minor writings. In what appears to be an early "letter" on the "science of letters" and the alchemical
elixir the Bab stated that all things created by God contain a "letter of the Elixir (ḥarf al-iksir). The celestial reality of the Elixir is, however, if I understand this difficult text correctly, available to one who mystically "ascends up about the Heavenly Throne... purifies his heart through the celestial Sinaitic fire and partakes of the "fruit" of the Sinaitic Tree by placing the "retort" on the edge of the albemic and allowing the "Greatest Crimson Oil" to pour out within his being".

The later epistles and books contain sometimes detailed alchemical materials. This is the case with a section of his lengthy (May-April 1850) Kitab-i panj sha'n (Book of the Five Grades). Certain of the precepts of the Persian and Arabic Bayāns (Expositions) having to do with precious stones, metals and other materials, are best understood in the light of alchemical theories of `perfected substances' relative to an ideal eschatological vision. The edifices of the Bābī world and the riches of its occupants are signs of the appearance of the "Most-Great Elixir" in the person of the Bāb or tokens of the transmuting power of the Bābī messiah (Ar.) man yuzhiru-hu Allāh) ("Him Whom God will make manifest"). Some very abstruse alchemical and talismanic ideas are contained in a late epistle of the Bāb which may have been addressed to his
disciple Mirza Assad-Allah Khu`i entitled Dayyān ("The Judge").

**ALCHEMICAL WRITINGS AND EPISTLES of Mirza Husayn `Alī Nūrī, Bahā-Allāh ("The Splendour of God", 1817-1892).**

It was in the late 1960's that I first became aware of the existence of Bābī-Bahā'ī alchemical texts. In 1971, a family of American Bahā'īs whom I visited in Blantyre (Malawi) informed me that they knew of a learned and elderly Iranian Bahā'ī resident in New York who had the reputation of having discovered, on the basis of the study of certain alchemical writings of Bahā'-Allāh, the secret of the philosophers stone. Since that time few Bahā'īs have brought up the subject of their alchemical heritage. Indeed, most western and for that matter oriental Bahā'īs remain uninformed of the existence of a considerable number of Bābī-Bahā'ī scriptural writings relating to alchemical practice and gnosis. This to some degree contrasts with the situation amongst literate modern Bahā'ī believers resident in the middle east from the 1840's to say, the 1890's.

In some respects it is not surprising that the vast majority of Bahā'īs are unaware of the alchemical dimension of their sacred writ. Alchemy is certainly not central to their
modern concerns. The practice of exoteric alchemy came to be expressly forbidden by Bahā'-Allāh himself during the latter years of his ministry spent in Ottoman Palestine. Most Bābī and Bahā'ī alchemical texts are in a difficult Arabic and/or Persian, frequently syntactically complex, somewhat ungrammatical and informed by various abstruse speculations. They largely remain in mss. Without some knowledge of Jabirian and later alchemical theories and of Shaykhi and Bābī-Bahā'ī gnosis they are virtually incomprehensible. Indeed, what I am about to say about these texts will be grossly simplified and quite definitely provisional.

Mirza Husayn `Alī Bahā-Allāh was from 1844 the 1850s or early 1860s a leading Bābī who ultimately claimed to be the the Babi messiah figure man yuẓhiru-hu Allah ("Him Whom God will make manifest") and a Divine Theophany or Manifestation of Divinity. He was the author of perhaps 20,000 alwāh (scriptual Tablets) or Arabic and Persian sacred writings. His again, largely unstudied and unpublished waḥy texts (divine revelations) include a score or more works that are partly or wholly alchemical. This is not surprising in the light of the Bahā'ī Prophet's mystic leanings, and Shaykhi-Bābī `universe of discourse' and background.
Mirza `Abbas Nuri, known as Mirza Buzurg (d.1839), Bahā-Allāh's father and his younger brother Mirza Musa (d.), were, according to Fāḍil-i Mazandarani, experienced alchemists (Asrar, art. iksir). The Nuri family were in possession of gold and silver alchemical tools and instruments which Bahā-Allāh in the early 1840s (?) had deposited in a certain locality in Tehran.

During the period 1852-1863 while Bahā-Allāh was resident in Ottoman Iraq, he was widely regarded as a Sufi master and alchemical initiate. Non-Bābīs visited him in the hope of learning alchemical secrets, among them, an associate of the mujtahid Shaykh `Abd al-Husayn Tehrani (d.1869). During the course of his two year withdrawal to Iraqi Kurdistan (1854-6) Bahā-Allāh, to quote Shoghi Effendi's God Passes By was not only revered by some as one of the "Men of the Unseen" (rijal al-ghayb) but "an adept in alchemy and the science of divination" (p. XX).

Like his half-brother Mirza Yahya Nuri, Subh-i Azal (1830-1914) Bahā-Allāh wrote about or responded to questions regarding alchemical subjects. These writings show him to have been well-informed about Islamic alchemical theory and practise. In his Kitab-i Iqan (Book of Certitude, 1862) he
criticized Karim Khan Kirmānī (see above) for maintaining that alchemy and other obscurantist branches of learning were necessary for an understanding of the mi`rāj ("Night Ascent") of the Prophet Muhammad. Bahā-Allāh preferred inspired, mystical avenues to knowledge as opposed to acquired erudition (see Quinn, 2002).

At least two early and important alchemical epistles most likely dating from mid.-late Iraq (Baghdad) period (1852-1863) were written by Bahā-Allāh. They were (1) an epistle to a certain `Abbas and (2) a brief reply to a question about the nature of the "Philosophers' Stone". In these texts Bahā-Allāh evinces a very high regard for alchemy, claims to have special knowledge in this area, and describes the secrets of theoretical and practical alchemy. Alchemy need not be a barrier to the practice of Bābīsm though spiritual detachment is preferable to the striving for transient self-sufficiency. The person and quest for "Him Who God Will Make Manifest" is the ultimate and ideal Elixir. His messianic and divine presence should be sought and prepared for. There follows a synopsis of these two epistles:

(1) The Lawḥ-i Kimiyā (I) an alchemical Tablet addressed to a certain `Abbās (c. 1858-60?).
• Arabic text in INBMC 36:277-80. cf. [incomplete text] Ma’ida 4:XX.
• Lawh-i kīmīya (I): An Alchemical Tablet to `Abbās (c.1856-60?).

Addressed to a certain `Abbās in reply to questions about alchemical terminology and operations, this interesting epistle highlights Bahā-Allāh's early familiarity with Islamic alchemical texts and perhaps Shaykhī alchemical gnosis. 3

Whilst resident in Iraqi Kurdistan and Baghdad Bahā-Allāh gained the reputation of being one privy to the secret of the philosophers' stone or alchemical elixir. According to Fāḍil-i Mazandarani members of Bahā-Allāh's family, his father and brother Mirza Musa were experienced alchemists at one time possessed of gold and silver alchemical equipment. 4

Without going into details it should be noted that a plethora of Biblical figures (as well as Greek gods, philosophers and Persian sages, etc.,) were believed by Muslims to have been alchemical adepts. as also, for Shi`i Muslims, the Prophet Muhammad and the Imams 5 Certain alchemical texts which form part the (Arabic) Jabirian corpus (9th--l0th cent. CE or earlier?) contain quotations and/or paraphrases and interpretations of biblical texts and utterances ascribed to Hebrew prophets and other ancient
worthies. This is also the case with Bahā-Allāh's Lawḥ-i Kimiyā [I] and certain other of his alchemical epistles.

For some details see R. Patai, Biblical Figures as Alchemists (in HUCA. Vol LIV (19~3), pp. 195 229).

It is then, presupposed at various points in Bahā-Allāh's Lawḥ-i Kimiyā [I] that certain pre-Islamic Prophets (anbiya') and ancient sages (hukama') were privy to alchemical secrets. Though Bahā-Allāh discourses on the alchemical implications of the Jabirian `sulphur-mercury' theory (6) he at one point writes:

"Some among the prophets (anbiyā') had, from mercury (zaibaq) alone, completed the alchemical task" (L-Kimiya [1]: 357).

Though, in other words, metals are fundamentally made up of varying proportions of "sulphur" (basically the "Hot" and "Dry" aspect) and "mercury" (basically the "Cold" and "Moist" aspect) with differing degrees of "purity" great Prophets were able to produce the perfect metal, gold, from mercury alone.

This alchemical secret, it is said, has always been kept secret, it being forbidden to divulge it.

Christian influence on Islamic alchemy is reflected in what Bahā-Allāh has to say about the "Divine Metal", presumably, gold:
As for the Divine Mine [metal] (ma`din-i ilahi) which is of "the Father" (āb = "sulphur"?), "the Son" (ibn= "mercury") and the Holy Spirit (rūh al-quds = sal ammoniac ?) it has become known as it was by means of the enigmatic utterances and subtle expositions of past times... (7)

Having commented on a good many sometimes abstruse alchemical *decknamen* Bahā-Allāh points out that the Prophets (anbiya') and sages (ḥukamā') made mention of alchemical secrets by using enigmatic language. At the time of his delivering the *khuṭbat al-bayān* ("Sermon of the Exposition") Imam `Alī made some cryptic remarks about alchemy. Ancient philosophers (al-falāsifa al-qadamī') spoke in riddles lest their contemporaries treated the "art" in an immature manner. The following dialogue is registered by Bahā-Allāh as is alleged to have taken place between Abraham, "the Friend [of God]" (al-khaIīl) and his people:

... Abraham... said, `The alchemical knowledge (al-`ilm) is in the Egg (al-bayḍ), although it is not an Egg (bayḍa)'. And it was said to him, `What is the alchemical "work" (al-`amal)? And what is "the Egg" (al-bayḍa)? And what is "other than the Egg? And he [Abraham] said, `The Egg is the Cosmos (al-`ālam) and the four elements [or natures] in which is the knowledge of the "All" (`ilm al-kull). " (L-Kimiya [1]: 316-2)

Abraham spoke in riddles only going so far as to indicate that the alchemical "work" has to do with the fourfold nature of the cosmos and likening the philosophers' stone to an egg (?).
Not only Abraham but Jesus is also is represented as one who spoke cryptically about the alchemical mystery. In a rather obscure paragraph, probably inspired by an Islamic alchemical treatise Bahā'-Allāh writes;

And it is said that Jesus, the Spirit of God (rūḥ Allāh) and His Word (kalimat) said; "It [the mystery of the philosophers' stone?], verily, is Existence (or: `Being'; kā'in). ' And it was said to him, `From what is it'? And he said, `The Speech of God' (kalam Allāh) (p. 362)

As a result of Jesus' words his listeners were divided. Some held fast to tradition or followed the law (al-shar`) while others were receptive to (philosophical alchemical [?]) "wisdom" (ḥikmat). As a result Jesus said: "He that hath no sword, let him buy a sword.." (p. 362).

These words are of course a slightly variant quotation of Luke 22: 36b and Bahā'-Allāh seems to imply that Jesus' identifying "Existence" with the "Speech of God" (= himself ?) led to serious dissension among his hearers such that he recommended that they arm themselves. Jesus had only begun to divulge cosmological and alchemical secrets (?) when he cut short his discourse and, in the light of the controversial nature of his words, uttered (part of) the saying contained in Luke 22:36. The sitz im leben given by Bahā'-Allāh (or his Islamic source ?) to these words seems a far cry from their setting and significance in Luke's Gospel (see Luke 22:35-8, and its wider context).
Of minor interest is the fact that Bahā'-Allāh after his reference to Jesus refers to Apollonius of Tyana (Balinas; fl. 1st cent. CE) an alchemical initiate in Islamic gnosis. He refers to the legend connecting him with the Tabula Smaragdina ("Emerald Table") associated with Hermes thrice-born (Trismegistos). In his Lawḥ-i kîmîyā Bahā'-Allāh quotes an Arabic version of several lines of this "Emerald Table".

During the Istanbul-Edirne (Constantinople-Adrianople) period of his mission (1863-8) Bahā'-Allāh continued to respond to questions about alchemical matters. He wrote, for example, in about 1864-6 (?) a lengthy commentary upon lines of a discourse attributed to Maria the Jewess/Copt which opens with an explanation of the "white" and "red" "gum" and the significance of the words [Maria]:

"Take from the "branch" of the "Stone" and not from the "root" of the "Stone".

The important Lawḥ-i Sarrāj ("Tablet to the Muhammad `Alî Sarrāj (c. 1867- 8) also contains a few comments on matters alchemical:
ADD

During the period of his residence in western Galilee, (Ottoman Palestine, 1868-92) Bahā'-Allāh came to forbid his followers to practice (exoteric) alchemy. He spoke of its secrets as something which would be known in the future.
Though he continued to write letters in response questions on the theory and practice of exoteric alchemy he stressed the need for inner, mystic transformation. In several letters he went so far as to denigrate involvement with such abstruse and impractical matters as jafr and kimiya (alchemy) and to emphasize such pragmatic concerns as geometry and missionary work. The "alchemy" involved in the rescue of souls was to supersede exoteric alchemy and excessive concern with its theoretical basis. The alchemical treatises of past sages are, he sometimes taught, confused and unworthy of detailed study.

In his al-Kitab al-aqdas ("Most Holy Book" c.1873) Bahā'-Allāh at one point wrote:
"We have made the two affairs two signs of the maturity of the world. The first of them, which is the greatest basis, We sent down in the former Tablets and the second hath been sent down in this Wondrous Tablet."

In explaining this passage in later writings Bahā'-Allāh identified the first "sign" with the universal adoption of one language and script (as well as the Most Holy Book) or the realization of universal peace. The second "sign" is interpreted as the disclosure of the secret of the (exoteric) alchemical Art [now undisclosed and forbidden], or alchemical gnosis as a part of the Divine Wisdom.

Alternatively, the second "sign" of the world's maturity is
disappearance of the institution of human kingship or sovereignty (something not mentioned in the Aqdas).

In line with the gradual evolution of Bābī and Bahāʾī religions doctrine out of a Shaykhi-gnostic and Sufi Islamic religious milieu, Shoghi Effendi (1897-1957) suggested that the realization of the abovementioned alchemical secrets found some fulfillment in the development of nuclear physics.

The study of Bahāʾ-Allāh's gradually evolving attitude towards alchemy provides a good illustration of the emergence of the Bahāʾī religion from its doctrinally Sufi-gnostic phase (1850's & early 1860's) into a more practical and rationalistic religious movement. The previously noted contemporary Bahāʾī ignorance of their Bābī-Bahāʾī alchemical scriptural texts, bears eloquent testimony to the extent of this transition. Socio-economic and related concerns, loom large today in the contemporary Bahāʾī world. Distinctly religious and mystical teachings, though not insignificant within Bahāʾī scripture, are not now much focused upon in contemporary occidental Bahāʾī communities.

See further:

- *Lawḥ-i kīmiya (I): An Alchemical Tablet to `Abbās (c.1856-60?).*
• Lawḥ-i kīmīya (II) | An Alchemical Tablet expository of a Saying of Mary the Copt or Jewess (1867).

• Lawḥ-i kīmīya (III) | An Alchemical Tablet about the Ḥajar ("Philosopher's Stone") with an introduction and a short work of the Bāb on the same subject.

• Tafsir ayat al-Nūr or Tafsīr al-ḥurūfāt al-muqattā`ah (Commentary on the Isolated Letters).

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