

# Science and Religion in Chinese Culture

*Anjam Khursheed*

## **Abstract**

According to the Bahá'í Faith, religion, in one form or other is believed to lie at the root of all civilisations. This paper sets out to examine this belief with respect to the great developments of philosophy and science in the Chinese civilisation during the Tang (618-907 AD) and Sung (960-1279 AD) dynasties.

Science in China is usually thought to have developed in isolation, with relatively little influence from other cultures, while philosophy in China is often described as "humanist", that is, one which is not reliant upon religion. The theme of this paper is that Chinese cultural achievements during the Tang and Sung dynasties not only emerged from considerable contact with other cultures, but were inspired by religion. The impact of Buddhism on Chinese culture is highlighted. This paper draws parallels between Buddhism being the inspiration behind the Chinese Sung Renaissance, and Islam lying at the root of the European Renaissance.

Another issue addressed in this paper is "Needham's puzzle", that is, the question of why modern science did not develop in China. Some of the source texts of the three main spiritual traditions in China, Confucianism, Taoism and Buddhism are examined in the light of whether they encourage or discourage scientific investigation. Also, elements of Neo-Confucianism are critically reviewed, since it has been the dominant school of philosophy in China for the last millennium. The general conclusions are that: when China was characterised by an ethnocentric world-view, illustrated for instance by Neo-Confucianist suppression of Buddhism, Chinese science did not make much progress. On the other hand, creative and innovative periods in Chinese history were characterised by an openness to foreign people, not only in terms of

scientific exchange, but also with respect to embracing their philosophy and religion.

## 1. Chinese Scientific Achievement

It is now well known, that around a millennium ago, the Chinese culture was one of the most scientifically advanced cultures in the world. Chinese people living at that time, were in many ways centuries more advanced than their European contemporaries. Until relatively recently, all this was not widely appreciated. Only after the second world war, largely through the seminal work of the English scientist/historian Joseph Needham, were the great achievements of Chinese science better disseminated to the Western world.<sup>1</sup>

Three Chinese inventions in particular, printing, gunpowder and the magnetic compass, are conspicuous of the great scientific legacy that China bequeathed to Europe. These inventions transformed medieval Europe and prepared it for the modern era. By the 17<sup>th</sup> century, many European scientists and philosophers were acknowledging their debt to these inventions, although curiously, they did not know where these inventions originated. The well-known English 17<sup>th</sup> century spokesman of modern science, Sir Francis Bacon, refers to the impact of these inventions in the following way:

“It is well to observe [said Lord Verulam] the force and virtue and consequences of discoveries. These are to be seen nowhere more conspicuously than in those three which were unknown to the ancients, and which the origin, though recent, is obscure and inglorious; namely, printing, gunpowder, and the magnet. For these three have changed the whole face and state of things throughout the world, the first in literature, the second in warfare, the third in navigation; whence have followed innumerable changes; in so much that no empire, no sect, no star, seems

---

<sup>1</sup> Joseph Needham's massive achievement is embodied in the continuing *Science and Civilisation in China* series, the successive parts of which have been published by Cambridge University Press since 1954. The home of the project is now the Needham Research Institute in Cambridge, which also houses a unique and growing library (the East Asian History of Science Library) used by scholars from East and West alike.

to have exerted greater power and influence in human affairs than these mechanical discoveries..."<sup>2</sup>

Bacon's clear testimony that printing, gunpowder and the magnetic compass were among the most powerful scientific discoveries of his day is important, as is his ignorance concerning their origins. It is difficult to exaggerate the great social impact these inventions had on European life in the late medieval period. The Reformation, Renaissance and the rise of capitalism all made use of printing, and the democratic form of education that it made possible. Gunpowder weapons brought about a more democratic form of warfare, and led to the end of Western military aristocratic feudalism. The castle was no longer the most secure fighting post. Both at sea and land, gunpowder made war more mobile. The magnetic compass opened up a new era of navigational science for Europe in the 15<sup>th</sup> century and took Europeans around the world, eventually to discover America. The great social transforming effect of such expeditions gave rise to Western colonies and brought the world much closer than it had ever been before. Also, no less important, is the role magnetic science played in the development of modern science. The study of magnetism provided parallels by which the gravitational force was understood, and this body of science finally evolved into field theory. Field theory is an important branch of physics by which we understand electromagnetic and gravitational phenomena today.

It is extraordinary, that given the far-reaching effects of printing, gunpowder and the magnetic compass on European society that their origins were to remain "obscure". What is even more surprising is that for most Europeans, the origins of these inventions remained a mystery right up to the 20<sup>th</sup> century. Indeed, Needham cites two occurrences of it in books written by well-known European scholars, one which was published in 1920, and the other published in 1962. Needham refers to it as an attitude of 'invincible ignorance'.<sup>3</sup>

The Chinese wrote of magnetic effects as early as 83 AD, in relation to divination devices called *Shih*. The earliest description of a magnetic compass dates from the 9<sup>th</sup> century AD. A small wooden piece of

---

<sup>2</sup> J. Needham, *The Grand Titration*, p. 62.

<sup>3</sup> *ibid.*, p. 63.

loadstone is embedded in the body of a wooden fish that is floated in water. The fish has a little needle projecting from it that points south. An interesting feature about this arrangement was that the compass-fish was magnetised by being heated to red heat while held in the north-south position in the earth's magnetic field. This shows that the Chinese knew about remnant magnetism. There is also evidence that they knew of magnetic declination (the fact that compasses do not point exactly North-South and that the difference varies with time). The Chinese used the magnetic compass in navigation around the 10<sup>th</sup> century AD. They achieved all these things long before Europeans even knew of magnetic polarity. The earliest mention of magnetic polarity in Europe dates from 1180 AD. This puts China ahead of Europe by at least two to three centuries. However, Arabic commentators certainly knew of the Chinese fish-compass, and often referred to it. It is thus quite likely that information about the compass and magnetic effects came to Europe via the Islamic civilisation.

Gunpowder seems to have developed out of Taoist alchemist experiments aimed at developing an elixir for longevity. The first mention of an explosive chemical mix resembling gunpowder occurs in the 9<sup>th</sup> century AD. In 919 AD, the 'fire drug', as it was known, was used as an ignition for a flame-thrower. By 1000 AD, it was packed into bomb and grenade form. The first composition formulae appeared in 1044 AD, some three centuries earlier than references to gunpowder composition in Europe. These first gunpowder devices were more like rockets, and did not consist of the much later destructive explosive mix. In fact, rocket devices in China date from around the 11<sup>th</sup> century. Gunpowder weaponry in Europe started to develop in the early 14<sup>th</sup> century.

Block printing in China developed in the 9<sup>th</sup> century AD. The earliest printed book is a Buddhist text (The Diamond Sutra), which dates from 868 AD. In 932 AD, the complete printed edition of the Classical Books of Confucius was commissioned. Moveable type was developed in the 11<sup>th</sup> century, even though a separate piece of type was needed for each one of the thousands of Chinese characters. Moveable type in Europe was introduced into Europe some 400 years later, when Gutenberg printed his Latin Bible in 1456 AD.

There was much more to the Chinese technological heritage than the development of gunpowder, the magnetic compass and printing. Other contributions of China, according to Needham, include, the efficient equine harness, the technology of iron and steel, the invention of the mechanical clock, the development of basic engineering devices such as the driving-belt, the chain-drive, the standard method of converting rotary to rectilinear motion, segmental arch bridges, nautical techniques such as the stern-post rudder, the seismograph, and deep drilling, to mention only a few. The list is considerable.

Although the Chinese contribution in technology is impressive, the idea that all these inventions came only from China is misleading. There are several instances of Needham's Chinese inventions being shared by other cultures. Take for instance the invention of the mechanical clock, whose development Needham claims to be mainly Chinese.<sup>4</sup>

A clock driven by a waterwheel is described by Su Sung in Khai-fêng, the capital of the Northern Sung Dynasty in 1092 AD. This clock used a linkwork escapement mechanism that made it accurate. Clocks in Europe did not arrive at the same accuracy of Su Sung's clock until the 17<sup>th</sup> century. The first origins of clock making in China started around 725 AD, when a Tantric Buddhist, I-Hsing and an engineer Liang Ling-Tsan built a water wheel clock for an imperial court of higher learning.

The development of the clock had of course, a profound influence on the craft tradition that accompanied modern science. Needham speculates that the Chinese water-wheel linkwork clock was known in 13<sup>th</sup> century Europe, or that there was at least the knowledge that mechanical time-keeping had been solved. But knowledge of clocks, as with many other scientific developments, reached Europe more directly through the Islamic civilisation. In fact, water-wheel driven clocks were designed and constructed in the Islamic world precisely around the same time they appeared in China, and there is disagreement among historians whether medieval Muslims knew of Chinese clocks or vice versa. The historian, Arnold Pacey cites the Muslim contribution in the following way:

---

<sup>4</sup> J. Needham, *Clerks and Craftsmen in China and the West*, pp. 131-2.

"Among Islamic books studied or translated at Toledo, there were several which discussed mechanical devices including astronomical and several types of water clock. One author who wrote on this subject was al-Muradi, and he illustrated elaborate gear trains, some with epicyclic and segmental gears. It is particularly interesting to note that he was working at almost exactly the time Su Sung was building his great clock in China. Indeed, one of al-Muradi's designs was for a clock driven by a water-wheel like Su Sung's, but no connection between the two seems likely. A more relevant connection is with two water-clocks of rather simpler design which were operating at Toledo in the 1080s."<sup>5</sup>

The relationship between clocks in the Islamic and Chinese civilisations is not well documented. It may be that Muslims learned of Chinese clocks, and made developments of their own. Or it could be that there was much more exchange of technology than we suppose; and that water-wheel clocks was a shared invention. There are similar examples in astronomy. Water-wheel clocks in China were used to drive astronomical devices called armillary spheres, which mapped the coordinates of stars on the celestial sphere. Needham cites the Chinese astronomer, Kuo Shou-Ching for the development of a bronze armillary sphere in 1275 AD at Peking, which he takes to be the forerunner of the equatorial mounting of the modern telescope. Modern astronomy uses the Chinese system of equatorial coordinates to measure a star's position on the celestial sphere, rather than the ecliptic coordinates of the Greeks or the altazimuth measurements of the Arabs. But Needham himself explains that Kuo Shou-Ching arrived at his invention by modifying the 'torqutum', a kind of computing machine for performing transformations between coordinate systems, which was first designed by the Spanish Muslim Jabir ibn Aflah, and that it was introduced into China by the scientific mission of Jamal al-Din in 1267 AD.<sup>6</sup> This is an instance where a Chinese invention was inspired by Islamic science. Moreover, the explicit mention of there being an Islamic "scientific mission" in China does seem to suggest that Muslims at least, were looking for scientific collaboration.<sup>7</sup>

---

<sup>5</sup> A. Pacey, *Technology in World Civilization*, p. 36.

<sup>6</sup> J. Needham, *The Grand Titration*, p. 79.

<sup>7</sup> This kind of collaboration was no doubt inspired by the Prophet's injunction to, "Seek after knowledge, even unto China", quoted by 'Abdu'l-Bahá in *The Secret of Divine Civilization*, p. 26.

Needham records an instance of the Chinese setting out to learn from the Arabs. The famous Muslim physician Al-Razi records the visit of a Chinese scholar to his home in Baghdad in the 10<sup>th</sup> century. Al-Razi wrote of how his Chinese guest stayed there learning Arabic in 6 months, and then translated the works of Galen into Chinese, after which he left to return to China. Chinese and Islamic scientists collaborated under Mongol rule. The Mongols instigated an astronomical observatory in the 13<sup>th</sup> century at Maraghaḥ (south of Tabriz in Iran) under the care of the famous Nasir al-Din al-Tusi. The Mongols arranged for a collaboration of Chinese astronomers (Fu Meng-Chi) with Muslim astronomers that came from Spain (al-Maghribi, al-Andalusi). Later, a similar astronomical observatory was set up in Samarkand in Central Asia.<sup>8</sup> The Islamic/Chinese contact, although officially sanctioned and encouraged by the Mongols in the 13-14<sup>th</sup> centuries, had certainly taken place earlier, in the Sung and Tang dynasties. Islam's overland entry in China is likely to have occurred in the mid-seventh century.<sup>9</sup> During the Tang dynasty, Arab traders were frequently in Canton. Mosques started to appear in China around the turn of the first millennium. All this suggests that there was ample opportunity for scientific interchange.

Chinese science also has points of contact with India. There are Chinese references in 636 AD to many Brahmin books on astronomy, medicine, and mathematics that are now lost. Around the same period, there are Chinese references to Indian knowledge of mineral acids.<sup>10</sup> There are records of Buddhist activity in building and repair of bridges along routes connecting China to India, and large bronze statues of the Buddha have been found as early as 734 AD, which must have involved the use of metal furnaces capable of melting about 1 ton of metal.<sup>11</sup> Already mentioned, is the oldest printed book, which is a copy of the Diamond Sutra, the most sacred of all Chinese Buddhist sutras. By the 12<sup>th</sup> century AD, Buddhist mathematical textbooks in China were very common. A 12<sup>th</sup> century Confucian scholar cited by Needham states, "Nowadays even children learn mathematics from Buddhist textbooks which deal with the counting of infinite numbers of sand-grains..."<sup>12</sup>

---

<sup>8</sup> J. Needham, *Clerks and Craftsmen*, p. 16.

<sup>9</sup> J. Ching, *Chinese Religions*, p. 179.

<sup>10</sup> J. Needham, *Clerks and Craftsmen*, p. 19.

<sup>11</sup> A. Pacey, *Technology in World Civilization*, pp. 16-17.

<sup>12</sup> C. A. Ronan, *The Shorter Science and Civilisation in China*, Vol. 1, pp. 38-39.

Needham acknowledges that the interchange of scientific information between China and other Asian civilisations such as the Indian and Islamic ones requires further research.<sup>13</sup> But one important point emerges from the scanty information that already exists. It is not possible to study Chinese science in isolation, without reference to other Asian cultures. The period 600 – 1200 AD, during the so-called “dark age” of Europe, three Asian civilisations reached their height: Chinese, Indian and Islamic, and they had considerable contact with one another. It was also a period of revivals: the revival of Confucianism by the Neo-Confucianists during the 10<sup>th</sup>-12<sup>th</sup> centuries in China, the revival of the teachings of the Upanishads by the religious leader Shankara in India during the 8<sup>th</sup> and 9<sup>th</sup> centuries, and the revival of ancient Greek learning in Europe. Interestingly, both the leading figures of the Chinese and Indian revivals, Chu Hsi and Shankara respectively, were accused of being “Crypto-Buddhists”.

A Table depicting some of these cross-cultural parallels in science, religion and philosophy is presented below. The Table is by no means definitive and there are many scientific achievements that have been omitted for reasons of space and clarity. Some general patterns nevertheless, do emerge from it. Firstly, during the Tang dynasty, which was when Buddhism in China was at its height, some of China's most enduring scientific discoveries such as gunpowder and the mariner's compass were made. Reference has already been made to specific inventions like bridge building and printing, which had direct Buddhist involvement. The great scientific achievements of the Sung dynasty in China roughly correlate with similar developments in the Islamic civilisation. They include improvements in clock design, construction of mechanical devices for astronomy, and the use of algebra. The very best of Chinese science, which occurred in the Tang and Sung dynasties, took place when China was open to Buddhist and Islamic cultures. They were periods when China's links with other countries were strong, through Central Asia to Islamic countries in the west, across the mountains south to India, eastwards to Japan, and down by sea around South East Asia.

---

<sup>13</sup> J. Needham, *Clerks and Craftsmen*, pp. 28-29.

Period	Religion and Philosophy	Science
600 -500 BC	Confucius, Lao Tze, Buddha, Socrates, Plato	Ancient Greek geometry, mathematical proofs, astronomy
270 BC-0 AD	Asoka and spread of Buddhism	* Jain Mathematics (large and small numbers, root extraction, sequences; etc) * Chinese "Nine chapters on the mathematical arts" (root extraction, number ratios etc)
0-100 AD	Beginning of Christian era and entry of Buddhism in China	
320-550 AD	Gupta Age in India -Buddhism still strong and dominant	* Indian Trigonometry, concept of zero, algebra, astronomical tables * Chinese solution of equations
618-907 AD	* Tang Dynasty – height of Buddhism in China * The rise and spread of Islam * Revival of "Hinduism" (Upanishads) in India (Shankara) * Beginnings of Confucian revival (Han Yu (768-824 AD))	* Chinese inventions of printing, mariner's compass, gunpowder, segmental arch bridge, mechanical clocks * Islamic commentaries on algebra, astronomical observatories, modern hospitals etc * Further developments in Indian mathematics
960-1279 AD	* Sung Dynasty Revival of Confucianism (Neoconfucianists, Chou Tun-I, Shao Yun, Chang Tsai, Ch'eng Hao, Ch'eng I, Chu Hsi) * Height of Islamic civilization * Greco/Christian revival in Europe (13 <sup>th</sup> century scholastics)	* Height of Chinese algebra, number theory, accurate water-wheel clock of Su Sung, clock-work mechanisms for astronomy by Shen Kua * Height of Islamic science: optics of Al-Hazen, medical advances of Avicenna, development of Algebra by mathematicians like Al-Kharizmi, use of zero in symbolic form ("Arabic numbers"), water-wheel clocks, astrolabe and armillary spheres for astronomy
1279-1368 AD	* Yuan dynasty (Mongol occupation of China)	

Another pattern that emerges from the above Table is that each revival occurred after an innovative period of science and religion. The revival of the Upanishads (Hinduism) by Shankara followed the scientifically creative Gupta period, the time of a second renaissance for Buddhism in India. The Neo-Confucianist revival followed on from innovative scientific discoveries in the Tang dynasty, a time when Buddhism reached its greatest popularity in China. The revival of Greek philosophy by the Christian Scholastics followed on from the scientific and religious achievements of the Islamic civilisation.

There is also an interesting similarity with respect to how Islam influenced the West and the impact of Buddhism in China. The great cultural impact of Islam on the West culminated with the European Renaissance, roughly 1000 years after its birth, while Buddhism inspired the Chinese Sung Renaissance, which occurred around 1000 years after its inception. The Neo-Confucianists, although borrowing much from Buddhism, claimed it to be directly from Confucian writings. Similarly, the Christian Scholastics, although using many concepts developed from within the Islamic world, claimed them to come either directly from the Bible, or from Aristotle. Both the Neo-Confucianists and Christian Scholastics were ethnocentric in their outlook.

Needham points out that understanding the multi-cultural roots of modern science helps us realise that many cultures have a share in the development of modern science. This means that no culture can claim to be intrinsically superior to any other on the basis of it being the originator of modern science:

"Science and its application need therefore no longer be regarded in China or by other Asian people as something for which they should feel themselves beholden to the generosity of the West, something with no roots in their own culture. On the contrary, it had many great and illustrious roots, roots which helped to sustain the scientific Renaissance itself, and it is right that the Chinese should become more and more conscious of them. Though *modern* science originated only in Europe, to modern science everyone in the last resort contributed.... When all debts are acknowledged... Asians and Europeans will be able to go forward together without hesitation, on a just and mutually appreciative basis,

'neither afore or after other', truly 'without any difference or inequality'.<sup>14</sup>

The same principle broadly speaking is also true within Asian science. The recognition that there were important foreign elements to the development of Chinese science implies mutual respect and equality amongst Asian cultures. Further research on the history of Chinese science may well benefit from correlating it to the development of science in other Asian civilisations.

## 2. Science in the Spiritual Traditions of China

The last section summarised some Chinese scientific achievements, and found them to be inextricably related to foreign influences coming from Buddhist and Islamic cultures. The question of how science is related to the sacred traditions that flourished in China is now considered. One possible approach is to first list criteria that are important for the growth of science, and then examine to what degree they are present in Chinese sacred literature. The following approach is a preliminary attempt to do precisely this. There are many pre-requisites for science to develop but only four will be mentioned here. They are discussed more fully elsewhere and will be stated here without discussion.<sup>15</sup> They are as follows:

- 1) Investigating/thinking for oneself and not relying upon tradition
- 2) Openness to learning from wherever it comes (from other cultures)
- 3) Underlying conviction in the rationality, unity and harmony of nature
- 4) Underlying conviction that we have the ability to understand/discover Nature's unity and harmony (that we are also rational)

These criteria for the growth of science take the form of individual ethics or beliefs. The social component to science for the purposes of this discussion will not be addressed. Selections from the scriptures of the

<sup>14</sup> J. Needham, *Clerks and Craftsmen*, pp. 134-5.

<sup>15</sup> A. Khurshed, *Spiritual Foundations of Science*, *The Singapore Bahá'i Studies Review*, Vol. 1, No. 1.

three main sacred traditions that existed in China, Confucianism, Taoism and Buddhism are now examined with the above criteria in mind.

## 2.1 Approach to Science from Within the Confucian Classics

The early official formulation of Confucian literature was endorsed by the Imperial Court of China in 175 AD. Confucianism became popular and was to be found in the "Five Books"; The Book of Documents, The Book of Poetry, The Book of Rites, The Book of Changes and The Spring and Autumn Annals. After a period of decline in the Tang dynasty (618-907 AD), Confucian teachings underwent a revival in the Sung dynasty (960-1279 AD). The leading scholar of the "Neo-Confucianist" revival was Chu Hsi (1130 – 1200 AD), and he reformulated the Confucian doctrines into the "Four Books", comprising: The Analects, The Great Learning, The Doctrine of the Mean, and the writings of Mencius. Chu Hsi's version of the Confucian writings received official sanction, and became the basis of the state examination system for around 800 years. In the following discussion, citations will be taken from 'The Analects' and 'The Great Learning'.

A background ethic articulated quite clearly in Confucianism, which is encouraging for the study of science, is the pursuit of learning. Although education is usually spoken of in the context of self-cultivation, of acquiring virtues, there is an underlying respect for learning. Confucius summarised his concerns in the following way:

"The Master said, 'The leaving virtue without proper cultivation; the not thoroughly discussing what is learned; not being able to move towards righteousness of which a knowledge is gained; and not being able to change what is not good:- these are the things which occasion me solicitude.'"(Analects 7: 3)

There is the encouragement of acquiring the ethics of honesty and humility in our search for knowledge:

"The Master said, 'The study of strange doctrines is injurious indeed!' The Master said, 'Yû, shall I teach you what knowledge is? When you know a thing, to hold that you know it; and when you do not know a thing, to allow that you do not know it; - this is knowledge.'" (Analects, 2: 16-17)

This attitude of mind is vital for the growth of science. On the other hand, Confucius regarded himself mainly as someone who sought traditional knowledge, whose mission it was to renew old wisdom:

“The Master said, ‘I am not one who was born in the possession of knowledge; I am one who is fond of antiquity, and earnest in seeking it there.’” (Analects, 7: 19)

If one then seeks to emulate Confucius’s way of life, as was done later in the Confucian tradition, then following ancient knowledge will be the primary concern. Now renewing ancient wisdom in terms of rediscovering eternal spiritual ideals may be what Confucius had in mind, if this be the case, looking towards tradition may be beneficial. But if the same attitude is applied to scientific knowledge, then it is likely to be a hindrance to the growth of science.

Although there is reference to “an all-pervading unity” and “principles” of nature, they appear primarily in terms of improving human conduct:

“The Master said, ‘Shan, my doctrine is that of an all-pervading unity’. The disciple Tsang replied, ‘Yes’. The Master went out, and the other disciples asked. Saying, ‘what do his words mean?’ Tsang said, ‘The doctrine of our master is to be true to the principles of our nature and the benevolent exercise of them to others – this and nothing more.’” (Analects, 4: 15)

In ‘The Great Learning’, the text mentions that the ancients “first extended to the utmost their knowledge” and that this “lay in the investigation of things”, which appears to be a very scientifically encouraging statement. But when examined more carefully, this process of “investigating things” is rooted in the “cultivation of the person”.

“The ancients who wished to illustrate illustrious virtue throughout the kingdom, first ordered well their own States. Wishing to order well their States, they regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified their hearts. Wishing to rectify their hearts, they first sought to be sincere in their thoughts. Wishing to be sincere in their thoughts, they first extended to the utmost their knowledge. Such extension of knowledge lay in the investigation of things... From the Son of Heaven

down to the mass of the people, all must consider the cultivation of the person the root of everything besides." (The Great Learning, 4-6)

Cultivating human virtues need not necessarily be opposed to the growth of science. In fact, from a Bahá'í point of view, they should develop hand in hand. But Confucius was relatively silent about cosmological questions, such as the origin of the universe or the unity of Nature. He was more concerned with acquiring harmony within human nature. With this lack of explicit guidance, in practice, whether Confucianism was encouraging to science or not depended on the whims of the ruling elite.

In the Analects, the relationship with foreign people is mentioned several times. There is the following famous passage that refers to all men as "brothers":

"Sze-mâ Niû, full of anxiety, said, 'other men all have their brothers, I only have not.' Tsz-hsiâ said to him, 'There is the following saying which I have heard: - "Death and life have their determined appointment; riches and honours depend upon Heaven." 'Let the superior man never fail reverentially to order his own conduct, and let him be respectful to others and observant of propriety: - then all within the four seas will be his brothers. What has the superior man to do with being distressed because he has no brothers?'" (Analects 12:5)

It is not clear what "within the four seas" means here, but it most likely refers to the known world for the Chinese at the time Confucius lived. The passage implies that a morally "superior" man does not need to be physically related to a brother, because through his elevated conduct, all men will treat him as if he were their brother. This passage suggests that moral behaviour transcends family ties, and by implication, racial ties, although that is not clearly stated.

Another passage, which relates to the same theme, is in the context of Confucius being disappointed with his reception in China, and him expressing his intention to live amongst the "wild tribes of the east". Someone asked him, "They are rude. How can you do such a thing?" His reply was, "If a superior man dwelt among them, what rudeness would there be?" (Analects, 9: 13)

Confucius thought that the “rude” foreigners or “Barbarians” would no longer be uncivilised if a “superior man” were to live amongst them. This does not necessarily mean that all “superior” men come from China, or that all foreigners are “barbarians”. But it does emphasise the power of moral transformation that moral conduct is more important than the race a person belongs to. So once again, moral behaviour is the primary concern, while racial allegiances in comparison, are secondary.

Passages like these should generally encourage a more open attitude towards people of a foreign race. However, there are some other passages that suggest China is superior to the “rude tribes of the east and north”:

“... In festive ceremonies, it is better to be sparing than extravagant. In the ceremonies of mourning, it is better that there be deep sorrow than a minute attention to observances. The rude tribes of the east and north have their princes, and are not like the States of our great land which are without them.” (Analects, 3:3-5)

It is not clear what is meant here, but historically, it had been interpreted to mean that the Chinese were superior to people of other races. The above passage was quoted by Confucianists to suggest that China without rulers is superior to foreign countries with rulers. In the “The Disposition of Error”, a dialogue between a Confucian and Buddhist in the 6<sup>th</sup> century AD, the Confucian states: “Confucius said, ‘The barbarians with a ruler are not as good as the Chinese without one.’ Mencius criticised Ch’en Hsiang for rejecting his own education to adopt the ways of (the foreign teacher)...”<sup>16</sup>

In summary, there is in Confucian literature, a general respect for learning, but it is primarily in the context of acquiring human virtues. There is a tendency to look towards traditional knowledge, which might, if taken to apply to all forms of knowledge, be detrimental to the growth of science. Also, there are conflicting statements about how to treat foreigners, and Confucius is for the most part, silent about it. Confucius also avoids discussion of cosmological questions about the origin of the universe or whether there is an underlying unity of Nature. While none of these observations are directly against the practice of science, they are not strongly encouraging towards it either.

---

<sup>16</sup> K. Reilly, *Readings in the World Civilizations*, Vol. 1, p. 168.

## 2.2 Approach to Science from Taoist Writings

Some excerpts from the Tao-Te Ching, the main body of writings attributed to Lao Tzu, the author of Taoism are given below. They are, in terms of the criteria considered here, very encouraging to the practice of science. Firstly, there is a definite origin to things (The Tao) and although it is in essence unknowable, it is subtle, and manifests itself in many different ways. The Tao is the way by which "we see the beginning of all things". Everything, including the world of Nature, derives its harmony and unity from the Tao. All are invited to discover the presence of the Tao, both in the world of Nature and in human nature. There are many mysteries to solve, and we are encouraged to delve into them. If we contemplate the Tao, it will reveal its mysteries to us. We must be all-embracing by "knowing the eternal". The citations demonstrating these points are as follows:

"The Tao (Way) that can be told of is not the eternal Tao; the name that can be named is not the eternal name. The Nameless is the origin of Heaven and Earth; the Named is the mother of all things. Therefore let there always be non-being so we may see their subtlety, and let there always be being so we may see their outcome. The two are the same. But after they are produced, they have different names. They both may be called deep and profound. Deeper and more profound the door of all subtleties!" (Tao-Te Ching, 1)

"Hold on to the Tao of old in order to master the things of the present. From this one may know the primeval beginning [of the universe]. This is called the bond of Tao." (Tao-Te Ching, 14)

"The all-embracing quality of the great virtue (te) follows alone from Tao. The thing that is called Tao is eluding and vague. Vague and eluding, there is in it the form... Eluding and vague, in it are things. Deep and obscure, in it is the essence. The essence is very real; in it are evidences. From the time of old until now, its name (manifestations) ever remains. By which we may see the beginning of all things. How do I know that the beginning of all things are so? Through this (Tao)." (Tao-Te Ching, 21)

"Tao produced the One. The One produced the two. The two produced the three. And the three produced the ten thousand things. The ten thousand

things carry the yin and embrace the yang, and through the blending of the material force they achieve harmony.” (Tao-Te Ching, 42)

“The best (man) is like water. Water is good; it benefits all things and does not compete with them. It dwells in (lowly) places that all disdain. This is why it is so near to Tao. [The best man] in his dwelling loves the earth. In his heart, he loves what is profound. In his associations, he loves humanity...” (Tao-Te Ching, 8)

“He who knows the eternal is all-embracing.” (Tao-Te Ching, 16)

The Tao-Te Ching contains some of the most poetic statements on the harmony of Nature in all the world's sacred scriptures. It is a religious tradition in which the Tao, as a Creator-God, has much in common with the Jehovah, Father or Allah of the Abrahamic religions. In both cases, the world of Nature derives its origin and unity from a supreme source, an infinitely mysterious and subtle being. In both cases, God and the Tao are in their essence unknowable. In both cases, God is revealed through Nature's laws and lies at the root of human inspiration. True, the Tao is not described in human personal terms, nor does it directly intervene in human affairs like the God of the Abrahamic traditions. The Tao is to be contacted by calm contemplation, by appreciating Nature's inherent harmony and balance, by discovering universal harmony.

Historically, Taoists made many scientific investigations to uncover the mysteries of the Tao. Taoist diviners during the Han times were responsible for the early development of the magnetic compass, while gunpowder was developed in the Tang dynasty from Taoist alchemist experiments in search of longevity. Their science was mixed up with notions of predicting the future, of finding an “elixir of life”. There may have been elements of magic in their science, but their belief in the universal harmony of Nature, in the existence of profound mysteries, and their conviction that we can be empowered to discover these mysteries, had a very positive effect on the development of science.

### 2.3 Approach to Science in Chinese Buddhism

There have been numerous schools of Buddhism in China. Excerpts from the source writings of only two of them will be given here. Both the Hua-Yen School and Chan Buddhism have their roots in the Tang dynasty. Both are distinctively Chinese and had significant influence on Chinese philosophy and religion around a millennium ago. In the case of the Hua-Yen school, it did not exist as a school of Buddhism in India.

The Hua-Yen School is well known for its "one-and-all" philosophy, which not only emphasises the unity of Nature, but also stresses the belief that the "one and many" are linked through the law of causation. When one understands, "great wisdom can be achieved". In the "One-and-all" philosophy of Fa-Tsang (643-712 AD) for instance, the most well known spokesman of the Hua-Yen school, the "one and many" principle is described in the following way:

"All phenomena which exist spontaneously can be combined because they rise through causation. As the one and the many totally involve each other, we look at one particle of dust and everything suddenly becomes manifest... The reason is that, when the mind understands, all dharmas can be free and at ease, and because the principle is clear, great wisdom can be achieved."<sup>17</sup>

Elsewhere, Fa-Tsang touches on the profound mystery behind universal causation, its paradox of embracing all in one, and how, "if we investigate its mystery", enlightenment can be attained.

"From the above principles, the theory of things coming into existence through causation is unfathomable; thus its many gates are universally alone. All things are exhaustively combined as one, and all infinities are embraced to form a totality. If we investigate its mystery, although (coming into existence through causation) may occupy a narrow position, it is always broad, and if we wish to investigate its source, we find that the deeper it is, the shallower it becomes. The principle of coming into existence through causation is great indeed!"<sup>18</sup>

---

<sup>17</sup> W.T. Chan, *A Source Book in Chinese Philosophy*, p. 424.

<sup>18</sup> *ibid.*, pp. 419-20.

These citations not only stress the unity of Nature, but they encourage us to understand the “principles” that give rise to this harmony. In terms of the criteria for the growth of science given earlier, these writings are extremely encouraging.

One of the most influential formulations of Chan Buddhism comes from Hui-neng (638-713 AD), its 6<sup>th</sup> Patriarch. The historical details that surround him, as well as the earlier Patriarchs need not concern us here.

A disciple of Hui-neng, Yoka Daishi, presents the “one and many” Chinese Buddhist tradition in terms of the moon’s light being one, although it is scattered over many surfaces:

“One Nature, perfect and pervading, circulates in all natures; One Reality, all comprehensive, contains within itself all realities; the one moon reflects itself wherever there is a sheet of water, and all the moons in the waters are embraced within the one moon; the Dharma-body of all the Buddhas enters in my own being, and my own being is found in union with theirs...”<sup>19</sup>

It is not certain where this analogy comes from, but it was used later by the Neo-Confucianists.

One of the main contributions of Chan Buddhism, in terms of it encouraging scientific investigation, was its principle of discovering truth for oneself, as opposed to following tradition. Chan Buddhism pointed to the “Buddha-nature” within everyone, and inculcated methods of meditation to achieve enlightenment, as opposed to relying on the authority of tradition. Hui-neng for instance, explicitly stated:

“All scriptures and writings, both Mahayana and Hinayana, and the twelve sections are provided for men. It is because man possesses the nature of wisdom that these were instituted. If there were no men in the world, there would naturally be no dharmas. We know, therefore, that dharmas exist because of man and that there are all these scriptures

---

<sup>19</sup> Yoka Daishi, disciple of Hui-Neng, cited by D. T. Suzuki in his *Manual of Zen Buddhism*, p. 97.

because there are people to preach them... we know that all dharmas are immanent in one's mind and person. Why not seek in one's mind the sudden realization of the original nature of True Thusness? The *P'usa chieh ching* says, 'We are originally pure in our self-nature. If we understand our minds and see our nature, we shall achieve Buddhahood ourselves.'<sup>20</sup>

Even within Buddhist schools in China, Chan Buddhism acquired a reputation for being unorthodox. Its meditation practices were specifically designed to rely on one's own individual investigations, rather than follow set forms of meditation. The Chinese philosopher Wing-Tsit Chan describes various novel techniques that Ch'an Buddhist monks employed, so that their students would not blindly follow tradition. They prescribed travel, to "broaden one's perspective and deepen one's insight". They adopted an approach to "never to tell too plainly", so that the student must learn for himself. There was also the *koan* – the question and enigmatic answer. Lastly, they employed shouting and beating – an "unorthodox way of shocking the pupil out of his outmoded metal habits and preconceived opinions."<sup>21</sup>

Chan Buddhism was extremely influential in encouraging openness to foreign knowledge. This was firstly due to the obvious reason that Buddhism itself came from outside China. Many Chinese Buddhists during the Tang dynasty embarked upon the long and arduous journey South, across the mountains to India. It is quite likely that Buddhist monks were the means through which Indian and Chinese science came together. There was also another reason for Buddhism's openness to learning from wherever it came. Buddhism is intrinsically universal in its outlook and does not encourage a parochial approach to learning. This is why in its history, wherever there arose rivalries between various sects of Buddhism, there would also be movements to unite them. During the Tang dynasty, there were differences between Buddhists living in the East and those in the West. In the "Pure Land" sect of Buddhism, some of those living in the East came to regard a place in the West to be a "pure land", where they believed the faithful would be reborn. They recited the name "Amitabha" to achieve this. But when Hui-neng was asked about

---

<sup>20</sup> W.T. Chan, *A Source Book in Chinese Philosophy*, pp. 438-9.

<sup>21</sup> *ibid.*, pp. 428-9.

this tradition, he made it clear that Buddhism involved the search of a "pure land within" rather than a specific place:

"Although you are native of the East, if your mind is pure you are sinless. On the other hand, even if you were a native of the West, an impure mind could not free you from sin. When the people of the East commit a sin, they recite the name of Amit bha and pray to be born in the West; but in the case of sinners who are natives of the West, where should they pray to be born? Ordinary men and ignorant people understand neither the essence of mind nor the pure land within themselves, so they wish to be born in the East or the West. But to the enlightened everywhere is the same. As the Buddha said, 'No matter where they happen to be, they are always happy and comfortable.'"<sup>22</sup>

During the Tang dynasty, there also arose a difference in meditation techniques between Northern and Southern schools of Buddhism. Within Chan Buddhism, those in the North stressed "gradual enlightenment" of the mind, while those in the South preferred "sudden enlightenment". There was also a great cultural divide between the monk and the "barbarian" (uneducated). But Hui-neng preached a more universal outlook, and directed his teachings specifically to overcome such differences:

"Although people are distinguished as northerners and southerners, there is neither north nor south in the Buddha-nature. The physical body of the barbarian and that of the monk are different. But what difference is there in their Buddha-nature."<sup>23</sup>

Hui-neng himself came from an illiterate background, and his becoming the 6<sup>th</sup> Patriarch for Chan Buddhism was in itself, a significant triumph for the more universal approach. All this was of course, most helpful in creating an atmosphere of openness to foreign learning, and it was therefore important to the growth of Chinese science.

Apart from the positive influence on the level of ethics and values, there were some instances where Buddhist philosophy directly suggested more

---

<sup>22</sup> *The Sutra of Hui-neng*, p. 90.

<sup>23</sup> W.T. Chan, *A Source Book in Chinese Philosophy*, pp. 430-1.

enlightened ways to understand cosmology. There was for instance, the Buddhist concept of space being infinite. This contrasted sharply with the finite closed way of seeing the universe in medieval Christendom. Hui-neng for instance speaks of space as an "illimitable void", and uses it as a metaphor to understand the infinitely great void (universe) of the mind:

"The capacity of the mind is as great as that of space. It is infinite... the illimitable void of the universe is capable of holding myriads of things of various shape and form, such as the sun, the moon, stars, mountains, rivers, worlds, springs... space takes in all these, and so does the voidness of our nature. We say the essence of mind is great because it embraces all things, since all things are within our nature. ... you should know that the mind is very great in capacity, since it pervades the whole dharmadh tu [the sphere of the Law, i.e. the universe]. When we use it, we can know something of everything, and when we use it to its full capacity we shall know all. All in one and one in all..."<sup>24</sup>

The Chinese Buddhist teaching that the power of the mind embraces the Universe, that it contains a universe greater than the physical universe, is very similar to Bahá'í teachings. Bahá'u'lláh states that:

"The All-Merciful hath conferred upon man the faculty of vision, and endowed him with the power of hearing. Some have described him as the 'lesser world,' when, in reality, he should be regarded as the 'greater world'."<sup>25</sup> The concept of the human mind "embracing the world of Nature", is a dominant theme in the talks of 'Abdu'l-Bahá.<sup>26</sup> The belief that the human mind is capable of understanding the world of Nature, capable of looking at it from a "higher" perspective, of studying it "objectively", implies that it must in some way be fundamentally different from it. Science is obviously reliant on the human mind being intrinsically different to what it observes, otherwise, none of its conclusions would be valid.

<sup>24</sup> *The Sutra of Hui-neng*, p. 80.

<sup>25</sup> Bahá'u'lláh, *Gleanings*, p. 340.

<sup>26</sup> 'Abdu'l-Bahá, *Promulgation of Universal Peace*, pp. 239-244.

### 3. The Influence of Buddhism on the Neo-Confucianists

The influence of Buddhism on Chinese philosophy and religion were far reaching. It nurtured a revival in Confucian thought during the Sung dynasty known as Neo-Confucianism. China, for the last 800 years, has largely been dominated by the Neo-Confucianist tradition, and the Sung period of Neo-Confucianism is regarded to be the golden period of Chinese philosophy. The Neo-Confucianists were themselves, strongly anti-Buddhist and anti-Taoist. One of their explicit aims was to eliminate Buddhist influence from China, and they were responsible for directing much Nationalistic propaganda against it. However, the Buddhist and Taoist influence on their philosophy is unmistakable, and although they claimed that their philosophy was founded on Confucianist teachings, it borrowed a great deal from Buddhist and Taoist doctrines. This subject has received considerable scholarly attention over the last few decades only a brief introduction to it will be given here. Carson Chang, in his two-volume treatise on the "Development of Neo-Confucian Thought", devotes a chapter to the Buddhist influence, calling it "Buddhism as stimulus to Neo-Confucianism". He summarises the Buddhist influence in the following way:

"Neo-Confucianism was one of the results of the introduction to China of Buddhism from India. Neo-Confucianism was no product of the cross-breeding of Buddhism and the Chinese tradition, but rather a declaration of independence from Buddhism after China had been under the influence of Indian thought for a long period. This, however, did not leave the Chinese mind entirely free from some of the more valuable elements in the Buddhist way of thinking. Without the introduction of Buddhism into China there would have been no Neo-Confucianism, and this despite the fact that according to Chinese practice Confucian scholars were exceedingly reluctant to admit the influence of Buddhism, and were anxious to make clear that they would have no traffic whatever with that school of thought."<sup>27</sup>

Wing-Tsit Chan, the author of the widely read "A Source Book in Chinese Philosophy", also frequently refers to the great impact Buddhism had on

---

<sup>27</sup> C. Chang, *Development of Neo-Confucian Thought*, Vol. 1, p. 43.

Chinese philosophy. He describes Chan Buddhism's influence on aspects of Neo-Confucianism to be "Zen in Confucian disguise":

"It was inevitable that such a philosophy would exercise a profound influence. Its impact on Chinese philosophy was great. The new doctrine of seriousness (*ching*) in Neo-Confucianism was one of its direct products, and the whole idealistic Neo-Confucian movement of several hundred years, initiated by Lu Hsiang-shan (Lu Chiu-yüan, 1139-1193) and culminating in Wang Yang-ming (Wang Shou-jen 1472-1529), was so much influenced by it that it has often been called Zen in Confucian disguise. Even the Neo-Confucian tradition of compiling and publishing the recorded sayings of philosophers is an imitation of those of Zen."<sup>28</sup>

Recently, a complete volume of "Buddhism in the Sung" has been compiled in which most of the authors follow through the theme of how Buddhism contributed to the great cultural achievements of the Sung dynasty. They stress, in particular, Buddhist influences on the Neo-Confucianist movement.<sup>29</sup> The purpose here, is not to review the work of the main Neo-Confucian philosophers, starting with Chou Tun-I (1017-1073), on to Shao Yung (1011-1077), through to Chang Tsai (1020-1077), Ch'eng Hao (1032-1085) and Ch'eng I (1033-1107), culminating with the prolific grand synthesis of Chu Hsi (1129-1200). The aim here, is to present some Buddhist teachings which inspired the Confucian Renaissance.

The Neo-Confucianist movement had its roots with Han Yü (768-824 AD), an influential Confucian poet of the Tang dynasty. His scathing attacks on Buddhism and Taoism betray the overt Nationalist objective of the Neo-Confucianists. In a letter to the Emperor, he protested against plans to bring a Buddhist relic to the capital for an exhibition:

"The Buddha was born in a barbarian country. His language was different from that of the Chinese, his clothes were different, he could not speak about the merits of our ancient emperors. If he were living today and asked for an audience, Your Majesty would probably receive him and order the officials of the protocol to give him a dinner party. Then he

<sup>28</sup> W.T. Chan, *A Source Book in Chinese Philosophy*, pp. 429-430.

<sup>29</sup> *Buddhism in the Sung*, edited by P. N. Gregory and D. A. Getz.

might be presented with new clothes, and sent away, in order to prevent his corrupting our people."<sup>30</sup>

Han Yü's main objection was that the Buddha was not Chinese, a "barbarian". Not only did the Buddha not eat and dress like the Chinese, but more importantly, he did not praise the ancient Chinese Emperors, indicating the central role that traditional authority played for the Confucian mind. In underlying the danger that Buddhism posed, Han Yü pointed to the danger of "corrupting" the Chinese people. This brings out the political nature of the Confucianist mind. They perceived the Buddhist threat mainly in social terms, not spiritual or philosophical ones.

Han Yü, like the Confucian in the "Disposition of error" already cited, appeals to the recorded sayings of Confucius to justify his anti-foreign bias, "The barbarians even *with* a King were not to be compared to the Chinese even *without* a king."<sup>31</sup> But as already mentioned, the original text in the Analects (3:3-5) upon which this is founded, is far from clear, and there are other passages to suggest that racial ties are secondary to moral conduct (see for instance, Analects 12:5). Han Yü even stigmatised Lao-Tzu as a "barbarian", knowing perfectly that he was Chinese<sup>32</sup>. Han Yü's recommended action was along the following lines, "Let a man be a man. Buddhist books should be burned. Monasteries should be used as dwelling places."<sup>33</sup> Unfortunately, this is precisely what happened on some occasions. In 845 AD, under Emperor Wu-tsung, 4,600 large temples and monasteries, and 40,000 smaller ones were burned and demolished. Neo-Confucianist criticisms of Taoism and Buddhism were inseparable from a nationalist propaganda to regain Confucianist influence over the Chinese people.

Many statements within Neo-Confucianist literature reveal their Taoist and Buddhist influence. Take for instance, some statements from Chu Hsi, the most famous of all Neo-Confucianists. He writes:

"Fundamentally there is only one Great Ultimate, yet each of the myriad things has been endowed with it and each in itself possesses the Great

---

<sup>30</sup> C. Chang, *Development of Neo-Confucian Thought*, Vol. 1, p. 85.

<sup>31</sup> *ibid.*, p. 96.

<sup>32</sup> *ibid.*

<sup>33</sup> *ibid.*, p. 97.

Ultimate in its entirety. This is similar to the fact there is only one moon in the sky but when its light is scattered upon rivers and lakes, it can be seen everywhere. It cannot be said that the moon has been split."<sup>34</sup>

This citation closely parallels the former Ch'an image of: "One Reality, all comprehensive, contains within itself all realities; the one moon reflects itself wherever there is a sheet of water, and all the moons in the waters are embraced within the one moon; the Dharma-body of all the Buddhas enters in my own being, and my own being is found in union with theirs..."<sup>35</sup> Here, instead of the universal Buddha being reflected in everything, it is the "Great Ultimate".

Another instance where Ch'an Buddhist influence is evident in Chu Hsi's philosophy is in his ideal of arriving at a mental state of "sudden release":

"We must eliminate the obstructions of selfish desires, and then it will be pure and clear and able to know all. When the principles of things and events are investigated to the utmost, penetration will come as a sudden release..."<sup>36</sup> The "sudden release" of understanding here closely parallels the "sudden enlightenment" of the southern Ch'an Buddhist school led by Hui-neng.

The goal of mind-control, was something explicitly associated with Buddhism and had never been a major concern in the Confucianist tradition. Yet Chu Hsi weaves it into his philosophy of "investigating all things":

"As to the exerting of the mind to the utmost, it is to investigate things and study their principles to the utmost, to arrive at broad penetration, and thus to be able fully to realize the principle (li) embodied in the mind".<sup>37</sup>

Although Chu Hsi wrote to disassociate his philosophy of mind from the Buddhist one, it is based upon simplifying and distorting the Buddhist approach. In the context of him replying to the accusation that his philosophy of mind bears similarity to the Buddhist one, Chu Hsi states

<sup>34</sup> W.T. Chan, *A Source Book in Chinese Philosophy*, p. 639.

<sup>35</sup> D.T. Suzuki, *Manual of Zen Buddhism*, p. 97.

<sup>36</sup> W.T. Chan, *A Source Book in Chinese Philosophy* p. 630.

<sup>37</sup> *ibid.*, p. 604.

for instance, that Buddhists "seek the mind with the mind", and that it is like the "eye seeing the eye"<sup>38</sup>. Of course, this is not the Buddhist position. Buddhism seeks to go beyond the mind with respect to its inherent egoism so that it can discover the "universal mind". Chu Hsi's views of Buddhist doctrines are better understood in terms of him having an underlying feeling of racial superiority, which he sometimes made explicit. After criticising the Buddhist approach to the mind, he states, "But unless one is a superior man who thinks accurately and sifts clearly, how can he avoid being deluded in this matter?"<sup>39</sup> "Superior" here of course, is the word the Chinese used for themselves, as opposed to the word "barbarians", which they reserved for foreigners.

Chou Tun-i and Chu Hsi made commentaries on the "Diagram of the Supreme Ultimate", a diagram of Taoist origin. The Neo-Confucianists used it to provide an explanation for the creation and evolution of the universe, something that is missing in ancient Confucian writings. Neo-Confucianists used the diagram to provide a response to Buddhist cosmology.

There was a clear influence of the Buddhist doctrine of "universal compassion for all things" on the philosophy of Chang Tsai. In his *Western Inscription*, he wrote: "My body reaches as far as the borderline of heaven and earth; the commandment of heaven and earth constitutes my nature; men are my brothers; animals and inanimate objects are my fellow-creatures..."<sup>40</sup> Also, the Neo-Confucianist practice of "quiet-sitting" was a form of meditation inspired by Ch'an Buddhism.

Perhaps the most important contribution made by Ch'an Buddhism was the injunction of not blindly following tradition, but investigating things for oneself. This was incorporated in Neo-Confucianist doctrine, and became known as "investigating principle to the utmost".

There were many examples of Buddhist monks being respected for their learning by the Confucian scholar officials or literati. Chang Chiu Ch'eng (1092-1159) was a famous Confucian scholar who was also a disciple of

---

<sup>38</sup> *ibid*

<sup>39</sup> *ibid*

<sup>40</sup> C. Chang, *Development of Neo-Confucian Thought*, Vol. 1, p. 131.

the Buddhist (Ch'an) monk, Ta-hui Tsung-Kao (1089-1163). Chu Hsi accused Chang of being "outwardly Confucian but secretly Buddhist". In fact Chu Hsi was himself later accused of being a "Crypto-Buddhist". Although many Neo-Confucianists in public life ridiculed and attacked Buddhism, the same people privately acknowledged their debt to Buddhist teachings. Chang, speaking to his nephew who was intolerant of Buddhism, said of his Buddhist teacher:

"The subtle benefits our teaching [Confucianism] has gained from the Buddhist dharma are great. Do not be so quick to denigrate it. The reason why I befriended the monk Ta-hui Tsung-Kao is because I got such enjoyment from his extraordinary ideas and discussions..."<sup>41</sup>

The same kind of situation existed for Han Yü, the pioneer of Neo-Confucianism. Although he was publicly anti-Buddhist, on the individual level, he had admiration for a monk named Ta-tien. This inconsistency between public and private life was quite typical of many Neo-Confucianists. The Buddhist association did not of course, go unnoticed. Han Yü was accused of being a secret Buddhist. In his defence, Han Yü wrote:

"Your story that I am converted to Buddhism is mere gossip. When I was in Ch'ao-chuo, I met an old monk called Ta-tien [a Ch'an disciple of the monk Shih-t'ou, 700-790 AD], who was intelligent and well-versed in philosophy. Since I was living in exile in a remote place, and could find no person with whom to discuss, I invited him to come to the city and stay about two weeks. Ta-tien is a man who looks with contempt upon the world, and who has his own convictions about truth. He is not one whit stirred by what is going on in the world. Though I did not understand his discourses, I was well aware that his mind was thoroughly intelligent and unaware of puzzles. Such a man is rare, and I was glad to consider him an acquaintance..."<sup>42</sup> It is significant that Han Yü's admiration of Ta-tien was based upon his intelligence and detachment from the world.

There were also Buddhist monks who were so knowledgeable in science, history, literature, poetry, and the Confucian tradition, that they even became advisors to the Emperor. Take for instance Tsan-ning (919-1001

<sup>41</sup> P. N. Gregory and D. A. Getz, *Buddhism in the Sung*, p. 84.

<sup>42</sup> C. Chang, *Development of Neo-Confucian Thought*, Vol. 1, pp. 127-8.

AD), he was so admired for his knowledge of the Confucian tradition, that he was known as a "Confucian monk". He was a *wen* master, that is, someone who was part of the movement to revive Confucian learning. Interestingly, he was renowned for his scientific learning. He for instance, gave correct explanations of luminescent objects and invisible ink and gained great respect from Confucian officials who were otherwise anti-Buddhist.<sup>43</sup>

All this goes to show that Buddhism was an inspiration to Neo-Confucianism and to the growth of science in China. It should be mentioned in passing here, that these observations are diametrically opposite to those arrived at by the historian Joseph Needham. Needham cites some positive influences of Buddhism, but then comes to the following conclusion:

"When all is said and done, though, Buddhism does not seem to have helped the development of science in China. It was essentially inimical to it as any philosophy built on a profound rejection of the world was bound to be... Buddhism, it is true, was a great civilising force in Central Asia, but in China, where there was already a civilisation of a high order, matters were rather different."<sup>44</sup>

In fact, in support of this conclusion, there is an instance of Needham citing Chu Hsi's criticisms of Buddhism.<sup>45</sup> But as already pointed out, Neo-Confucian criticisms of Buddhism are replete with an underlying Nationalistic agenda and feelings of racial superiority, which was made explicit on many occasions. Moreover, to dismiss the Buddhist contribution on the grounds that its philosophy involves a "rejection of the world" is to misunderstand both Buddhism and science. In its open declaration of investigating truth for oneself and not blindly following tradition, in its profound conviction that the human mind can discover the secrets of nature, in its inherent belief in the unity of nature, in its concept of universal causation, and much more besides, Buddhism has been extremely encouraging to the practice of science. There is also much more to science than empirical observations. Observations need to be carefully

<sup>43</sup> P. N. Gregory and D. A. Getz, *Buddhism in the Sung*, pp. 34-5.

<sup>44</sup> C. A. Ronan, *The Shorter Science and Civilisation in China*, Vol. 2, Chap. 14, pp. 271-2.

<sup>45</sup> *ibid.*, pp. 267-8.

selected, interpreted and valued, and this involves creative powers of the mind that are both rational and spiritual.<sup>46</sup>

#### 4. Parallels between the Neo-Confucianists and the Christian Scholastics

The Neo-Confucianists had many points in common with the medieval Christian scholastics and ancient Greeks like Aristotle. All of them, in one way or another, had versions of the "One in Many" paradox. The Neo-Confucianists referred to an eternal unitary realm they called *ri*, manifesting itself in diverse physical ways, *ch'i*. Chu Hsi stated, "*ri* is one, but its manifestations are demonstrated in thousands of ways", and "each particular thing forms a Supreme Ultimate in itself".<sup>47</sup> The relationship of the "Supreme Ultimate" or *ri* to individual objects is very much like the relationship between "universals" and "particulars" in ancient Greek thought, which were debated at great length by medieval scholastics. The "Supreme Ultimate" is used on other occasions like Aristotle's "Final Cause" or his "Unmoved Cause", and is also similar to the "First Cause" of the Scholastics. Chu Hsi's dual model of human nature, of an eternal realm hidden within a transient mind, like a "pearl in dirty water"<sup>48</sup>, has similarities to the Form/Body distinction of Aristotle's philosophy, and the half-animal/half-angel doctrine in Christianity. The Neo-Confucianists believed in different grades of life, each manifesting to its own degree, the inherent *ri*.

This has similarities to Aristotle's differing levels of "souls" (vegetable, animal and human). Like Aristotle, the Neo-Confucianists thought that human reason was the distinguishing feature that made people different from animals. Like Plato's form of the Good, the Neo-Confucianists believed in the existence of an objective eternal universal moral order. In short, the kind of philosophy that was being pursued in China around 1000 years ago, although in name very different, and ostensibly humanist (as opposed to religious or theological), was in fact much like the

---

<sup>46</sup> For more on this subject, see A. Khursheed, "The Spiritual Foundations of Science", *The Singapore Bahá'í Studies Review*, Vol 1, pp. 3-22.

<sup>47</sup> C. Chang, *Development of Neo-Confucian Thought*, Vol. 1, p. 257.

<sup>48</sup> *ibid.*, p. 262.

philosophy/theology of the medieval scholastics. Around exactly the same period we have: Averroes (1126-98 AD) demonstrating the harmony of Aristotle's philosophy with the Quran, Maimonides (1135-1204 AD) formulating the harmony of Aristotle's philosophy with the Torah, and Aquinas (1225-1274 AD) writing of the harmony of Aristotle's philosophy with the Bible. Their philosophies had many areas in common with Neo-Confucianism as articulated by Chu Hsi (1131-1200 AD), and in fact, all these schools of philosophy, whether in the East or West, in their own ways, express harmony between science and religion.

The 17<sup>th</sup> century European pioneers of science, such as Galileo and Kepler echoed many of the same fundamental beliefs articulated by the medieval scholastics, such as the unity and rationality of nature, and the essential harmony of science and religion. One simple illustration of this is the metaphor of "The Book of Nature", where the world of Nature is likened to the revelation of scripture. Galileo for instance states:

"Philosophy is written in this grand book the universe, which stands continually open to our gaze. But the book cannot be understood unless one first learns to comprehend the language and to read the alphabet in which it is composed. It is written in the language of mathematics, and its characters are triangles, circles, and other geometric figures, without which it is humanly impossible to understand a single word of it."<sup>49</sup>

Galileo is often portrayed to be modern in his outlook, and his work is usually thought to have opposed medieval scholasticism, but in the above quotation, there are echoes of the scholastic doctrine. Kepler also referred to mathematics being the script of the Book of Nature.<sup>50</sup> Broadly speaking, the same is true for the other 17<sup>th</sup> century pioneers of modern science. Viewed from this perspective, the most lasting influence of medieval scholasticism was its doctrine on the harmony of science and religion.

On the other hand, medieval scholasticism is also known for impeding scientific progress. Something that was cited by the 17<sup>th</sup> century pioneers of modern science to be an obstacle for the growth of science was the

---

<sup>49</sup> S. Drake, *Galileo*, p. 70.

<sup>50</sup> A. Koestler, *The Sleepwalkers*, p. 268.

University Aristotelian tradition of learning. Aristotle's philosophy had been made a core and compulsory part of university education by Christian scholastics since the rise of universities in Europe in the 13<sup>th</sup> century. Those who worked within Aristotle's school of philosophy were known as "Peripatetics". In the first half of the 17<sup>th</sup> century, Francis Bacon, Descartes and Galileo, all wrote of the necessity to remove Aristotelian learning from the curriculum of European universities. In Galileo's words:

"There remain in opposition to my work some stern defenders of every minute argument of the Peripatetics. So far as I can see, their education consisted in being nourished from infancy on the opinion that philosophizing is and can be nothing but to make a comprehensive survey of the texts of Aristotle, that from divers passages they may quickly collect and throw together a great number of solutions to any proposed problem. They wish never to raise their eyes from those pages - as if this great book of the universe had been written to be read by nobody but by Aristotle, and his eyes had been destined to see for all posterity."<sup>51</sup>

Galileo himself had to reject Aristotelian theories before he could make progress. An obvious example that comes to mind is Aristotle's impetus theory of motion, which was defended by the university Peripatetics, and which needed to be rejected before Galileo could advance the modern description of projectile motion. Galileo's references to the Peripatetics suggest that they were largely concerned about preserving Aristotle's tradition of learning, rather than investigating matters for themselves. Understood in this way, the scholastics had institutionalised a tradition of learning that impeded the growth of science. On the need for science to rely on individual investigation, as opposed to traditional authority, Galileo wrote:

"It appears to me that they who in proof of anything rely simply on the weight of authority, without adducing any argument in support of it, act very absurdly. I, on the contrary, wish to be allowed to raise questions freely and to answer without any adulation [of authorities] as becomes those who are truly in search of the truth."<sup>52</sup>

---

<sup>51</sup> *ibid.*, p. 434.

<sup>52</sup> S. Drake, *Galileo*, p. 23.

There are many historical similarities between medieval Christian scholastics and the Neo-Confucianists in the context of the history of science. The following table summaries some of them.

<b>Comparison between European Scholastics and Chinese Neo-Confucianists</b>		
<i>Common elements</i>	<i>Christian Scholastics</i>	<i>Chinese Confucianists</i>
Both sought to revive ancient traditions	Philosophy of Aristotle	Tradition of Confucius
Both were inspired by foreign influences and then sought to suppress them	Christian scholasticism set out to suppress influence of Islamic philosophy/theology	Neo-Confucianists set out to suppress influence of Buddhism
Both became part of orthodox doctrine that lasted for around 800 years	Aquinas theology became part of official Catholic doctrine	Chu Hsi philosophy became part of official ideology of the ruling elite
Both were ethnocentric and exclusivists with respect to other cultures	Rejected everything non-Christian/Greek	Rejected everything non-Chinese
Both incorporated ancient doctrines into a formal education system	Aristotelian tradition in newly created European universities	Chinese state examination system based on Neo-Confucian formulation of Confucian texts
Both ancient traditions held back progress of science	Scholastics delayed the Copernican revolution by making the university curriculum Greco-Christian, and so were slow to absorb developments in Asian theoretical science, mathematics, also the Peripatetics opposed 17 <sup>th</sup> century scientists like Galileo.	Confucianists opposed all foreign learning, making it difficult to learn Greek geometry, Indian trigonometry, Islamic astronomy, so that they did not have all the necessary pieces of the puzzle to develop modern science

The main points which emerge from the comparison is that both Christian scholastics and Neo-Confucianists over-emphasised the role of ancient learning and institutionalised them into rigid formal systems of education. The Chinese state examination system, which was based entirely on the study of Confucian texts, excluded not only Taoist and Buddhist education, but also did not include scientific subjects. This examination system dominated and dictated the pattern of education in China for over 800 years, and it in effect, created a rote-learning environment of education, where ancient Confucian texts dominated all forms of scholarly activity. Many generations of Confucian scholars in the centuries following the Neo-Confucianist pioneers, looked to ancient Confucian texts for their scientific inspiration. But unlike the Neo-Confucianists, they did not find a philosophy in these texts that explicitly encouraged scientific investigation. The problem had been created by the Neo-Confucianists themselves, who had derived their inspiration from Buddhism and Taoism, but wrongly attributed it to ancient Confucian writings. Unlike the situation in Europe, where the Aristotelian scholastic tradition at universities was overthrown, there was no comparable revolution in the Chinese educational system. The Confucian system of education in China was for the most part, unchallenged. This greatly impeded the growth of science in China, since progress in science depends on thinking for oneself, as opposed to following tradition.

The Christian scholastics were Eurocentric in their outlook and this also retarded progress in science. It meant for instance that the contributions of India and China in the pure sciences, which were well known in the Arab-Islamic world, were not recognised in Europe for many centuries. Needham cites the reason for this being the highly selective translations that were made from Arabic into Latin in medieval Europe. He states:

"It is not that there was no contact between Arabic civilization and East Asian science; quite the contrary. But for some reason or other, when the translations were being made from Arabic into Latin, it was always the famous authors of Mediterranean antiquity who were chosen, and not the books of Islamic scholars concerning the science of India and China".<sup>53</sup>

---

<sup>53</sup> J. Needham, *Clerks and Craftsmen*, p. 15.

A similar problem existed in China. The Neo-Confucianists succeeded in creating a hostile attitude towards the learning of other cultures. In fact, rejecting all forms of foreign learning had been one of their founding aims. This meant that in subsequent centuries, the ruling elite, schooled only in the Confucian classics, was not so open to learning from other cultures as their predecessors had been during the Tang and Sung dynasties. This meant that China was deprived of crucial scientific advances, such as Greek geometry, Indian astronomy, and Islamic astronomy, which all proved important to the development of modern science in Europe.

Equally important, is the Neo-Confucian opposition to Buddhism and Taoism within China. This resulted in Neo-Confucianism depriving itself of spiritual traditions that were rich in scientific inspiration, and as a result, Chinese science declined as Neo-Confucianism rose to power. Seen from this perspective, it is perhaps no coincidence that the decline of innovative science and the decline of Buddhism in China occurred over approximately the same period, that is, the one stretching from the 13<sup>th</sup> century to the 19<sup>th</sup> century.

Through adopting the Neo-Confucianist policy of not accepting learning and wisdom from other cultures, both within and from outside China, China deprived itself of the necessary pieces of the puzzle from which the modern scientific revolution was made. These observations may provide the basis for a solution to "Needham's puzzle": as to why China did not develop modern science.<sup>54</sup>

It is perhaps instructive at this point to remind ourselves of the demise of Neo-Confucianism in the 19<sup>th</sup> century, when China suffered humiliating defeat at the hands of various foreign powers. Although the invading countries had armies numerically much smaller than the Chinese one, they were technologically much more superior, and this proved to be the decisive element in their victory. The 19<sup>th</sup> century is, of course, well known for being a crisis point for Confucianism in China. It was a time when many of the Chinese elite rebelled against the Neo-Confucianist orthodoxy and sought to make reforms. Significantly, the crisis brought about a revival of Buddhism in China. Ian Mabbitt, a historian on modern

---

<sup>54</sup> J. Needham, *The Grand Titration*, Chap. 6.

China, notes that most the 19<sup>th</sup> century Chinese reformers drew much inspiration from Buddhism:

"China's modern "revolutionaries" grew up in a tradition of rebellion where Buddhism was an integral part of the surroundings, like wallpaper. But the influence of Buddhism upon the intellectual life of the new men, who sought during the last hundred years to bring their country into the modern world, is indeed direct and traceable... Buddhism, as a tradition of heterodoxy with something to offer to intelligent men, was of very considerable interest to the fathers of reform in old China. Late in the 19<sup>th</sup> century, the confrontation with a menacing western civilization which could not readily be accommodated to the place assigned to it by orthodox thought compelled many Chinese thinkers to distance themselves from their own culture, seeking to assess it critically as one among many, not as the only possible framework for thought. Liang Qichao (Liang Ch'ch'ao, 1873-1929), one of the later products of this movement, looked back at the intellectual currency of its protagonists and wrote that 'among the late Ch'ing "Scholars of the New Learning", there were almost none who did not have some connection with Buddhism.'..."<sup>55</sup>

Mabbitt judges the influence of Buddhism on modern China to be such a spiritually profound one, that he predicts it will grow and dominate Chinese culture in the future:

"This Part begins with a prediction. However irrelevant Buddhism may seem to modern Chinese culture now, it will in the coming years emerge bit by bit as an influence of no mean order upon the national psyche; and the forms of its influence will appear, not to have re-emerged after long eclipse, but to have been always there. It is therefore proper to give it special attention. This attention is unusual, because it is usually Confucianism that commands our notice. There are those who say that in China the past refuses to lie down dead, but their argument is usually nothing to do with Buddhism. It is the mandarin, not the bonze, who has discarded his robes; and he has put on the new-pressed uniform of the commissar."<sup>56</sup>

---

<sup>55</sup> I. W. Mabbitt, *Modern China*, p. 139.

<sup>56</sup> *ibid.* p. 101.

These observations on Buddhism in modern China reinforce the theme pursued here, that Buddhism has had a lasting impact on scientific and cultural progress in China. The universal, egalitarian, non-partisan principles of Buddhism contrast sharply with the elitist, nationalistic doctrines of Neo-Confucianism, and of the two, it is Buddhism that seems more in tune with the modern world. There is an interesting historical comparison that can be made between China and Japan in the 19<sup>th</sup> century.

Both Buddhism and Confucianism coexisted in these cultures, but their response to the modern world was quite different. As is well known, Japan adopted a much more open response to foreign learning than China, and in fact, its adaptation to the modern world has been a remarkable achievement. Among one of the many differences between 19<sup>th</sup> century Japan and China, was that in Japan, Buddhism had much more of a stronger social profile than it had in China. An interesting line of inquiry would be to investigate whether the greater influence of Buddhism in Japan helped it better adjust to the modern world.

In the Bahá'í Writings, China's 19<sup>th</sup> century defeat is cited in the context of calling for more openness to foreign learning in 19<sup>th</sup> century Persia. The contrast between Japan and China is mentioned, and the benefits of being open to the learning of other cultures are highlighted.<sup>57</sup>

---

<sup>57</sup> 'Abdu'l-Bahá, in his book, *The Secret of Divine Civilization*, p. 110, states that, "Observe to what a degree the lack of education will weaken and degrade a people. Today [1875] from the standpoint of population the greatest nation in the world is China, which has something over four hundred million inhabitants. On this account, its government should be the most distinguished on earth, its people the most acclaimed... Not long ago, a small contingent of English and French troops went to war with China and defeated that country so decisively that they took over its capital Peking. Had the Chinese government and people been abreast of the advanced sciences of the day, had they been skilled in the arts of civilization, then if all the nations on earth had marched against them the attack would still have failed... Stranger even than this episode is the fact that the government of Japan was in the beginning subject to and under the protection of China, and that now for some years, Japan has opened its eyes and adopted the techniques of contemporary progress and civilization, promoting sciences and industries of use to the public, and striving to the utmost of their power and competence until public opinion was focused on reform. This government has currently advanced to such a point that, although its population is only one-sixth, or even one-tenth, that of China, it has recently challenged the latter government, and China has finally been forced to come to terms. Observe carefully how education and the arts of civilization bring honour, prosperity, independence and freedom to a government and its people."

## 5. Chinese Spiritual Traditions and the Belief in a Personal God

It is often claimed that Chinese spiritual traditions are humanist, in the sense that they do not rely upon the belief of a personal God. Usually, only Taoist and Confucianist traditions are discussed. But if the considerable impact of Buddhism on Chinese culture is acknowledged, then the situation is quite different.

Our knowledge of God, according to the Bahá'í Writings, is related both to the attributes of the Manifestations of God, (founders of religion; Moses, Christ, Buddha, etc), and our self-knowledge. Through their teachings and lives we are able to unlock our true spiritual potential, and this is, effectively knowledge of God for us. The Manifestations of God are likened to be perfect "Mirrors" which reflect the light of the "Sun of Truth" (God). The "image of God" in human beings is a reflection of the light cast by these perfect "Mirrors". After referring to man's knowledge of God, Bahá'u'lláh qualifies what He means by it:

"... these mentionings that have been made of the grades of knowledge relate to knowledge of the Manifestations of that Sun of Reality, which casteth Its light upon the Mirrors. And the splendour of that light is in the hearts, yet it is hidden under the veilings of sense and the conditions of this earth, even as a candle within a lantern of iron, and only when the lantern is removed doth the light of the candle shine out. In like manner, when thou strippest the wrappings of illusion from off thine heart, the lights of oneness will be made manifest."<sup>58</sup>

When we think of God, according to the Bahá'í Faith, we are actually thinking about the spiritual attributes of a Manifestation of God reflected within ourselves.<sup>59</sup> When we praise God, we are not actually saying anything about God, we are rather learning more about ourselves. Bahá'u'lláh states:

<sup>58</sup> Bahá'u'lláh, *The Seven Valleys*, pp. 23-4.

<sup>59</sup> In the context discussing the attributes of God, 'Abdu'l-Bahá states, "Accordingly all these attributes, names, praises and eulogies apply to the Places of Manifestation; and all that we imagine and suppose beside them is mere imagination..." *Some Answered Questions*, p. 149.

"Far, far from Thy glory be what mortal man can confirm of Thee, or attribute unto thee, or the praise with which he can glorify Thee! Whatever duty Thou has prescribed unto Thy servants of extolling to the utmost Thy majesty and glory is but a token of Thy grace unto them, that they may be enabled to ascend unto the station conferred upon their own inmost being, the station of the knowledge of their own selves."<sup>60</sup>

If our concept of God is inextricably tied to the attributes of a Manifestation of God, then the great awe and devotion with which Jews and Muslims worship God, or that Christians worship Christ, is equivalent to the way Buddhists regard the Buddha. While Jews, Christians and Muslims pray to God, Buddhists pray to Buddha. While Jews, Christians and Muslims address God in terms of the Father and Lord, so Buddhists address the Buddha as the "Blessed One" and, "Lord of the World".<sup>61</sup> The Buddha declares that:

"The Tathagata sees the universe face to face and understands its nature. He proclaims the truth both in its letter and in its spirit, and his doctrine is glorious in its origin, glorious in its progress, glorious in its consummation. The Tathagata reveals the higher life in its purity and perfection."<sup>62</sup>

These attributes of the Buddha are very similar to those ascribed to the God of the Bible, Jesus, or the Allah of the Quran. Now these observations have several consequences for our present discussion.

Our highest conception of God is an inner one, in terms of spiritual attributes. Ultimately, these attributes do not belong to God at all, but actually belong to us. There is then, no objective description of God possible for us, that is, we cannot describe God in terms that are independent of our spiritual understanding or capacity. The conception of God as an external force, "The All-Powerful Creator" for instance, characterises the traditional approach to God in the Semitic religions, but the inner approach to God, the Immanent One, has also always been present in traditions. Christ declared, "The Kingdom of God is within

<sup>60</sup> Bahá'u'lláh, *Gleanings*, pp. 4-5.

<sup>61</sup> see P. Carus, *The Gospel of Buddha*, pp. 158-9, where both of these titles are used.

<sup>62</sup> *ibid.*, p. 142.

you" (Luke 17: 20). In the Quran it is stated that, "And We know what his soul whispers within him, and we are nearer to him than the jugular vein" (S 1: 15).

Knowledge of God comes from a process of inner enlightenment inspired by a Manifestation of God, and this is an irreducibly personal process. This doctrine shares much with the search for the universal "Buddha nature" within each human being, which characterised the primary aim of Chinese Buddhism. Knowledge of God, is then, effectively the discovery of Buddha's spiritual attributes within oneself. The personal relationship that Christians strive to have with Christ through prayer, is similar to the meditation practice of Buddhists aimed at discovering the universal "Buddha-nature" within. From this perspective, the belief in a personal God was very much alive in China. It was expressed primarily in terms of an inner and personal relationship with the "Universal Buddha" immanent within the mind. Chinese Buddhism covered a wide range of different beliefs, from the humanisation of Buddha through to his God-like exaltation.<sup>63</sup> Since Chinese Buddhist monks greatly influenced the pattern of spiritual life in China, it is reasonable to acknowledge that there were at least these elements of a personal God belief in China. They did not speak of the attributes of God, but referred to the spiritual qualities of the universal Buddha, the "Buddha nature" within the mind, and this from the Bahá'í point of view, is effectively the same thing.

## 6. Conclusion

This paper has argued for Buddhism being the founding inspiration of the Chinese cultural renaissance in the Tang and Sung dynasties occurring over a thousand years ago. It calls for a reassessment of the place of Buddhism in Chinese history. The Chinese culture is usually portrayed as primarily Confucian. Redressing this balance is somewhat analogous to pointing out that the European Renaissance was inspired by Islam,<sup>64</sup> it goes against centuries of orthodoxy and ethnocentricity.

---

<sup>63</sup> Y. H. Yeo, An introduction to the doctrines of soul and Enlightenment in Mahayana Buddhism and the Bahá'í Faith, *The Singapore Bahá'í Studies Review*, Vol. 3, pp. 54-62.

<sup>64</sup> A. Khurshed, Medieval Islam: The influence of Islam on Judaism and Christianity, *The Singapore Bahá'í Studies Review*, Vol. 2, pp. 175-229.

What implications do the findings of this paper have for science and religious issues in China from a Bahá'í perspective? The first observation is that it is misleading to think of the Chinese spiritual tradition as a "religion without revelation"<sup>65</sup>. The Chinese Religion consists of three spiritual traditions, Confucianism, Taoism, and Buddhism. Buddha is referred to as a "Manifestation of God" in the Bahá'í writings, comparable to Jesus, Moses, Muhammad or Krishna,<sup>66</sup> so if the Chinese religion includes Buddhism, it is certainly a "religion with revelation". This then provides some ways at least, to apply the basic Bahá'í premise that religion lies at the root of all civilisations<sup>67</sup> to the history of China. It also allows for the role of a personal God in China, since from the Bahá'í perspective, God is effectively understood through the spiritually transforming impact a Manifestation of God has on people's inner lives. Chinese Buddhist monks for centuries sought enlightenment through meditating on the universal "Buddha-nature" within the mind, and their spiritual transformation had a considerable impact on Chinese society as a whole, particularly on the ruling Confucian elite who frequently sought their company.

## Works Cited

### 'Abdu'l-Bahá

- *The Promulgation of Universal Peace*, Bahá'í Publishing Trust, Wilmette, Illinois, 2<sup>nd</sup> ed., 1982.
- *Some Answered Questions*, Bahá'í Publishing Trust, Wilmette, Illinois, 1984.
- *The Secret of Divine Civilization*, Bahá'í Publishing Trust, Wilmette, Illinois, 1984.

<sup>65</sup> P. G. L. Chew, *The Chinese Religion and the Bahá'í Faith*, p. 51.

<sup>66</sup> 'Abdu'l-Bahá, *Promulgation of Universal Peace*, p. 197, "The Holy Manifestations Who have been the Sources or Founders of the various religious systems were united and agreed in purpose and teaching. Abraham, Moses, Zoroaster, Buddha, Jesus, Muhammad, the Báb and Bahá'u'lláh are one in spirit and reality."

<sup>67</sup> 'Abdu'l-Bahá, *Secret of Divine Civilization*, p. 80, "Our purpose is to show how true religion promotes the civilization and honour, the prosperity and prestige, the learning and advancement of a people once abject, enslaved and ignorant, and how, when it falls into the hands of religious leaders who are foolish and fanatical, it is diverted to the wrong ends, until the greatest of splendours turns into blackest night."

**Bahá'u'lláh**

- *Gleanings from the Writings of Bahá'u'lláh*, translated by S. Effendi, Bahá'í Publishing Trust, London, UK, 1978.
- *Seven Valleys and the Four Valleys*, translated by Marzieh Gail, Bahá'í Publishing Trust, Wilmette, Illinois, 1991.

**Carus, Paul**, *The Gospel of Buddha*, One World Publications, Oxford, UK, 1994.

**Chan, Wing-Tsit**, *A Source Book in Chinese Philosophy*, Princeton University Press, Princeton, USA, 1983.

**Chang, Carson**, *Development of Neo-Confucian Thought*, Vol. 1, Bookman Associates, New York, 1957.

**Chew, Phyllis Ghim Lian**, *The Chinese Religion and the Bahá'í Faith*, George Ronald, Oxford, 1993.

**Ching, Julia**, *Chinese Religions*, Orbis Books, New York, 1993.

**Drake, Stillman**, *Galileo*, Oxford University Press, Oxford, UK, 1980.

**Gregory, Peter N. and Getz, Daniel A.**, *Buddhism in the Sung*, Studies in East Asian Buddhism 13, A Kuroda Institute Book, University of Hawaii Press, Hawaii, 1999.

**Khursheed, A.**, Medieval Islam: The influence of Islam on Judaism and Christianity, *The Singapore Bahá'í Studies Review*, Vol. 2, 1997.

**Koestler, Arthur**, *The Sleepwalkers*, Penguin Books, Middlesex, England, 1964.

**Needham, Joseph**

- *The Grand Titration*, Science and Society in East and West, George Allen and Unwin Ltd, London, 1969.

- *Clerks and Craftsmen in China and the West*, Cambridge University Press, Cambridge, UK, 1970.

**Mabbitt, Ian, W.**, *Modern China, the Mirage of Modernity*, Croom Helm, London, 1985.

**Pacey, Arnold**, *Technology in World Civilization: A Thousand Year History*, Basil Blackwell, Oxford, 1990.

**Reilly, Kevin**, *Readings in the World Civilizations*, Vol. 1, The Great Traditions, St Martin Press, New York, 1992.

**Ronan, Colin A.**, *The Shorter Science and Civilisation in China*, An abridgement of Joseph Needham's original text, Vols. 1 and 2, Cambridge University Press, Cambridge, UK, 1980.

### **Buddhist Scripture**

*The Diamond Sutra and The Sutra of Hui-Neng*, translated by A. F. Price and Wong Mou-Lam, Shambhala, Boston, 1990.

### **Confucius Scripture**

*Confucian Analects, The Great Learning, and The Doctrine of the Mean*, Translation by James Legge, Dover Publications, New York, 1971.

### **Taoist Scripture**

*Tao-te Ching*, chapter 7 in Wing-Tsit Chan's, *A Source Book in Chinese Philosophy*.

**Suzuki, D. T.**, *Manual of Zen Buddhism*, Rider and Company, London, 1950.

**Yeo, Y. H.**, An introduction to the doctrines of soul and Enlightenment in Mahayana Buddhism and the Bahá'í Faith, *The Singapore Bahá'í Studies Review*, Vol. 3, 1998.