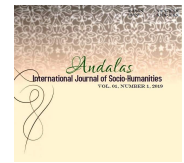




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Review

The Malayonesian Cosmological Doctrines in Some Past Scientific Writings in Malay

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A B S T R A C T

The Malayonesian cosmological doctrines highlighted here are based on the study of the five Malay inscriptions dated 5th century to 14th century A.D, a traditional Malay folklore on cosmology compiled by Abdullah (1984), and a well known best seller Malay manuscript entitled *Taj al-Muluk* edited by Syaikh Ismail al-Asyi (1893). We find that the Malayonesian cosmology changes as the people change their religion successively from Hindu to Buddha and to Islam as such that their cosmology became a syncretism of Hindu-Buddha cosmology and Islamic cosmology (after 13th century A.D). But in the second part of the 20th century, the Muslims through out the world began to rediscover their cosmology in relation to a much more pure Islamic cosmology. As a result, a substantial portion of Malayonesians become dualistic or syncretic in their cosmology. Then toward the end of the 20th century came a very powerfull Western cosmology invaded the Muslims thought through economics and malitarism as such that their belief in Islamic cosmology has to accommodate the Western cosmology as well and hence the syncretic Hindu-Buddha-Islamic cosmology became less prominent. A new relativistic dualism, namely a parallel recognition in both the Islamic and the Western cosmologies appeared in Malayonesian cosmology.

INTRODUCTION

This work is influenced by the famous book by Nasr (1964). Analogous to his argument we intend to show here that the past scientific writings in Southeast Asia using Malay language as a medium of expression were also influenced by the cosmological doctrines of the people in the region. For historical reason, as well as for brevity, simplicity and aptness, as we have adopted since a few years ago (Shaharir 2008), we purposely use the term Malayonesia coined

by the British ethnographer and naturalist, George Earl, in the middle of 19th century for renaming the Southeast Asia region.

Until today, the writings on Malayonesian cosmology have been mainly based on interpretations of Malayonesian poises (religious ritual culture and customs of the natives and indigenous people of Malayonesia, or their traditional performing arts and on non-scientific writings or literature), as shown by papers presented at the “*Seminar Antarabangsa Kosmologi Melayu*” (International Seminar on Malay Cosmology) ⁽¹⁾ 1994, the First International Conference on Malay Civilization 2002, and the *Kolokuium Bahasa dan Pemikiran Melayu/Indonesia Ke-3* (the 3rd Colloquium on the Malay/Indonesia Language and Thought) 2002. The proceedings of these meetings are edited by Yaacob (2001), Asmah (2003) and Worasit (2004) respectively. Exceptions of such writings are few and they are discussed in the section 2 below. A more recent two seminars, “The Fourth East Asia & Southeast Asia Conference on The Philosophy of Science 2014” held on 5-6 Nov. 2014 at Institut Latihan Islam Malaysia (ILIM), Bangi, Selangor, Malaysia, and “*Seminar Falsafah dan Hikmah Melayu*” (Seminar on Malay Philosophy and Hikmah) held on 13 Dec. 2014 at Universiti Malaya do have a few papers which deal indirectly on Malay cosmology but the studies involved were still not based on the past Malayonesian scientific writings except the paper by this author which is re-presented here. There are two books edited by the Malaysian *Sasterawan Negara* (National Literature Laureates), Anwar (2005) and Muhammad Haji Salleh (2012) which indirectly deal with Malay cosmology. However all of them also do not make use of any Malay scientific writings as the basis for their studies except a few contributors who will be discussed in section 2 below. We also have yet to obtain an Indonesian scholar who wrote about Indonesian cosmology based on any pre-Indonesian (or Malay) scientific writings similar to what we intend to do it here (Note that before the formation of Indonesia 1945, the present Indonesian people share the same literatures (and scientific writings) as the present Malaysians and any other parts of Malayonesia). However, we note that a book entitled “*Manusia Indonesia*” (Indonesian People) written by a great Indonesian journalist, Mochtar (1977), indirectly contains some interesting descriptions of the Malay cosmology which coincides with some of the findings by the writers mentioned above, even though the book was based on his perceptions and journalistic observations only. We will discuss all these in section 2 below.

Malayonesia was influenced first by the Hinduism since about the end of the 1st century (considering the Malayonesian calendar year named *Saka* (S) was started in the year 78 A.D), Buddhism since not later than 6th century A.D (considering the Champa kings during that century were Buddhist), Islam since 13th century (considering the tomb of the oldest Muslim king in Pasai/Aceh dated 1292 A.D, and the oldest Malay-Islamic inscription in *Jawi* found in Terengganu dated 1303 A.D)¹, and later their European colonials since 16th century (considering the fall of Malacca to Portugese 1511 A.D). The Malayonesian cosmology changes accordingly but remain distinctively their own cosmology albeit syncretic or dualistic in nature as revealed in this paper. Our study were based on the following past scientific writings in Malay:

¹ Even though it is not uncommon among scholars to highlight the islamisation in Kelantan (a state in East Coast of the Malaysian Peninsula) was very much earlier than Pasai based on a coin dated 577 H (= 1181 A.D), one the face of the coin written in Arabic “*al-Julus Kelantan 577*” and the other face of the coin written in Arabic “*al-Mutawakki*”, but to date there is no other evidence to support the claim.

- 1) Malay inscriptions: the Dong Yen Chau (in Champa, presently Vietnam) dated about 400 A.D, the three Malay inscriptions in Sumatera, namely Talang Tuwo dated 606 S/684 A.D, Kota Kapur and Karang Brahi dated 608 S/686 A.D. , and the Terengganu inscription (presently in West Malaysia) dated 702 A.H/1303 A.D.
- 2) The famous manuscript, *Taj al-Muluk*, edited by Syaikh Ismail al-Asyi (1893)
- 3) A book by Abdullah (1984) which contains a folklore on Malay cosmology

A REVIEW ON THE MALAYONESIAN COSMOLOGICAL DOCTRINES DERIVED FROM NONSCIENTIFIC WRITINGS

As mentioned earlier, so far, Malayonesian cosmology have been derived indirectly through non-scientific writings such as all the well known *Hikayats* (mythological genres), folklores, traditional *pantuns* and proverbs, and manuscripts entitled partly as *al-Salatdin* such as *Sulalaht al-Salatdin* (Sulalatus Salatin) and *Taj al-Salatdin* (Tajus Salatin). For our comparison later on, we present here all those cosmological doctrines which we thought even indirectly obtained by those writers. In Muhammad Haji Salleh (2012), only two contributors namely Noriah (pp. 85-108) and Siti Hajar (pp. 109-137) in which some Malayonesian cosmological doctrines could be derived as follows: The are **the Seen World (Our World) and the Unseen World**. In a more original Malayonesian cosmology the Unseen World is known as *Kayangan*, the place where some human-like-beings known as *makhluk indera* (traveling beings), *peri*, *dewa* (deity), *bidadari* (female-like beings) and *mambang* (ghost); whereas in the sufistic world the Unseen World is the world of *Nur Muhammad* (Light of Muhammad) known as *Alam Jabarut* (World Without Form) and *Alam Malakut* (The World of Angels where *Malaikat* or Angels live), and the world of all soles created by Allah from *Nur Muhammad*. There are other Unseen Worlds in Sufism but Siti Hajar failed to mention clearly whether those Worlds are in *Hikayat Nur Muhammad* 1668 or not. Further more the discussion on the supposedly Malayonesian cosmogony, the *Martabat Tujuh* (the Seven Order), by Siti Hajar is rather confusing as such that one could not ascertain that the theory belongs to Malayonesians scholars in the 16th - 17th century or not due to her effort to bring a similar theory by Ibn Arabi and al-Hallaj, the Islamic Civilisation scholars. Muhammad Hj. Salleh (2012) also quoted other writers on “Malay cosmology” which is worth mentioned it here again. He said, according to “*Surat Pawang*” (A Shaman Letter as reported in Harun, 2003) the World began with the presence of ‘*Pawang yan tuha*’ (The old Shaman) who had existed before the earth and the heaven. The earth began as a size of a pan and the heaven as big as an umbrella. The earth created by the *Pawang* when he became passionate... then the various plants were created having four branches, i.e. *Syajrat Muntaha*, *Tubi*, *Khuldi*, and *Nasrun Alkam*, each directed towards north, south, east and west.... , became *Datuk Mentala*, ..., *jins* etc. ,..., source of all diseases, i.e ghost (*hantu*, *jembalang*, *polong* and *penanggal*) . Centre of the earth is *Ular Saktimuna* (a serpent). God then directed Gibrel to cut the serpent into various parts and each part then became various types of *jins*, ”. This is clearly a Malayonesian **syncretic animistic-Hinduistic-Islamic cosmology-cosmogony-Cosmogogenesis**.

Further, Muhammad Hj. Salleh (2012) also quoted A.Wahab (in Yaacob, 2001: 312-13) that in Malay folklores, the Unseen Worlds are *Alam Semangat* (World of Spirits or Soles), *Alam Hantu* (World of Ghosts), and *Alam Orang Halus* (World of Invincible Beings); and some people may have the ability (knowledge) to communicate with these Worlds. This is a Malayonesian **syncretic animistic-Islamic cosmology**.

According to Singaravelu (in Yaacob, 2001: 43-44), also quoted by Muhammad Hj. Salleh (2012), Malayonesian-Hindu cosmology consists of three *lokas* (*triloka*), i.e. *Brahmanda*, *Havrita* (*Syurga* or Heaven) and *Bumi* (Earth). Every *loka* has seven worlds or *Talas*. One of

the *Tala* in the Earth is known as *Dvipa* or *Jambhu Dvipa*. The centre of the universe is known as *Mahameru*. This is a **simplistic version of Malayonesian Hindu cosmology**.

Muhammad Hj. Salleh (2012) concludes in his article, that the Malayonesians have a very intimate and amicable relationship with the Worlds (the Seen and the Unseen Worlds) perhaps more than they care for among themselves. Thus we term this particular Malayonesian cosmological doctrine as a **universal existentialism**.

In Worawit (2003) only Hassan (pp. 1-12) and Jelani (pp. 104-137) articles can appropriately be highlighted here for their relevancy and indirectly discussed the Malayonesian cosmology. Hassan pointed out that the Malayonesian epistemologies were first irrationalism motivated by the animism, Hinduism and Buddhism followed by Islamic theological-rationalism, alegoricalism, analogism, and pragmatism. However we believe that only analogism that can be characterised as uniquely Malayonesian but at the same time the term “analogy”, and hence our temporary derived term “analogism”, described by Hassan is not quite appropriate because the “analogy” involves in a *pantun* is not the same analogy as in Islamic or Western scientific method but instead more like a syllogism. Thus we rename it as the ***pantunic syllogism***. Jelani’s article is regarding the concept of justice prescribed by the Malayonesian scholars in 16th century and 17th century. However one could not possibly highlighted any of the prescribed good behaviour of a king presented by Jelani to be one of the Malayonesian cosmological doctrines on justice simply because we are not sure weather most of the Malayonesian kings indeed internalised those prescribed good governance or not. We will discuss this later in this article.

In Asmah (2003), Osman (pp. 132-154) argued that Malayonesians leaders and intellectuals had practiced globalism since 13th century up to the 19th century; whereas Mohamed Ghouse (pp. 495-505) showed how the Malayonesian cosmological doctrines in musics and traditional performing arts had evolved from animistic to hinduistic, buddhistic, islamic and finally to western secular-materialistic doctrines.

In Anwar (2005), Zainal Kling (pp.17-61) assumed that Malayonesians before they embraced Hinduism had practiced egalitarianism simply based on a few proverbs such as *berat sama dijinjing*,....., which we thought is insufficient, but became hierarchical society with *raja* (king) as the highest position when Malayonesian embraced Hinduism-Buddhism and feudalism became their cosmological doctrines. When Islam came, again the Malayonesians change their cosmological doctrine from pantheism of Hindu-Buddha gods (*dewas*) to monotheism, Allah, (even though in the early writing the preislamic ia still used such as “Dewata Mulya Raya” in the oldest Malay-Jawi inscription, The Terengganu, Malaysia Inscription dated 708 H/ 1308 A.D as read by Ahmat Adam 2017 ; or in traditional verbal (folklores) Malay literatures, such as *Selampit* and *Wayang Kulit*, “Sang Hyang Tunggal”) and adopted many Islamic values instead but the status of a king is still unchanged as such that the king is regarded as the god’s representative in this world and hence must be obeyed even if the king is a tyrant. Consequently, **Malayonesians become very tolerant towards injustice and tyranny**. On the other hand due to the Islamic teachings on knowledge and business the **Malayonesian leaders, traders and scholars became globalistic in their outlook in intellectualism and trading** until the Western domination and colonisation in the 19th century. Asmah (in Anwar, 2005: 121-144), based on her study on the nature of Malay language and linguistics, argued that **Malayonesians easily adopted foreign mould and abandoned their own and quickly build a strong frame around the new mould** in order to not allowing any modification or innovation on it until another fascinating foreign new mould came and enchanted them. Hassan Ahmad (in Anwar, 2005, pp. 145-162), based on some classical Malay literatures, believes that **Malayonesians are very law**

abiding citizens as supported by the well known proverb, *biar mati anak jangan mati adat* (by interpreting *adat* as laws, not traditional customs as normally understood), and value-based knowledge, *budi*, as implicitly contains in the expression *akal budi*, *budi bahasa*, *budi pekerti* and *budi bicara*. Regarding justice, Hassan (ibid.) thought that Malayonesian leaders (kings) were not autocratic as normally believed, but instead practiced collective responsibility simply based on some advices of Malacca's rulers to their respective princes and officers as stated in the Malay Annals (*Sejarah Melayu* or *Sulalat us-Salatin*) and uphold the rule of law as proved by the Malay proverb, *biar mati anak jangan mati adat*. However Jelani (in Anwar, 2005: 163-163), after studying almost all Malay (*Jawi*) manuscripts on presumably good governance, shows that a **Malayonesian leader (king) must necessarily be an autocratic** since the masses must regard the king as "the shadow of Allah on the earth" and must avoid from *durhaka* (displeasure) to a king and hence must be patient (not even to utter hatredness etc) even if the king is a tyrant, even though at other occasions the same writers usually mentioned the importance not to follow anything that a king asked for which can be considered *maksiat* (god's dislikes), leads to *durhaka* to Allah, or leads to *kafir* (infidelity). However even a list of *maksiats* given in a manuscript studied by Jelani are all regarding things which give displeasures to a king.

In the collection of articles on the Malay cosmology by Yaacob (2001), as mentioned in the Introduction of this article, only Osman and El-Muhammady discussed the Malay cosmology based on the past scientific writings, namely by Hamzah Fansuri, al-Raniri, Daud al-Fatani, dan Abdul Samad al-Palimbani. However their discussions, even though better than Siti Hajar (in Muhammad Hj. Salleh, 2012: 109-137) discussed earlier, we consider them still insufficient because lack of clear explanation on the physical configuration of the celestial bodies as such that a comparison with the modern cosmology could not be made out of it. Azizan (in Yaacob, 2001: 470-489) shows that some of the modern Malayonesian scientists subscribe to the necessity of accepting modern (the Western) cosmology but with a new justification based on *al-Qur'an*; others simply embrace the modern cosmology without confronting it to any Islamic cosmological doctrine. This observation is not quite correct because she neglects other group of Malayonesian scientists who criticised the modern cosmology based on the Islamic cosmological doctrines. Hairuddin (in Yaacob, 2001: 490-506) argued that the Malayonesian scientists have been embraced dualism in their cosmological doctrines but he thought that the challenge from the cosmological doctrines in information technology which emphasised more on *rasio* rather than *intellectus* (dominantly present in the traditional Malayonesian cosmological doctrines) may not be able to resist unless a movement in Islamisation of knowledge wins the intellectual war against the colonisation-Westernisation of knowledge at least in Malayonesia. Other contributors in Yaacob (2001) are regarding Malayonesian cosmology based on traditional belief, custom, artistic work, performance and non-scientific literatures such as Singaravelu (pp. 43-51), and A. Wahab (pp. 306-320) quoted by Muhammad Hj. Salleh (2012) and already discussed earlier. Others, as stated by Yaacob (2001: iv-xix) can be summarised as follows: **the Malayonesian cosmological doctrine is dualistic or syncretic in nature based on animism, Hinduisme, Buddhism and Islam**. Thus the nature of the Seen World and the Unseen World are subjected to dualism or syncretism. Even a Malayonesian cosmology derived from a custom (*adat perpateh*) is shown to be a syncretic Pre-Hindu and Hindu cosmology; similarly with the present cosmology of animistic indigenous people is shown to be influenced by Hindu-Islamic cosmology. Even Islamisation in the era of Islamic revivalism since 1970s until today is shown to be unsuccessful in purifying the Malayonesian cosmological doctrine to a satisfactory Islamic level since the belief in mystical predictionism and shamanism are still widely practiced. **Metaphorism** among the Malayonesians is argued by Asmah (in Yaacob, 2001: 108-208) naturally emerges from the nature of the Malay language

and the Malayonesians in general who prefer to hide their feelings towards others by not expressing them explicitly and hence develop their skill in expressing things metaphorically. Mahadzir (in Yaacob, 2001: 389-406) dan Hussain (in Yaacob, 2001: 407-427) argued that the **Malay heroism or great leader** is based on the strength of a person as a saviour or protector of the Malays; hence **feudalism** in Malay politics is very strong.

Mochtar (1977) described at length on 6 types of behaviour of Indonesian people (naturally can be extended to Malayonesians), i.e (1) hypocrite (behaving differently in the public), (2) irresponsible, (3) **feudalistic**, (4) **mythologistic**, (5) artistic, and (6) weak character. In addition he briefly discussed other 14 characteristics of Indonesians and hence naturally Malayonesians, namely (7) non-*homoeconomicus* (lazy, not a hard worker, seek for instant return, like networking with IK (interpreneurs and knowledge persons); (8) do not show anger openly; (9) easily jealous and envious, (10) easily happy and proud of something empty and frivolous; (11) easily intoxicated by power, wealth etc.; (12) like to immitate superficially anything which fascinates them; (13) animistic mixed with a strong belief in fatalism (hence less scientific inquiry, and weak in adopting the causality principle); (14) less care towards the unfortunate especially those who are unknown to him; (15) strong family ties; (16) **over patient**; (17) easily trained in hands-on ability and competency; (18) **strongly practice syncretism**, i.e. easily excepting paradoxical and ambiguities (inclined only towards searching for complementarity but not interested in resolving contradictions); (19) embrace rhetoricism; (20) embrace time cyclicism (not punctual, time always available)

MALAYONESIAN COSMOLOGICAL DOCTRINES BEFORE 13TH CENTURY

In this section, we show that the two well known Malayonesin cosmological doctrines, namely feudalism, manifested in the form of *darohaka*, and the belief in the two worlds (the Seen and the Unseen Worlds) are indeed contains in the Malay inscriptions dated late 8th century A.D. Similarly with the numerologism.

Feudalism: *Darohaka*

The **Dong Yen Chau inscription** (in Campa/Champa, presently Vietnam) dated approximately 400 A.D written in Kunlun (Old Malay) stated that the King (of a group of Malayonesian people at that time, the Champa/Campa people), was from different world, the world of *Dewa* (*Deva*) or the world of gods whose ancestors were normally unseen or inviscible by the ordinary people. The King was a transformed *Dewa* who was sent by the King of *Dewa*, *Dewata Mulia/Mulya Raya* (the word written on the Terengganu inscription dated 702 H/1303 A.D (al-Attas 1970) or 708/1308 A.D (Ahmat Adam 2017); according al-Attas 1970 it means *Allah Rabb al-'Aalamyn*/the God the Sustenance of the Universe), to the earth destined to become a king. Further, it is stated that the King not only must be obeyed, but even his image, the *Naga* (the big serpent), is sacred and must be respected as such that any one who disrespect it will be a thousand years in hell (*naraka*) with seven generations of his family. The act of disrespect a *raja* (king) is known as *darohaka* or *durhaka* (first recorded on Kota Kapur and Karang Berahi inscriptions dated 686 A.D; the present Malay word is *derhaka*) and it is regarded as one of the “great sin”, if not the greatest, even today. Even today in Malaysia, this belief is coded as a very serious offence and it is included in the Seditious Act in the Malaysian Law. Thus, it is clear that one of the cosmological doctrines of the Malayonesians, **feudalism and in particular the acceptance of *derhaka* as an act of treason**, since the 4th century, would be an animistic-Hindu-Buddha cosmological doctrine; the other is **the belief that the world has two categories, the unseen or the inviscible world where the *Dewas* (males) and *Dewis***

(females) live and the seen world, the visible world, or real world such as the earth, where humans live.

The Seen and the Unseen World

In folklores, this unseen world is known as *Kahyangan* (the original old Malay and Javenese word from *Ka-Hyang-an* which means the place for *Hyangs* (referring to a particular god, *Dewa*, and it was used as part of the mystical and powerful title for Sri Jayanasa, the king of Sriwijaya as recorded on the Talang Tuwo inscription dated 684 A.D); and the Malay word *sembahyang* = *sembah Hyang* = prostrate to *Hyang* or pray to god came from) later corrupted to become *Kayangan*. *Kahyangan* is different from *swarga/sorga* in Sanskrit, which means the goodness or good returns (*ratnas* or jewels) come from for every body who respect the image of his/her king, as also mentioned in the Dong Yau Chen inscription. The word later Islamised to become the the present Malay word *syorga* or *syurga* which means the place in a paradise in the world hereafter. The *Dewas* and *Dewis* governed this Real World as such every thing in this Real World must be respected and not to displeas the guardian (*penunggu* in general and the evil one, *hantu*, in Malay). *Penunggu* and *hantu* already existed in the Malayonesian cosmology before they embraced Hinduism as shown by the belief of the indigenous people all over Malayonesia (see many articles in Yaakob, 2008).

This animistic-Hindu cosmological doctrine continue to exist when the Malayonesians embraced Buddhism not later than 7th century as stated in the **Talang Tuwo inscription** dated 684 A.D in Palembang, Sumatera (The Champa kings were Buddhists since the end of 5th century A.D. as stated by a historian, Jelani, 2002). When Hindu and Buddha came Malayonesia, the two categories of the world became more explicit.

Thus in the Buddha-Malayonesian cosmology, there are three categories of the world in this universe, namely *Arupadhato/Aropadhathu* (The Unseen of The Unseen World), *Rupadhathu/Ropadhathu* (The Unseen World) and the *Kamadhathu* (The Seen World or the Real World). The Hindu-Malayonesian cosmology is just as the Buddha worlds but with different terminologies. The Real world is known as *Bhurloka* (equivalent to *Kamadhathu*). This is the lowest world of cosmos whereby common mortals leave (humans, animals also demons). The unseen world consists of two world, namely *Bhuvarloka* (equivalent to *Rupadhathu/Ropadhathu*), and *Svarloka/Svargaloka* (equivalent to *Arupadhathu/ Aropadhathu*), the highest and holiest world, reserved for the *dewas* and *dewis* (Hindu gods and goddesses). (Sources: Borobudur. <http://www.borobudurpark.com/temple/aboutBorobudur>; Borobudur & Prambanan UNESCO World Heritage. <http://www.borobudurpark.com/temple/aboutPrambanan>)

Numerologism

The **Dong Yen Chau inscription** also contains four Malay terminologies for number : *sa* (one or a; the present Malay is also *sa* with its variant *se* and *satu*), *tjuh* (seven; the present Malay is *tujuh*) and *riwu* (thousand; the present Malay is *ribu*) and *sa-riwu* (one thousand; the present Malay is *seribu*). Thus we can envisage that the Malayonesian people in late 4th century have already had their concept of numbers up to thousands. We can also deduce that the number seven and thousand have some mystical values. In fact, later we show that these numbers or their multiples are used oftenly to describe ultimate numbers of great and mystical things in this universe and for emulates. This is another Malayonesian cosmology namely numerologism. In *Taj al-Muluk*, an emulet or talesman (*tangkal* and *azimat* in Malay) is made of a set of amicable numbers, and in al-Raniyriy's cosmogenesis (discussed later) a number of celestial object in this universe is described in terms of multiples of seven and thousand.

The **Talang Tuwo inscription** also clearly dated 606 Saka (equivalent to an additional 78 years of A.D). It is clear that, even based on this inscription alone, we can confidently conclude that Malayonesians had a decimal numeral system having a zero numeral at least since early 7 century A.D. Indeed based on other Malay inscriptions dated 7th-10th century A.D. xxx (2000) had obtained a complete set of symbols of numbers from zero to nine and simultaneously other numbers written in a decimal system just like our present universal numeral system (the Andalusian numerals, *al-arqam al-ghubariyyah* which is confusingly referred to in English as the Arabic numerals). Number zero is termed in Old Malay (Kunlun) as *khaung* in those days, as mentioned in Aymonier & Cabaton MDCCCCVI (=1906), which became *kosong* in the modern Malay. The most interesting part of these findings is that the Malayonesian numeral system is the oldest decimal system in the world. We can speculate that Malayonesians invented zero (number and numeral) earlier than those oftenly quoted civilisations because of their deeply concern with the concept of *sunyata* in Buddhism especially via Nagarjuna's teachings on reaching *nirvana*.

THE MALAYONESIAN COSMOLOGICAL DOCTRINE AFTER 12TH CENTURY A.D

We believe that this section contains the first time ever written on islamisation of Malayonesian cosmological doctrine and revealing the unique nature of Malayonesian cosmology-cosmogony-cosmogenesis of *Nur Muhammad* and the al-Raniyriy's universe.

First Islamisation

When Islam came to Southeast Asia, and the Malayonesian people embraced it significantly in the end of 13th century A.D, in the earlier part of Islamisation, the Malayonesian adopted the Arabic numeral and alphabets (with modifications and known as *Jawi*) as shown by the Terengganu inscription dated 1303 A.D (al-Attas 1970) or 1308 A.D (Ahmat Adam 2017). By 15th century the Malayonesian writers in general no longer used the pre-Islamic numerals and alphabets but use the Arabic numerals and alphabets instead as shown by the Pengkalen Kempas inscription (in Negeri Sembilan, Malaysia) dated 1467 A.D. where both *Jawi* and *Palawa* scripts are used. During this period of time the pre-Islamic Malayonesian cosmological doctrines had undergone some changes in their form (not in contents) as it may be seen from the Malayonesian folklores and *Selampit* (traditional story telling performances) recorded by Abdullah/Nakula (1984) which was first interpreted geometrically by Shahrir (2000) and briefly re-presented it here. From these folklores and *Selampits*, it can also be seen that the Malayonesian embraced the Hindu-Buddhist cosmological doctrines much more than what we have thought before in the 7th century A.D. In fact at least in the 12th century A.D. the universe or the world for Malayonesians consists of three categories similar to the Hindu-Buddhist cosmology: The Unseen of the Unseen World, *Alam Ghaib Lagi Ghaib* or *Syurgaloka/Surgaloka* in *Jawi* Malay (an Islamic translation or transliteration of *Arupadhatu* in Buddha cosmology and *Svurgaloka* or *Mahameru* in the Hindu cosmology), the Unseen World or *Alam Ghaib* in *Jawi* Malay (an Islamic translation of the *Rupadhatu* in Buddha cosmology or *Bhuvvarloka* in Hindu cosmology) and the Real World or *Alam Nyata* in *Jawi* Malay (an Islamic translation of *Kamadhatu* Buddha cosmology or *Bhorloka* in Hindu cosmology). The *Syurgaloka* or *Mahameru* (in a form of a sphere) was Islamised into '*Arsy al-'Azhim*. *Alam Ghaib* is in a form of a cuboid known as *Catur Mukha Brahma* which presents inside the spherical form of the *Syurgaloka* = *Mahameru* = '*Arsy al-'Azhim* and Islamised into *al-'Arsyul Rahman*. This *Alam Ghaib* contains many worlds, one of them is known as *Meru* or its indigenised name, *Kahyangan/Kayangan*, which was Islamised as *al-'Arsy al-Karim*. The soles of *Dewas* and *Dewis* in the *Meru/Kayangan* were replaced by the soles of prophets (*nabis* and *rasuls*) and saints (*wali*). In *Meru* or *al-'Arsy al-Karim* there is a spherical world known as

Hansa (Hangsa/Angsa) which islamised into *al-Kursy al-'Azhim* and contains many spherical worlds, Real Worlds (*Alam Nyata* which correspond to *Kamadhatu* and *Bhorloka* in Buddha and Hindu cosmology). Among these Real Worlds is Our On Real World known as *Brahmanda* and Islamised as *Jabal Qaf*. The *Brahmanda* or *Jabal Qaf* has seven layers of earths (*bumis*) and seven layers of skies/heavens/celestia (*langits*). The Hell (*Naraka*) is in the seventh layer of the celestia (*langits*) and all the celestia are in the first layer of the earths. In the first layer of the celestia there is a world known as *Bimasaksi* (now it is taken to be the Malay term for our own galaxy). Geometrically, this syncretic Hindu-Buddha-Islamic cosmology is shown in Fig. 1a and 1b below.

Second Islamisation: Nur Muhammad (Light of Muhammad) and Martabat Tujuh (The Seventh Order)

Then a few centuries later, the whole Hindu-Buddha-Malayonesian cosmology above was completely replaced by a much more Islamic in nature whereby the three categories of world is replaced by two world, the unseen world known as the *Alam Akhirat* (Arabic-Malay word which means the Hereafter World) and the *Alam Duniya* (Arabic-Malay word which means the Universe or the Cosmos) both are governed by the God, *Allah*. The Universe and its contents are created by the God from a source known as the *Nur Muhammad* (Arabic-Malay word which means the Light of Muhammad) in orders of creation, *martabat kejadian* in Malay, described in a manuscript entitled *Asrar al-'Arrifin (Rahsia Orang Arif* or The Secrets of the Gnostics) written by Hdamzah Fanshuri/Hamzah Fansuri in 1590 (the title of the manuscript is in Arabic but the contents are in the classical Malay) and the cosmogenesis known by later scholars as *Martabat Lima* (the Five Orders) or *Martabat Enam* (the Six Orders) depending on interpretations of scholars such as Syukri (2005) or Zulkefli (2008) respectively.

The Six Orders are *La Ta'ayyun* or *Zat Tulen* (The Unknown of the Unknown or Pure Essence), *Ta'ayyun Awwal* or *Penyingkapan Pertama* (The First Revelation) or *al-'Ayan al-Thabitah* (Fixed Potentialities), *Ta'ayyun al-Thani* or *Penyingkapan Kedua* (Second Revelation), *Ta'ayyun Thalith*, *Ta'ayyun Rabi'* and *Ta'ayyun Khamis*. *al-A'yan Thabitah* has the following characteristics: (1) active and passive simultaneously; (2) exist (*mawjud*) and void (*'adam*) simultaneously; (3) without origin (*qadim*) and new (*hadith*) simultaneously. Some combine the last three Orders into two as *'Alam Mithal* and *al-Insan al-Kamil* or *Insan Kamil* (The Perfect Man), and thus become the Five Orders. The Orders occur in three different worlds namely *'Alam Lahut*, *Lawh Mahfuz*, and *Nur Allah* which was discussed in great details by Syukri (2005). Some identified the first three worlds as the three worlds of the pre-islamic Malayonesian cosmology described earlier, but according to Syukri (2005) it correspond to the four sufists worlds: *'Alam Jabarut*, *'Alam Malakut*, *'Alam Mithal* and *'Alam Ajsam*.

al-Raniyriy's Universe: Cosmogenesis and Configuration of Celestial Bodies

Later, in 1639, Nur al-Diyn al-Raniyriy/Nuruddin al-Raniri presented much more detail on the nature of *Nur Muhammad* but with an improved number of orders of creation into seven, and hence his theory of cosmogenesis is known as the *Martabat Tujuh* (the Seven Order) in his famous manuscript entitled bilingually, *Bada' Khalq al-Samawat wa al-Ardh* (Arabic) or his own translation in Malay *Kejadian Tujuh Petala Langit dan Tujuh Petala Bumi* (which means The Creation of Seven Heavens and Seven Earths). This manuscript is found in *Taj al-Muluk*, one of our main source of study references for this paper. According to his theory, the God created the *Nur Muhammad* from nothing and the cosmos then created from the *Nur Muhammad* the seven Orders (state of creation) namely *Martabat Ahadiyah* (Order of the One Form), *Martabat Wah-dat* (Order of the First Form), *Martabat Wahidiyat* (Order of the Early

Form), *Martabat Alam Arwah* (Order of World of Soul), *Martabat Alam Mithal* (Order of World of Examples), *Martabat Ajsam* (Order of Mass) and *Martabat Alam Insan al-Kamil* (Order of World of Complete Man) or simply we rename it as the Seventh Order. Briefly, the First Order God is the state of being the pure essence or *dzat* of God only without being able to be described by any words or means; the Second Order is the state of creation from the *Nur Muhammad* without being able to be functioning yet but only a creation of a form of manifestation of his presence known as *tajalli* in Arabic; in the Third Order, the God created from *Nur Muhammad*, the origin of every thing; in the Fourth Order, the God created one soul which became the origin of all souls created in the next Order; in the Fifth Order, the God created all the unseen/invisible things but real namely angels (*malaikats*), *jins* (which includes *syaitdan/satans*, *hantu/ghosts* and *iblis/devils*), souls, heavens, hells etc.; in the Sixth Order God created all physical things (things with masses); in the Seventh Order God created human beings. Then al-Raniyriy not only described the creation of those things in the *alam Ghaib*, the Unseen World (in the Fifth Order) (*lawuh mahfuz*, *qalam*, *'arsy*, *'arasy kursy*, *lwa' al-hamd*, *malaikat*, *jin*, *syaitan dan iblis*, *sidraht al-muntahday*, *langit*, *syurga*, *neraka*, *hur al-'ain*, and *byt al-ma'mur*) but the order of creation of things in this cosmos, physical world (in the Sixth Order).

According to al-Raniyriy, the first thing Allah created was the light known as the *Nur Muhamad* (from the the emission of His *Nur Ahadiyah*), and it happened from *'adm* (void or empty) to an existence (*wujud*), followed by other creations from this *Nur Muhammad* not through evolutions but simply instantly by the the Order of Allah, “let it be” (*kun fayakun*) or by His Lovingly Look (*tilik mahabbah محبه* or *tilik Hdaybaht هيبه*). The first creation from *Nur muhammad* is sole (*ruh* or *nyawa*) then intellect (*'aqal*) and *qalam*. The first sole created was from a dot of perspiration of the *Nur Muhammad*; it became all human soles (*nyawa insan*). From these human soles God created the soles of all angels and from the soles of angels came soles of *jins* (holy ghost and spirits), followed by soles of *satans* (*syaitdan/syaitan/setan* in Arabic and Malay), soles of animals (*haiwan/binatang* in Malay) and soles of plants (*tumbuhan* in Malay). From soles of plants the God creates the four fundamental substances: soil (*tanah* in Malay), water (*ayer* or *air* in Malay), fire (*api* in Malay), and air (*hdawa'* or *angin* in Malay). By the *tilik hdaybaht هيبه* or *al-mahabbah المحبة* of Allah that the fire heated the water to produce smoke (*asap* in Malay) and subsequently became the sky/heaven/celestium (*langit* in Malay); the air (*hdawa'*) and smoke (*asap*) became the Sun, the Moon and the stars; the wind came from the sole of fire lid to produce water waves and subsequently water foams to become this earth; the waves themselves became hills and mountains; water became seas and oceans. All these happened in six days (the present unit of day).

It is interesting to note that al-Raniyriy uses the Malay word *petala langit* which literally means layers of skies to describe a number of strata of object above the earth. This word is suitably understood in accordance to the believe in the flatness of the world, even though the word can also be used for strata of a thing which is curved in nature, such as concentric spheres as depicted in Fig 2 in the Appendix. In fact, traditionally, the **Malayonesians, just like other people all over the world (the West before 16th century) believe that the world is flat. Mathematically, this is true even today provided that one describes this world locally (which means in a small area or a vaccinity of anybody); in fact this is one of the important assumption in modern cosmology that the whole universe is locally flat, and the mathematical term for the universe is a Manifold.**

Further, al-Raniyriy also describes astronomical objects during his times as follows: There are 10 layers of skies, the first 7 layers are the Seven Stars or *Bintang Tujuh* generically referred to as the Wandering Stars or *Bintang Siarah*; both are the translations of the Arabic term, *Najm*

al-Siyyarah (See Fig. 2) which is the same as the pre-Copernicus model of our world known in Western the geocentric model of the world but with the Arabic names of the “stars” (or planets) to replace (Islamise) the Sanskrit terminology already known to the Malayonesian astrologers/astronomers (*horasakti* and *hora* in the Old Malay) before Islam (Shaharir, 2013). There is the 8th *langit* (see Fig. 2) which contains many *Kursies* (*Kursiy* for a singular form; literally means Chairs) and one of the *Kursiy* known as *Falak al-Tawabik* where the twelve fixed stars (the zodiac) reside. All other stars are at these *Kursies*. Rotation (*Perkitaran* or *Putaran* in Malay) of this layer occurs locally from the West (*Maghrib* in Arabic or *Barat* in Malay) to the East (*Masyriq* in Arabic or *Timur* in Malay), or anti-clockwise. There is the 9th *langit* (see Fig. 2) known as *Falak al-Atldas* and the 10th *langit* known as *Falak al-A'zham*, or 'Arasy, which has without stars and its rotation is locally from the East (*Masyriq*) to the West (*Maghrib*), or clockwise.

There are 12 fixed stars or constellations (*buruj*), the same as the constellations known by the Greek and the pre-Islamic Malayonesian astronomers but now with the Arabic names to replace (Islamise) the Sanskrit names or the original Malayonesian names as already discussed by (Shaharir, 2013)

There are 28 Lunar Mansions (*Manazil* in Arabic-Malay or *Naksara* in Sanskrit-Malay), believed to be the temporary stopping places of the moon and they are known *Naksara* by the pre-Islamic Malayonesian astronomers but later with the Arabic name, *Manazil*, to replace (Islamise) the Sanskrit name, and the Islamisation also includes replacing a few of the elements the 28 Lunar Mansions in the original Malayonesian names into the Arabic as already discussed by Shaharir (2014).

The geocentric world of al-Raniyriy (Fig. 3) is still popular among the Malayonesian religious scholars until today judging from the popularity of such writings, for example the book by Ahmad Sabiq 1427 H (=2006) was reprinted 5 times until 1429 H (during a period of two years of Islamic calendar). However, **the many worlds theory** (by al-Raniyriy or even by other great scholars during Islamic Civilization such as al-Raazi) was abandoned completely judging from the fact that there has been no interpretation of the quranic word 'alamyyin ('alamin) as many worlds in Malay (This is discussed at length in Shaharir, 2012)

The difference between the al-Raniyriy's theory and the Ptolemy's theory is that the number of layers of the worlds are 10 and 11 respectively, and the direction of rotation for these two layers of the world in the Ptolemy's theory is locally from East to West. These differences can be regarded as due to the result of Islamisation of the Greek model beyond the changes in names of the Greek Wandering Stars to adopt the Arabic names which are not associated with the Greek or Roman Gods. The abandonment of the eleventh layer of the Greek world is very Islamic because the layer is inhibited with the Greek Gods and “the Selected people” which contradict to the Islamic teaching. Islamisation was also done on the names of the 8th, 9th and 10th layers from the fixed stars layer into *Falak al-Thawwabit* الثوابت, the name of the Crystalline Layer into *Falak al-Atldas* الاطلس and the Prime Mobile Layer to *Falak al-A'zhim* الاعظم or 'Arasy عرش, without stars on it, and stationary in nature.

Besides the the theory of Our Small World with its ten layers centered around the the Earth, al-Raniyriy also presents a theory of nature and the universe all together centered at *Jabal Qaf* around which there are seven layers of skies where there are 70 thousands of earths like our earth and each “back of the earth” there are 70 thousands worlds similiar to the Our (Small) World centered at the earth. Thus al-Raniyriy's Universe contains 7×70 thousands $\times 70$ thousands Small Worlds, or 34 billions 3 hundreds millions Small Worlds (i.e there are that

much number of stars in the al-Raniyriy’s Universe). These numbers are smaller than the present Western knowledge on the number of stars as discussed in Shaharir (2014). It is still yet unknown on the level of innovation made by al-Raniyriy on both of theory of Small World and the universe because his references are not yet available (to us). The al-Raniyriy’s model of the universe can be geometrically illustrated in Fig. 3 in the Appendix.

Beyond the seventh *langit* around the *Jabal Qaf* there are 7 layers of oceans, and further there are layers of 8 walls/partitions/veils (*hijab*) each of which has 70 thousands *hijabs* respectively from *Nur*, *Zulmat*, thundering (*halilintar*), lightening (*kilat*), light like the light from the sun (*cahaya seperti cahaya matahari*), light like light from the moon (*cahaya seperti bulan*), oceans (*laut*), and rivers (*sungai*). Some believe there exists also separations (*hijabs*) consist of trees (*pohon kayu Sidraht al-Muntahday*), *Jannaht al-Ma’wa*, *al-Hamd*, *al-Yajd*, *al-Jabarut*, *al-‘Izzaty*, *al-Zulumat*, *al-Kibriya*, *al-Kursy*, and *al-‘Arasy*. All these *hijabs* are inhibited by angels.

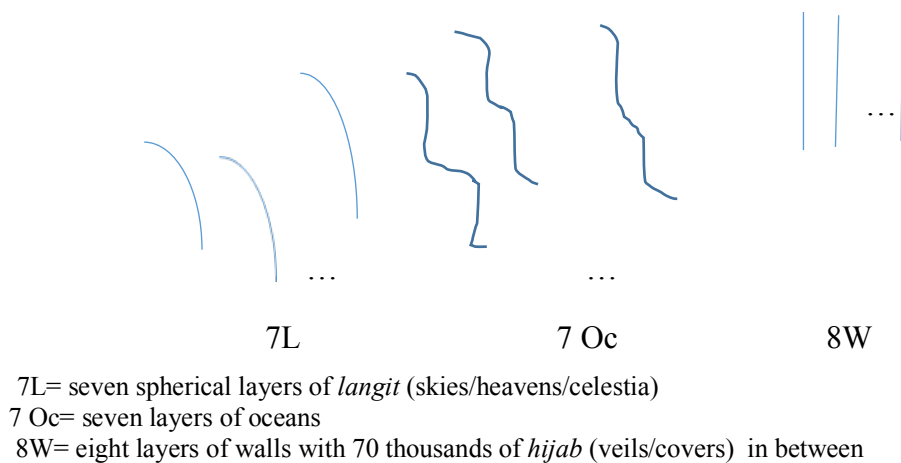


Fig. 1. Beyond the Seven Skies according to al-Raniyriy

There are 7 layers of earths on the back of a cow from the Heaven of Firdaus (*Jannaht al-Firdawus*) which has 40 thousands horns. The distance between the horns is 500 (some say 50 thousands) years of travelling (*perjalanan*), 40 thousand feet, 40 thousands heads and similarly with the number of ears, noses, mouths, and tongues. Its head is at the East (*Masyriq*) and its tail at the West (*Maghrib*). The distance between the earth and the first *langit* is 500 years of travelling (*perjalanan*). This is similar to the myth among the people in the Middle East, Greek, Hindia/India or even European in general (until our modern time)².

² **According to Arabic and Jewish mythology** (Internet 1) a vast fish fish known as *Bahamut* (Arabic: *Bahdamwut*, بهموت), or *Behemut* in Jewish/Hebrew, supports the earth. In some sources, *Bahamut* is described as having a head resembling a hippopotamus or elephant. **In Hinduism**, the creature is *Akupara*, a gigantic tortoise supports the earth. In *Vedas*, the second incarnation of *Vishnu*, a turtle known as *Kurma*. **In Greek mythology**, it is one of the *Titans*, *Atlas* does the job (The word “atlas” came from. The Greek believe that *Atlas* was forced to hold the earth on his shoulder for ever after he was defeated in the war with *Kratos*). *Titans* are the Greek gods/deities believed to be the decedents the God of the earth (*Gaia*) and heaven (*Uranus*). **As for European mythology**, it is indirectly described by Stephen Hawking, in his best seller, *A Brief History of Time* (1988). In the book, he made an anecdote mentioning the occasion at the end of a public lecture on astronomy given by Bertrand Russel whereby “a little old lady at the back of the room got up and said: “What you have told us is rubbish. The world is really a flat plate supported on the back of a giant tortoise.” Russel gave “a superior smile before replying, “What is the tortoise standing on?” “You’re very clever, young man, very clever,” said the old

Al-Raniyriy also mentioned that the skies/heavens/celestia (*langits*) was created from substance known as *jawhdar/jauhar* which contains in the “smoke of jewel water” (“*asap air manikam*”; an interpretation of the quranic term, *dukhan* in *Suraht Fushilat, Ayaht 11*). Some Malayonesian scholars later regarded *langit* as the fifth fundamental element equivalent to *akasa/angkasa/al-athir/aether/ether* (Shaharir, 2011).

al-Raniyriy’s Theory of The Origin of Spesies

As said earlier, every thing is from *Nur Muhammand* the origin of every sole, in particular the sole of animals and plants (these soles were created after the creations of human soles, angels, holy ghost and spirits, and satans in that order). The plants began with seeds known as *biji sawi* (mustard seed, *Brassica juncea*). The man began with Adam but the concept of Adam is different from the presently adhered to as such there were 10 thousands of Adams and 200 thousands of man created from light about 10 milion years earlier than the well known Adam and Eve.

Creations of all things are classified into three: Animal kingdom or *haywanat*, plants or *nabatat*, and things without life, without uncertainty, like stone, sand and soil or *jamadat (tiada bernyawa, tiada berlebih berkurang, seperti batu dan kersik dan tanah)*. *Haywanat* consists of five

categories: human (*manusia*), angels (*malaikat*), genes (*jin*), satan (*syaitdan*) and animals (*binatang*). Humans are either Muslims (*Islam*) or infidels (*kafir*). This biological classification creates **dualism among present Malayonesians** since most of them believe in this Islamic teaching as well as the modern Western biological classification.

Syncretic Hindu-Buddha-Islam Cosmology in Life: Predictionism, Spiritualism, Dreams Interpretation, Medicine, Healing, Personal Defence and Security, Sexology and Preparation for Building a House

The contents of the *Taj al-Muluk*, other than the manuscript by al-Raniyriy and Syaykh Abbas Kuta Karang, and a translation of the famous 40 hadith compiled by al-Nawawi, are **regarding predictions** (horoscope, *rasi, kutika, rejang* or *ilmu nujum* in Malay) of all sorts of situation and intentions, curing and healing all sorts of deseases, sexology, spiritual defences from humans, animals and satans/devils (*syaitdan* and *iblis*), interpretation of dreams, and prescriptions for doing almost every thing and living including a preparation for making a house/home. **The subjects are seen from the the physical as well as the spiritual worlds** in accordance with the aherence to the belief in the existence of the seen/visible and unseen/inviscible worlds. Thus most deseases are treated not only by consuming or rubbing the relevant herbal medicine but also by reciting, chanting or wearing talismans/amulets (*tangkals* or *azimats*) of some religious rituals or sacred writings/symbols which are Islamised heritage of the pre-Islamic practices. **The existence of holy ghosts and spirits** (genies or *jins*), devels (*iblis*) and satans (*syaitdans*) in Islamic teachings (part of the unseen Islamic world) is integrated into the pre-Islamic belief in ghosts (Malay ghosts are: *hantu, polong, penunggu, pelesit, orang halus* etc.). **The Islamic teaching of recognising every living thing has sole is integrated with the pre-Islamic belief** in the power of spirit of every thing on earth. Thus

lady. “But it’s turtles all the way down!” Again Bertrand Russell, in his lecture *Why I Am Not a Christian* (1927) use this Hindu cosmology myth to support his argument on the invalidity of argument based on God.

came the ritual of soothing the spirit of every thing that man has to deal with including a preparation for building a house which is elaborately prescribed in *Taj al-Muluk*. **Horasakti and Horasastera (Malayonesian astrology and astronomy during the pre-Islamic period) is integrated with the 'ilm nujm** (the Arabic astrology considered Islamic by the earlier Malayonesian Islamic scholars) to become an important prestigious and practical knowledge for Malayonesians until today such as the good and bad times, days and months prescribed lengthily in *Taj al-Muluk*. The **interpretations of dreams in *Taj al-Muluk* also reflect an integration of the pre-Islamic heritage of Malayonesians and the Islamic elements of the subjects concerned**. Thus even though dreams of seeing or meeting the prophet Muhammad and the God *Allah* are prohibited the interpretation of these dreams are discussed in *Taj al-Muluk*. Other dreams on the subjects in the Islamic Unseen World such as dreams on angels, prophets, Hereafter (*qiyamaht*), Bridge of Judgement (*Titian Shiratd al-Mustaqiy*), God's Individual Programs (*Luwah Mahfuz*) etc. are discussed which are unislamic. It is interesting also to note that dreams of a benevolent or unjust king (*raja*) or minister (*menteri*) are not allowed to be interpreted in any way and a dream of becoming *raja* signifies of doing something unjust (*aninyaya*), and a dream of an angered *raja* signifies of losing wealth. These are manifestations of feudalistic nature of Malayonesians and the Malayonesian belief in the sacred power of a king as discussed earlier with regard to the content of the oldest Malay inscription. There are of course plenty of contardictions such as a very Islamic writing is presented in the introduction of the chapter on the interpretation of dreams whereby a prescription for obtaining a true dream is pescribed: Before going to sleep a person must take ablution and read a specific *doa* (humbly recital pray, supplication) which includes *Surah al-Fatihah* and *al-Ikhlash*, and *Sholawaht* for 7 times and *allahu maghfirli zunuubi* ... until the end.

Regarding a preparation for building a home, the care for the existence the two worlds (the seen and the unseen worlds) is started from the day of choosing a place to build the home (it is assumed that many places are only good for non-human including the unseen creatures) to the day of moving to occupy the finished house (It is believed that there is a spirit lives in the house to be properly cared for properly sending the spirit off the house). Among other things to be cared are not only for self-satisfaction physically but equally important for pleasing the unseen creatures around the place of the house such as in choosing a good day of fixing the pillars (such as to avoid of ghosts/devils/satans visiting the house), choosing the wood (often guarded by *hantu-setan* or ghosts-satans), choosing the place for pillars, choosing a day for measuring a thing related to making a house, designing a door for avoiding many evils entering the house and hanging a suitable talisman on the door, designing walls, steps/stair case, and designing everything in a house.

THE WESTERN-MALAYONESIAN COSMOLOGY AND ITS ISLAMISATION

The Western cosmology based on modern science is dominantly the world without god, or with irrelevant god, without the unseen world, without religion or metaphysics but instead replaced by naturalism, atheism, deism, liberalism or secularism. In particular the Western cosmology becomes a mathematical cosmology in a sense not only without the unseen world but actually without the realistic world since the universe is just man made model to fit all the observation at a particular time and place, a mathematical model of the universe. The Universe is a 4-dimensional pseudo-Riemannian manifold on the assumption that the basic constituent of the universe are particles (atomistic view), or for some people, an 11-dimensional manifold on the assumption that the basic constituent of the universe are strings (stringistic view); or even an infinite dimensional dimensional geometry on which the Bohmian quantum mechanics is developed. This is lucidly and interestingly discussed by Hawking and Mlodinow

(2010) from atomists point of view, Greene (1999) from stringistic point of views, and Lee (2001, 2006) on both point of views ; each point of views are very challenging to Islamists. The atomistic view believe in the Big Bang Theory as the beginning of this universe which takes about 9 billions years for evolutionary changes to occur into the the state where biological evolution (Darwin's theory of evolution) was suitable to start with and it takes further about another 8 billions years to evolve to the present state of universe. The stringistic view (string theory) does not support the Big Bang Theory but the alternative theory is yet to be introduced. There is one exceptional Western theory or interpretation in Quantum Mechanics which is heavily influenced by a religion, Hinduism, and that is the Bohmian theory/interpretation of quantum mechanics. A criticism on this theory and the atomist view of the universe (Relativity and Quantum Mechanics) from an Islamic perspectives have initiated by Shaharir (2011b) but of course need to be supported by more articulations and finally improved or replace the whole theory based on those criticisms of the Western cosmological doctrines implicitly entrenched in the Relativity and Quantum Mechanics. Malayonesian knowledge has been dominated by the Western sources since 18th century as such the cosmology of the Malayonesians become dualistic, Western-Malayonesian cosmology (subscribe the Western cosmology and the syncretic Malayonesian cosmology separately depending on occasion, or time and place). The are of course some subscribed the Western cosmology completely, and some are trying to Islamised the modern science (and hence the western cosmology) but without much success (not as much as the Islamisation of the Hindu-Buddha cosmology).

As far as the contents of the universe based on the present Western cosmology, the cosmos or universe has no centre but it is isotropic and homogeneous. It contains 88 constellations (of stars) which include the 12 constellations known by most people (especially those who believe the Western horoscope) such as (in English) Capricorn, Leo, Virgo, Pisces etc. Each constellation has tens millions of galaxies which in turn each galaxy contains 200 billions of stars (our sun is one of the stars) and hence there are about 200 sextillions stars in the universe (2 followed by 20 zeroes). Our (small) world centered at the sun (a star), not at the earth, is in a galaxy known as The Milky Way (*Bimasakti* in Malay). There are 10 planets including the earth revolve around the sun approximately in elliptical path (actually precessingly wobbling around the Sun), each planet has her own satellites or moons revolving around the planet (the earth has only one satellite known as the Moon). Each star has her own planets and satellites and hence appropriately referred to a world by its own, just like our own world. Thus there are 200 sextillion worlds in the universe (much bigger than the number of the al-Raniyriy's world in the Islamic-Malayonesian cosmology discussed earlier). There are many other objects in space around our sun and they are known as planetoids, meteors, meteorites, particles, plasma, and plenty of dark matter (matter which theoretically exists but does not react with light). Similar situations occur around other stars. Based on the present theory of atomic physics, it is estimated that around 95 % of the universe consists of dark matter or dark energy (they are equivalent based on Relativity Theory). The distance in the universe is measured in term of the length of time for light to travel (about 3 millions meter per second), so that the distance between us (the earth) to the sun is 3 seconds of light travelling or simply 3 light seconds, and the nearest star to us after the sun is 3 light years (the star is named Alpha Centuary).

6. Conclusion

The present Malayonesian cosmological doctrines are those derived from a syncretic Hindu-Buddha-Islamic cosmology and dualistic Western-Malayonesian cosmology but those derived from pure Islamic cosmology and pure Western cosmology are becoming more visible and assertive as well. The main Malayonesian cosmological doctrines are as follows, Feudalism,

Dualism and sycriticism, Jabalqaf-centricism of the universe and the geocentricism of our world, Non-evolutionism, Horoscopism, Mystical Predictionism, Relativistic dualism.

These findings do not coincides with those earlier findings by the previous writers mentioned in section 2 of this paper, especialy those cosmologies which could be deduced from “*Manusia Indonesia*” by Mochtar (1977), the later partly because those are based on modern observations. However we believe that our discussion on the Islamisation of the Hindu-Buddhist Malayonesian cosmologies and Western cosmologies is not found else where.

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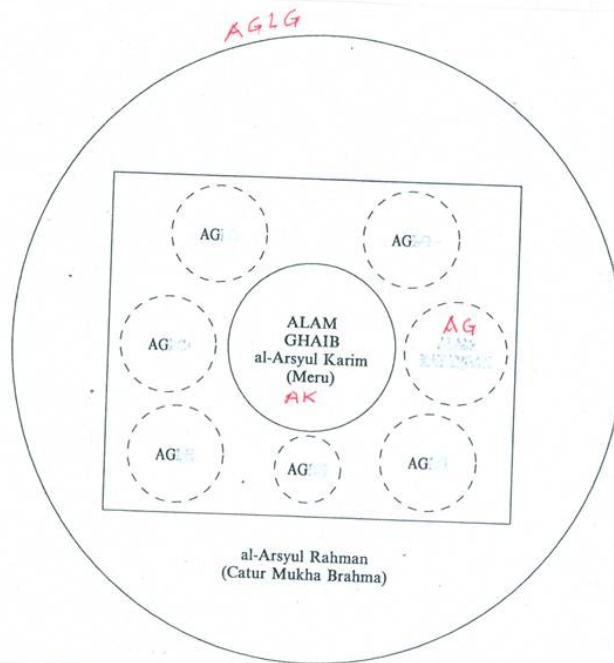
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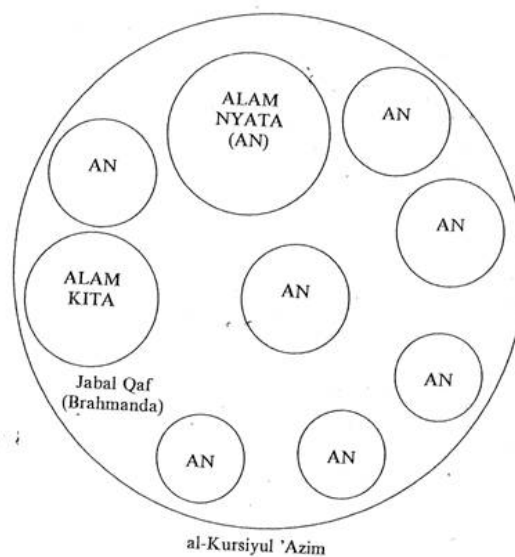
Appendix

Fig. 1a(i): The First Islamised Hindu-Buddha Cosmology in Malayonesia before 16th Century A.D – A Universe (AGLG) contains a Cuboidal World which in turn contains an indefinite number of the Unseen World (AG), one of them is known as Meru (AK)



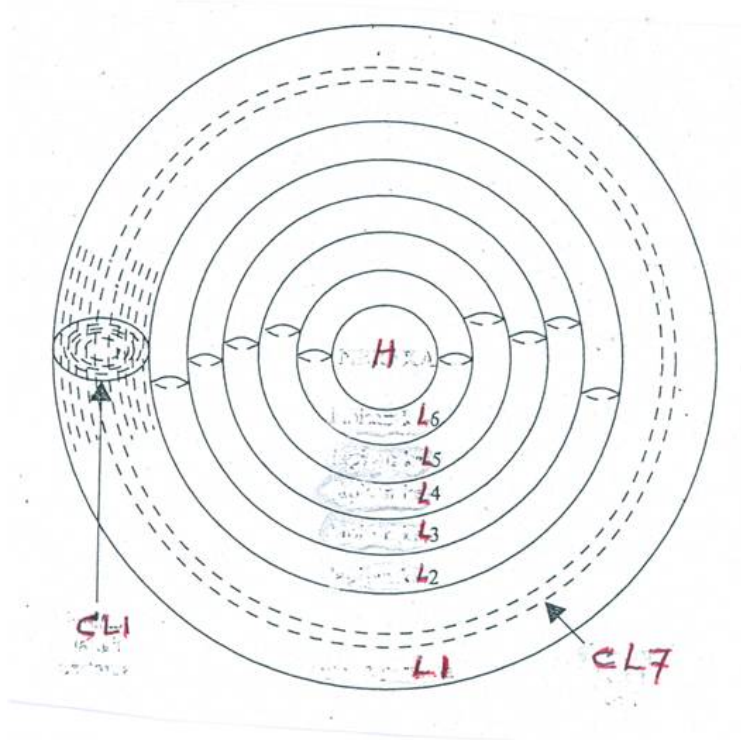
AGLG=Alam Ghaib Lagi Ghaib (*The Unseen of the Unseen World*) = Mahameru = Syurgaloka = 'Arsy al- 'Azhim
 AG=Alam Ghaib (*The Unseen World*) inside a Cuboidal World known as *Catur Mukha Brahma* = 'Arsy al-Rahman
 AK=Alam Kayangan = A special world of *The Unseen Worlds* = Meru = 'Arsy al-Karim

Fig. 1a(ii): The First Islamised Hindu-Buddha Cosmology in Malayonesia before 16th Century A.D - Our World among other indefinite number of Real Worlds situated in a spherical world known as *al-Kursiyul 'Azim*



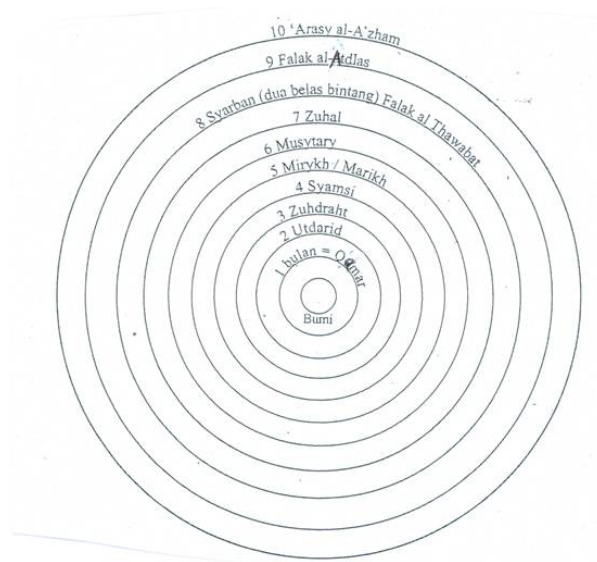
al-Kursiyul 'Azhim = Alam Hansa is inside 'Arsy al-Karim in Fig 1(q)(i) above
 Alam Kita (Our World) = Jabal Qaf = Brahmanda
 AN=Alam Nyata (*The Real World*)

Fig. 1b : A Geometric Configuration of the Islamised Our Real World of Hindu-Buddha Cosmology in Malayonesia before 16th Century A.D : The *Jabal Qaf*



H = Hell = Naraka = Neraka
 Ln = the nth spherical layer of the *Jabal Qaf*
 CL1 = the first spherical-celestial layer
 CL7=the seventh spherical-celestial layer

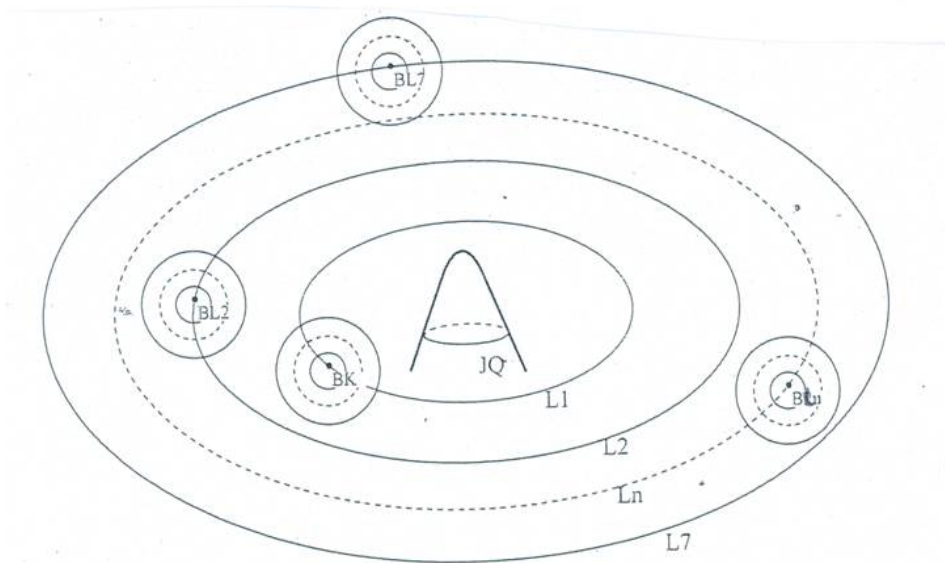
Fig. 2: Geometrical Configuration of Our (Small) World According to al-Raniyriy”: A Geocentric World



Bumi = Earth, the centre of the World

1= Moon (Bulan/Qamar), 2=Mercury (Utdarid), 3=Venus (Zuhraht), 4=Sun (Syamsi), 5=Mars (Marikh), 6=Jupiter (Musytari), 7= Saturn (Zuhal), 8=zodiac and other fix stars, 9 & 10= correspond to the Crystalline layer in the Ptolemy's model

Fig. 3: A geometrical Configuration of our Universe according to al-Ranyry: Jabalqal-centric Universe



JQ = *Jabal Qaf* (a mountain, known as *Jabal Qaf*, the centre of universe)

L_j , $j=1,2,\dots,n, \dots,7$, is the j th layer of worlds

BK = *Bumi Kita* (our earth) with its system of wandering stars

BL_j = *Seperti Bumi Kita yang ke-j* (Like Our j th Earth) with its own system of wandering stars . There are 70 thousands BL_n -like for each L_n and 70 thousands of BK-like in L_1 ; for each BL_n -like and BK-like there are other 70 thousand worlds.