VI. BÖLÜM / CHAPTER VI

COĞRAFYA

GEOGRAPHY

1. Uluslararası Prof. Dr. Fuat Sezgin İslâm Bilim Tarihi Sempozyumu Bildiriler Kitabı

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Al-Idrīsī and a Translation and Commentary About the Far East from His Nuzhat Al-Mushtāq^{*}

El-İdrîsî ve Nuzhatü'l-Müştâk Adlı Eserinin Uzak Doğu İle İlgili Bölümünün Çeviri ve Yorumu

Muhammad Ashraf SARIP** 💿

ABSTRACT

This paper talks about the earliest Islamic knowledge on the Far East based on 8th – 12th century extant works on geography as well as travel accounts. It shows how pre-Islamic works on geography, e.g. the *al-Ğuġrafyā* of Ptolemy, the *Sindhind* of the Indians, and imperial practices of the pre-Islamic Persia, influenced the thinkers of medieval Islam. It offers a comprehensive overview on the development of Islamic geographical practices in the Middle Ages by consulting the works of Ibn Khurdādhbih (d. 912 CE), al-Marwazī (d. 887 CE), al-Ya'qūbī (d. 897 CE), al-Nadīm (fl. 10th century), al-Khwārizmī (d. 850 CE), Al-Mas'ūdī (d. 956 CE), al-Sīrāfī (fl. 10th century), ibn Ḥauqal (d. 977 CE), al-Muqaddasī (d. 991 CE), al-Andalusī (d. 1070 CE), among others.

The paper highlights the parts that cover the Far East in *Nuzhat al-Mushtāq fi ikhtirāq al-āfāq*, also known as the *Book of Roger*, a magnum opus written by a 12th century Sicilian scholar, al-Sharīf al-Idrīsī. The sections of *Nuzhat al-Mushtāq* that talk about the Far East are translated from its original language to English. An excerpt from the translation is included in this paper. The progression of *Nuzhat al-Mushtāq*, which started upon the invitation of King Roger II of al-Sharīf al-Idrīsī to his court in Palermo and the commissioning of the latter to make a map of the world, as well as the biography of al-Sharīf al-Idrīsī are also presented in this endeavor.

Keywords: Islamic Geography, Islamic Cartography, Nuzhat al-Mushtāq, Book of Roger, King Roger II, al-Ğuġrafiyā, Ptolemy, Sindhind, al-Sharīf al-Idrīsī, Far East

ÖZ

Bu çalışma, 8'inci ve 12'inci yüzyıllar arasından günümüze ulaşan gerek coğrafya ve haritacılık alanındaki çalışmalara gerekse seyahatnamelere dayanarak Uzak Doğu'ya dair ilk İslâm bilgi birikimini konu edinmektedir. Bu çerçevede, Batlamyus *Coğrafya*sı, Hintlilerin *Sindhind*i ve İslâm-öncesi Pers emperyal girişimleri gibi coğrafya temalı İslâm-öncesi çalışmaların Orta Çağ İslâm düşünürlerini nasıl etkilediği ortaya konulmaya çalışılmıştır. İbn Hurdâzbih (ö. 912), Mervezî (ö. 850), Ya'kûbî (ö. 897), en-Nedîm (10. yy.), Harizmî (ö. 850), Mes'ûdî (ö. 956), Sîrâfî, (10.asır), Ibn Havkal (ö. 977), Mukaddesî (ö. 991) ve Endelüsî'nin (ö. 1070) eserlerine, bunlarla sınırlı olmamak kaydıyla, başvurarak Orta Çağ İslâm coğrafya pratikleri ve haritacılık geleneğinin gelişimine ilişkin genel bir değerlendirme sunulmuştur.

Çalışmamızda Sicilyalı âlim Şerîf el-İdrîsî tarafından 12'inci yüzyılda kaleme alınmış ve *Roger'ın Kitabı* olarak da bilinen şaheser *Nuzhatü'l-Müştâk fî ihtirâk el-âfâk*'ın bazı bölümlerine özel vurgu yapılmaktadır. Çalışma kapsamında, *Nuzhat*'ın Uzak Doğu temalı bölümleri Arapça aslından İngilizce'ye tercüme edilmiştir. Çeviriden bir seçme parçası bu makaleye dahil edilmiştir. Bu bağlamda, *Nuzhat*'ın Kral II. Roger'ın Şerîf el-İdrîsî'yi Palermo'daki sarayına davetinden başlayıp kendisini bir dünya haritası çıkarmakla görevlendirmesiyle sürüp giden akışı sergilenmiştir.

Anahtar Kelimeler: İslâm Coğrafî Bilimi, Haritacılık, Nuzhatü'l-Müştâk, Roger'in Kitabı, Kral II. Roger, Coğrafya, Batlamyus, Sindhind, Şerîf el-İdrîsî, Uzak Doğu

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Introduction

The geographical works on the Far East had dwindled and were evidently poor in early Middle Ages. Except for Periplus of the Erythrean Sea written by an unknown Greek author in the first century C.E., which gave us information on sailing and trading in the Indian Ocean, the following periods became stagnant or less information became known and available about the Far East. Earlier written sources in the Ptolemaic era had reported relatively little information about the region ranging from the mountains of Central Asia, characteristics of the Chinese people, and the Chinese silk trade with the west. Orosius (d. 420 C.E.) also wrote about Asia which he stated to begin in the East where lies the mouth of the River Ganges facing the Eastern Ocean. His story about the region had been repeatedly used in Europe between the 8th and the12th century, contributing to the dwindling of knowledge (Kimble, 1938). The arrival of the first silk moths into Europe from China had been reported in the middle of the sixth century. A 7th century writing from an Egyptian Greek that goes by the name of Theophylactus Simocatta spoke of the land of Taugas that share border with the nomadic Turks. According to him, the people of Taugas are one of the greatest nations of the world in power and population. They are idolaters, but possess just laws. They produce silk and carry on a great commerce. Their land is divided into two parts by a great river. He also spoke of the warring rival states on either side of the river, putting an end to one of them (Kimble, 1938). Kimble (1938) believed that this event refers to the war between the Sui and the Ch'en dynasties that led to the victory of Sui and the unification of China under their reign in 588 C.E. Except for these tidbits of information about the Far East in earlier time, the knowledge about the region remained unknown and ambiguous for centuries, until the Islamic civilization came and reached out to the Far East.

Before the arrival of the Portuguese, led by Vasco de Gama, in the Indian Ocean in the last years of the fifteenth (15th) century, the Muslims had already busied themselves with missions and trades to India, to as far as China in the medieval period for centuries. They maximized their new found prowess in seafaring, dominating the sea traffic in the Indian Ocean and the lands beyond. According to Validi (1934), the success of Islam in winning the heart of merchant-folk in Middle Asia was largely because of their disgust of feudal regimes of the pre-Islamic era. The Islamic interaction with the Far East, somehow, produced fresh and meritorious knowledge of the region.

But before this feat came into existence, it is worth noting that the earliest Muslim Arabs were disengaged in sea expedition, instead preferred overland caravans for trade. According to Chaudhuri (1985), the swift expansion of state formation of Islam both within and outside the Arabian Peninsula, drove the Muslim Arabs to utilize the use of the sea. The first known Arab seaborne expedition took off from al-Baḥrayn under the instruction of then governor 'Uthmān the Thaqafite to raid on the Indian coast at Tānah, near Bombay, in 636 C.E. (Hourani, 1995). During the reign of 'Umar ibn al-Khatṭāb (fl. 634-644 C.E.), he disapproved of any forms of sea expeditions that would put the lives of his men at risk, except for one instance when he ordered the retaliation against the attack on the Arabian coast by the Abyssinian in 641 C.E. (Hourani, 1995). The governor of Syria, Mu'āwiyah, had expressed his desire to attack Cyprus but was denied permission by Caliph 'Umar ibn al-Khatṭāb. But the request of Mu'āwiyah was granted under the term of Caliph 'Uthmān (fl. 644-656 C.E.) on the condition that he took his wife with him. In 649 C.E., Cyprus was successfully raided. Several seaborne raids then followed, which included one of the biggest naval victories that happened off the coast of Lycia, near Phoenix, which was dubbed as the Battle of the Masts (Hourani, 1995).

The Muslims did not just limit their seafaring skills to raiding countries they deemed as threat and wanted to conquer. It also became a means to transport products and people from one place to another. Sea-based transportation of goods had been widely desired because of its lower cost and the ability to carry and deliver more products compared to the traditional caravan-type movements of goods. As early as the eighth (8th) century, Arab traders and merchants from Persia and Afghanistan were already in China, which was then under the Tang dynasty (fl. 618-907 C.E.). Most of them settled in the northwest of China and married local women. This early interaction also led to the construction of a mosque in Chang'an in 742 C.E. The great mosque of Chang'an in China, also known as *Qingzhen Dashi*, is one of the extant proofs of Islam

and Chinese syncretism in the past. The structure, visible today, was a reconstruction made in the late Ming dynasty (fl. 1368-1644 C.E.) period, that incorporates Chinese and Islamic arts. The mosque, which was listed as a UNESCO Islamic Heritage Site in 1985, still serves its function as a house of worship amongst the Chinese Hui people to present. The Far East, particularly China, had been sought by the Muslims primarily for trade, particularly for its unique products such as silk, porcelain, and other riches the country could offer to its foreign visitors. Medieval sea voyages coming from the ports of Arabia and Persia, India, and Indonesia culminated in China.

On the other hand, the armies of the Tang dynasty, led by General Go Seonji, faced off with the soldiers of the Abbasid caliph in the Battle of Talas in 751 C.E. The Tang army was defeated in this battle which led to some Chinese being captured as prisoners of war. One of these Chinese captives was Du Huan, relative of the famous Chinese author Du You (b. 735 – d. 812 C.E.), who wrote an entry about the Islamic world considered to be the first extant account of the place and its people in his *Encyclopedic History of Institutions (Tongdian)*. The information of Du You about the Islamic world was largely based on the report of Du Huan who kept a record of his experiences. In Du You's encyclopedia entry, he mentioned important information about the Islamic world, and I quote:

The country is west of Persia. Others say before this a Persian Arab [Muḥammad], as if with divine aid, obtained a sword and killed people. Because he summoned some of the Arabs to join him, eleven men came. Following the order of joining, they encouraged the first one to be appointed king. After this, many gradually joined him, and subsequently they destroyed Persia and defeated Byzantium and the city of India. All they encountered had no way of defeating them. Their troops numbered 420,000. Their nation has existed for 34 years [i.e., starting from 622 C.E.] Before this, when the first king [Muḥammad] died, a successor was appointed as head, and the present king is the third successor [i.e. 'Uthmān]. The king belongs to the tribe of the Arabs (*Dashi*) (Park, 2012, p. 20).

From the above mentioned quotation, we can say that the Chinese, through Du You's entry, knew about Arab Muslims which they called *Dashi*; where do they originate and come from; the Prophet of Islam - Muhammad -; Islamic conquest of Persia, Byzantine, and the city of India; the might of the Islamic army; and the process of succession of leaders. Du You gave further descriptions of the *Dashi*, that completely distinguished them from other nations, their products, customs and belief, and I quote:

The men of the land have large, long noses and are dark-skinned and heavily bearded, like Indians. The women are dignified and beautiful. Their writing system differs from that of the Persians. They raise camels, horses, donkeys, mules, sheep, and other animals. The soil has much sand and is not suitable for cultivation. They do not have the five grains of rice, millet, beans, wheat and barnyard millet, but only eat the meat of camels, horses, and other similar animals. It was only when they had defeated Persia and Byzantium that they obtained rice and baked goods. They worship the god of Heaven (Park, 2012, p. 23).

Even though Du You's work is not an official history written for the Chinese imperial court, it definitely contained informative details of the Islamic world acquired from a firsthand account. In the Battle of Talas, in which Du You's relative was captured, Arabic sources mentioned that the aftermath of it led to the introduction of papermaking in the Abbasid empire. The use of paper contributed to the increase of the production of books and libraries when it replaced the use of papyrus and parchment (Park, 2012). Despite the encounter in Talas, China and the Islamic world enjoyed economic and cultural development, as well as exchange of geographical knowledge as a result of steady growth of maritime contact between civilizations.

In the last quarter of the ninth (9th) century, al-Ya'qūbī reported of an international shipping trade commencing from the western side of African coast to China. Here is what al-Ya'qūbī (2001) had to say about it:

ومن أغمات إلى ماسة، وماسة قرية على البحر تحمل إليها التجارات وفيها المسجد المعروف بمسجد بهلول وفيه الرباط على ساحل البحر ، ويلقي البحر عند مسجد بهلول المراكب الخيطية التي تعمل بالإبلة التي يركب فيها إلى الصين From Aghmat to Masa, and Masa is a village on the seacoast where trades are carried on to it, in which there is a mosque known as the mosque of Bahlal, and there is a military point. To this mosque on the seacoast come the sewn ships which are made in al-Ubulla that transport to China.

This report from al-Ya'qūbī gives us an idea that the sewn ships typically found and produced in the Indian Ocean did not just navigate along the Indian Ocean all the way to China, but also had set sail and reached the southern tip of Africa, all the way to Aghmāt, in what is now part of Morocco. It dismisses the claim made by Pinto (2016) that the Muslim sailors did not travel beyond Sofāla, and owing to the ship design, in reference to the typical sewn ships of the Muslims, they were compelled to stay in proximity to the coast to access freshwater when needed. The report of al-Ya'qūbī should not come by surprise because even in earlier times we have heard of the expedition of Eudoxos of Kyzikos, who had set sail west of the Pillars of Herakles with the objective to reach India by going around the African continent in order to avoid the Ptolemies and their taxes (Roller, 2017).

In addition to this interaction between Islam and the Far East, in the tenth (10^{th}) century, Ibn Ishaq al-Nadīm mentioned a man from China who travelled to the Abbasid empire to study with the celebrated chief physician of Baghdad, al-Rāzī. This encounter was mentioned by al-Nadīm in his *Fihrist*, who quoted al-Rāzi as saying:

A man from China came to seek me and dwelt with me for about a year. In five months of this time he learned Arabic, both spoken and written, becoming proficient in style, as well as expert and rapid in writing. When he desired to return to his country, he said to me a month in advance, "I am about to set forth and wish that you would dictate to me the sixteen books of Galen, so that I can write them down." I said, "Your time is short and the length of your stay will be sufficient for you to copy only a small part of it." Then the young man said, "I ask you to devote yourself to me for the length of my stay and to dictate to me as fast as you can. I will keep up with you in writing." I proposed to some of my students that they join in this project with us, but we did not have faith in the man, until there was a chance for comparison and he showed us everything he had written.

I questioned him about the matter and he said, "We have a form of writing known as Collective, which is what you see. If we wish to write a great deal in a short time, we write with this script. Then later on, if we wish, we transcribe it with a script which is familiar and not abbreviated." He thought that a man who was quick in learning and understanding could not learn it in less than twenty years (Al-Nadim, 1998, p. 31).

From this encounter, we learned of the unique way of collective writing of the Chinese. Al-Nadīm (1998) also mentioned of a mixture of compound used as ink by the Chinese and that a portion of it could last long after a constant writing.

In 1998, a shipwreck, believed to be an Arab merchant ship, was discovered off the coast of Belitung in Indonesia. Krahl, et al. (2010) compiled a study on this shipwreck which contains an astonishing collections of lead ingots, bronze mirrors, spice-filled jars, intricately worked vessels of silver and gold, and more than 60,000 glazed bowls, ewers, and other ceramics which were preserved because of its packing and conditions of the silty sea floor. Wei (2010) reported that these ceramics were manufactured in Changsa, in the Province of Hunan. Flecker, who was one of the those who analyzed the sunken ship, mentioned that the ship was not nailed, but instead built with perforations and lashings (Krahl et al, 2010). This technique was commonly used in the Indian Ocean, especially amongst Arab shipbuilders. The Belitung archaeological finding is just one of the many proofs that strengthens the idea of maritime trade and interactions between the Muslims and the Far East in the earlier period.

Furthermore, these interactions between the Islamic world and the Far East, and the knowledge thereof, were reinforced by the reports evident in the extant medieval Islamic written sources that spoke about the region. Some of these are the following, to wit:

1. Akbhar al-Ṣin wa al-Hind (Account of China and India) by unknown author or some scholars associated it with Sulaymān al-Tājir;

- 2. Silsilat al-Tawārīkh (The Chain of Histories) by Abu Zayd al-Hasan al-Sirafi;
- 3. Kitāb al-Masālik wa al-Mamālik (Book of Routes and Provinces) by Ibn Khurdādhbih;
- 4. Hudūd al- 'Ālam (The Regions of the World) by an unknown 10th century author;
- 5. Murūj al-Dhahab wa Ma'ādin al-Jawhar (Meadows of Gold and Mines of Gems) by al-Mas'ūdi;
- 6. An Eleventh Century Egyptian Guide to the Universe: Book of Curiosities by an unknown author;
- 7. On China, The Turks and India of Sharaf al-Zamān Ṭāhir Marvazī which was translated by V. Minorsky;
- 8. Nuzhat al-Mushtāq fī ikhtirāq al-āfāq (The Book of pleasant journeys into faraway lands) by al-Sharīf al-Idrīsī;
- 9. Rehla (Travels) by Ibn Battūtah; and

10.Kitāb al-Fawā'id fī usūl al-bahr wa'l-qawā'id by Ahmad ibn Mājid.

The author took a special interest on the magnum opus of al-Sharīf al-Idrīsī entitled *Nuzhat al-Mushtāq fī ikhtirāq al-āfāq* for the following reasons. First, the sections that spoke about the Far East have never been translated before in its entirety. Second, al-Sharīf al-Idrīsī made use of a unique approach of combining the works of three rival schools of Islamic geography to produce his *Nuzhat al-Mushtāq fī ikhtirāq al-āfāq*. And lastly, the *Nuzhat al-Mushtāq,* also known as *Book of Roger*; is a living proof of how much the Muslims and non-Muslims can do together in terms of scientific studies regardless of religious differences.

The manuscript no. 2221 kept in the Bibliothèque Nationale de France was used as the primary source of al-Sharīf al-Idrīsī's *Nuzhat al-Mushtāq* because of its known superior quality. Because of this reason, I did not bother to check the other extant copies of the manuscripts. The copy of the manuscript, believed to have been reproduced in the 14th century, was accessed through the Bibliothèque Nationale de France's official website.

1. History of Arabic-Islamic Geography

According to Strabo (d. 23 C.E.), the first to study science of geography in earliest times were philosophers. He mentioned several names of philosophers who worked on geography such as Homer (fl. 8th century B.C.), Anaximander of Miletus (d. 545 B.C.), Hecataeus (d. 476 B.C.), Democritus (d. 370 B.C.), Eudoxus (d. 337 B.C.), Dicaearchus (d. 290 B.C.), Ephorus (d. 330 B.C.), Erastosthenes (d. 194 B.C.), Polybius (d. 118 B.C.), Posidonius (d. 51 B.C.), among others (Strabo, 1949). Strabo and Hipparchus (d. 120 B.C.) considered Homer as the founder of the science of geography (Strabo, 1949). Homer who, according to Geminos (fl. 70 B.C.), believed the earth as flat surface extending to the sky (Randles, 2000), and the inhabited world is surrounded on all sides by *Oceanus* (Strabo, 1949). It is no wonder that the Homeric representation of the earth became one of the four theories that influenced thinkers on the shape and ordering of landmasses and their relation to the seas. The second theory was the sphericity of the earth, believed to have been first suggested by Pythagoras (fl. 530 B.C.), but the relation of water to land was based on the doctrine of Aristotle (d. 322 B.C.) of concentric ordering of the elements (Randles, 2000). The third theory refers to four small *oikoumenes* situated symmetrically on a sphere covered by water. It is credited to a Greek known as Crates of Mallos (fl. 150 B.C.) (Randles, 2000). And the fourth theory portrays oceans as separate lakes lying in hollows in a spherical earth. The theory appears in Ptolemy's *Geography* (Randles, 2000). The work of Ptolemy (d. 170 C.E.) on geography became the most influential and popular text not just to the Europeans, but most especially to the medieval Islamic world.

The conquest of Persia and Syria became a significant period amongst Muslims who had a keen sense of intellectual curiosity and great desire for learning. They became heirs to older and superior cultures. The period of the late eighth (8th) and the first half of ninth (9th) century marked the golden age in Islam. It was the period when vast scientific works from Indian, Persian, and Greek were translated into Arabic in the Abbasid empire. Baghdad, which was the capital of Abbasid empire, became the center of scholarship, enticing great minds from near and afar to travel to this place for the purpose of learning and demonstration of their skills and knowledge. For instance, Ibn al-Ādamī (fl. 925 C.E.),

who is the author of *Nazm al-'Iqd* (Organization of the Necklace), talked about a man from India who came to the court of Caliph al-Mansūr and presented to him the Indian astronomical system called *al-Ṣindhind* (Andalusi, 1996). It was then ordered that this be translated into Arabic as a reference for the understanding of planetary motion by the caliph. Al-Khwārizmī simplified the text for Caliph al-Ma'mūn and made use of it for the construction of his famous table. But Ṣā'id al-Andalusī stated that:

[...] al-Khwārizmī made some changes in the Sindhind system and deviated from its relations and declinations; he adopted the Persian system in formulating his equations and relied on the method of Ptolemy for determining the declination of the sun (Andalusi, 1996, p. 47).

The conversion of Persia to Islam also contributed a great advantage to the ruling Arab Muslims to inherit their geographical knowledge of the inhabited world, and monopolize maritime trade in the Indian Ocean to as far as China and the art of seafaring. This unmatched superiority of Muslims in trade and seafaring across the known world in the medieval period played a vital role in their domination in the field of geography. In order to reach their destination, they perfected the use of road books that were originally compiled for administrative purposes and later adopted into geographical works. Amongst the earlier scholars who wrote on these road books were Ibn Khurdādhbih (820-912 C.E.), al-Marwazī (d. 887 C.E.), al-Sarakhsi (d. 899 C.E.), al-Jayhani (d. 922 C.E.), al-Ya'qūbī (d. 897 C.E.), al-Bakrī, Ibn Rustah (d. 903 C.E.), and Qudamah (fl. 10th century). Other earlier extant texts like *Kitāb Aja 'ib al-Hind* (Marvels of India) and the *Akbhar al-Ṣin wa al-Hind* (Accounts on China and India) are just some of the surviving proofs on how narration of historical traditions and stories of marvelous events and things augmented and contributed to geographical traditions in Islam (Tibbets, 1992). The conquest and vast expansion of the territories of Islam contributed too for earlier Muslims to realize and take up the idea of mapping their controlled territories and the known world.

It was in the reign of Abbasid caliph al-Ma'mūn (786-833 C.E.) in Baghdad when this great task of mapping the known world was materialized. Al-Ma'mūn commissioned his best scholars working in the House of Wisdom (*bayt al-Hikma*) to make an actual map of the world, that later became known as *al-Şūrah al-Ma'munīyah* in which the original is no longer extant. The laborious and challenging task required the calculation of the circumference and radius of the Earth. According to Sezgin, the only remnants of the *al-Şūrah al-Ma'munīyah* that have reached us are composed of the tabular coordinates in al-Khwārizmī's *Şūrat al-Ard*, fragments from different works of scholars such as *Kitāb Masālik al-Abṣār* by Ibn Fadlallāh, *Taqwīm al-Buldān* by Abu al-Fidā', and *Muģnī* by Ibn Hibintā, sections from Abū 'Abdallāh az-Zuhrī's work, and from copies of the original world map and regional maps (Sezgin, 2005). All these were reinforced by al-Mas'ūdī in his book entitled *Murūj al-dhahab wa ma 'ādin al-jawāhir* (Meadows of Gold and Mines of Gems). Al-Mas'ūdī (896-956 C.E.), who was a geographer and was revered by Ibn Khaldūn as Imam of all Arabic historians, had these words to say about the map of al-Ma'mūn:

I have seen these climates represented (*muṣawwarah*) in various colors, without a text, and the best that I have seen has been in the book of *Jughrafya* (Geography) of Marinus and the commentary to *Jughrafya* of the divisions of the earth and in *al-Ṣūrah al-Ma'munīyah* that al-Ma'mūn ordered to be constructed by a group of contemporary scholars to represent the world with its spheres, stars, land, and seas, the inhabited and uninhabited regions, settlements of people, cities, etc. This was better than anything that preceded it, either the Geography of Ptolemy, the Geography of Marinus, or any other (Sprenger, 1841, p. xi).

Al-Mas'ūdī also mentioned Husain the astronomer, author of Astronomical Tables entitled *Kitāb al-Zīj fi an-Nujūm* relating from Khālid ibn 'Abd al-Malik al- Marwazī and others, commissioned by al-Ma'mūn who went to the plains of Sinjar in Diyār Rabī'ah to observe the sun and make measurements. They came up with 20,160 miles, which is a remarkable estimation of the circumference of the Earth at that time (Al-Mas'ūdī, 1841). Ṣā'id al-Andalusī gave additional information about this awe-inspiring project by Caliph al-Ma'mūn, stating that:

[...] observations began in the city of Shamāsīyah in the region of Damascus, al-Shām, in the year A.H. 214 [829 C.E.]. They determined the length of the solar year, the magnitude of the sun's declination, the eccentricity of its orbit, the position of its apogee. They further studied the behavior of stars and planets until their works was interrupted by the death of Caliph al-Ma'mūn in A.H. 218 [833 C.E.]. They recorded all their observations in a book and named it *al-Raṣḍ al-Ma'mūnī* [The Observations of al-Ma'mūn].

Those who worked on this project were Yahyā ibn Abū Manşūr, the chief astronomer of his time, Khālid ibn 'Abd al-Malik al-Marwarūdhī, Sanad ibn 'Alī, and al-Abbās ibn Sa'īd al-Jawharī (Andalusī, 1996, p. 47).

The same al-Ma'mūn map was mentioned in the 12th century work of Abū 'Abdallāh az-Zuhrī in a more elaborate fashion, and I quote:

I refer to the geography by al-Fazārī, which for its part was based on the Geography by the ruler of the faithful, 'Abdallāh al-Ma'mūn b. Hārūn ar-Rašīd, which seventy natural philosophers from Iraq produced in a collaborative undertaking. Their objective was the depiction of the Earth, even if it did not correspond with reality, since the Earth was round, but the geographical depiction was flat. They moved it into the plane, as they had done with the astrolabe and with the eclipses contained in their records. This is how the observer can inform himself about all the parts of the Earth, all regions, borders, climate zones, seas and oceans, rivers, hills and mountains, inhabited and barren land and the position of the cities in the east and west, and he can see the locations of the world, what famous and marvelous things are to be found in the individual parts of the earth and what historical monuments and edifices are to be found in the individual parts of the earth and what historical monuments and edifices are to be found in the individual countries (Sezgin, 2005, p. 79).

In the encyclopedia of Ibn Fadlallāh al-'Umarī entitled *Masālik al-Abṣār*, he also gave clues of the structure and character of al-Ma'mūn *Geography* and its maps. Sezgin (2005) was confident that Ibn Fadlallāh referred to *Ṣāḥib al-Ğuġrāfiyā* and the world map from *Ṣūrat Lauḥ ar-Rasm*.

The directional orientation of the maps was treated as more symbolic and sacred. Almost all ancient cultures oriented themselves according to the east-west axis based on the rising and setting of the sun, and north-south axis based on the measurement of the position of the North Star Polaris or the midday sun. The sun-worshipping cultures regarded east as the direction of renewal and life, followed by the south; west was associated with decline and death, and north with darkness and evil. The Judaeo-Christian tradition absorbed these beliefs orienting their places of worship as well as maps, e.g. the T-O Map or the Hereford Mappa Mundi of England in 1300 C.E., towards the east which was regarded as the Earthly Paradise. The west was related with mortality and the direction faced by Jesus Christ on the cross; north with evil and satanic influence, and often the direction faced by the excommunicates and the unbaptized when they were buried (Brotton, 2012). But the Islamic map's distinct characteristic during the Middle Ages was its south orientation, aside from the adoption of seven *iqlīm* or *aqālīm* in Arabic, *climata* in Greek, and *kishvars* in Persian. The Indians, who were the first cultivators of science, had three great astronomical systems like the *Sindhind*, *Ārjbahd*, and *Ārkand*. The *Sindhind* system was the only text received by the Muslims in its correct information (Andalusī, 1996). In order to understand the *Sindhind* system, Şā'id al-Andalusī explained it briefly in his Categories of Nations (*Tabaqāt al-Umam*), and I quote:

Those who believe in the Sindhind say that all the seven planets and their apogees and perigees meet in the head of Aries once every four thousand thousand thousand years and three hundred thousand thousand years, and twenty thousand thousand solar years. They call this cycle the "period of the universe" because they believe that when all the planets meet in the house of Aries everything found on the earth will perish, leaving the lower universe in a state of destruction for a very long time until the planets and their apogees and perigees disperse back to their zodiacs [constellations]. When this takes place the world return to its original state. The cycle repeats itself indefinitely (Andalusī, 1996, p. 13).

It was also from Indian that the geographical context of the Cupola of the Earth and the use of the meridian of *Ujjain* or *Arin* as the prime meridian was adopted by the Muslims and later by the medieval Europe (Tibbets, 1992). The

topographical descriptions and concept of division of the inhabited world into seven regions or climate were ideas Muslims acquired from the scientific information of the Persians, which they probably inherited from the Babylonian and Indian cosmographical perceptions, and Greek, of which there were treatises attributed to Claudius Ptolemy (Tibbets, 1992). The work of Ptolemy on geography was more appealing to the Muslims, because of its mathematical approach and the values he had given on latitude and longitude (Tibbets, 1992). This had a great influence on the works of famous Islamic scholars such as al-Khwārizmī (780-850 C.E.), al-Battānī (850-929 C.E.), and Yaqūt, who came up with coordinates of latitude and longitude in their works, and it also played a vital role on the works of other geographers of Middle Ages. The only disparity of Islamic maps with that of Ptolemy's geography were the circumnavigable African continent and the globe surrounded by encircling bodies of water which were completely missing in the works of Ptolemy (Brotton, 2012).

Abū Zāyd al-Ḥasan al-Sīrāfī (fl. 10th century) mentioned a report in his *Silsilat al-Tawārīkh* of planks of sewn ships that washed up in the Mediterranean Sea in support of the knowledge of the connectivity of the Sea of China and India and the Mediterranean Sea. This is what he said in his own words:

[...] news reached us of the discovery in the Mediterranean Sea of planks from the sewn ships of the Arabs. These ships had broken up and their crews had been lost; the waves had pounded their hulls to pieces, and these were then driven by winds and currents which cast the planks into the Sea of the Khazars. From there, the timbers floated through the Gulf of al-Rūm, finally emerging into the Mediterranean Sea. This points to the fact that the ocean turns north around China and al-Sīlā, continues around the back of the lands of the Turks and the Khazars, then debouches through the Gulf of al-Rūm, arriving at the Levent, the reason being that these sewn planks are used only for the Indian Ocean ships, and those of Sīrāf in particular. In contrast, the ships of the Levant and of Byzantium are nailed, rather than sewn, together (Abū Zāyd, 2014, p. 87).

As to the question on how exactly these planks ended up in the Mediterranean Sea is not the point of discussion here, but rather how the medieval Muslims were convinced and understood the concept of the encompassing sea. It might be that the found shipwreck was carried literally to the Mediterranean from *Baḥr al-Qulzum* (the Red Sea) in pieces and then assembled in one of the ports in Egypt; or it found its passage through the Canal of the Commander of the Faithful, which was built under the supervision of General 'Amr ibn al-'Ās in honor of Caliph Umar, that connects the Nile River to the Red Sea. According to later reports by 14th-century Mamluk historian Ibn Duqmaq, in reference to the canal, and I quote:

No sooner had ['Amr] brought effort to bear than ships were moving in it as they had before. Ships were arriving in the Hijaz in the seventh month [after the start of excavation] (Cooper, 2012).

Brotton (2012) wrote that as the rapid growth of converts to Islam, mostly from the north of Mecca and Kaaba, grew making the *qibla* due south, Muslim mapmakers made maps with a south orientation. This action made the Arabian Peninsula as the center of the world with Mecca and the Kaaba as its heart. On the other hand, Al-Mas'ūdī mentioned the Indian origin of the south being north, and north as south in his *Meadows of Gold and Mines of Gems*, saying:

Barahman was the first who explained the apogean of the sun; and stated that the apogean is three thousand years in every sign of zodiac [...] When it comes into the signs of the southern hemisphere, the face of the Earth will be changed, and what is now inhabitable will turn unin-habitable, and vice versa; for the south will be north, and the north south (Al-Mas'ūdī, 1841, pp. 158-159).

The Muslims were convinced that the reason why the southern hemisphere was uninhabitable was because of the south-pole was the extreme of heat and north-pole was the extreme of cold. And this would only be reversed when the apogean of the sun would be in the southern hemisphere and the perigean in the northern hemisphere (Sprenger, 1841).

The tradition of Islamic mapmaking with the adoption of south-orientation and Mecca as the center of the world was made popular by the Balkhī School of Geography, led by Abū Zāyd Aḥmad ibn Sahl al-Balkhī (b. 850–d. 934 C.E.)

(Brotton, 2012). Abū al-Qasim Muḥammad ibn Hauqal (d. 977 C.E.), known for his *Kitāb Şūrat al-Ard* (Book of Picture of the Earth), Abū Isḥāq al-Iṣṭakhrī and his *Kitāb al-Masālik wa al-Mamālik*, and al-Muqaddasī and his *Aḥsan al-Taqāsīm fī Ma 'rifat al-Aqālīm* (The Best Divisions for Knowledge of the Regions) were the most distinguishable figures of this school that came up with world maps and illustrations of its regional maps, aside from distances between cities along routes made popular by geographers before them. Among the three geographers, two met in person. Ibn Ḥauqal claimed meeting al-Iṣṭakhrī in one of his travels and worked on a modification of the treatise of al-Iṣṭakhrī between 961-988 C.E. Their works focused on descriptions of the realm of Islam (*Mamlakat al-Islām*) or countries of Islam (*Bilād al-Islām*) with special attention to regional subdivisions, accompanied with written commentaries and maps (Antrim, 2012). The purpose of this written commentary is for the attainment of comprehensible and eloquent presentation of the regions according to al-Muqaddasī. This school largely depended on direct experience rather than foreign influence in their geographical works. Antrim (2012) finds the geographical approach of Balkhī School to be in contrast with the substantial use of administrative data, which reflects the imperial practice of Pre-Islamic Persia in the works of Ibn Khurdādhbih, and the Hellenistic practice of al-Khwārizmī's latitudinal and longitudinal tabular compilation. As a proof of their distinctive approach to geography, here I quote Ibn Hauqal in his words:

I do not intend the seven climes $(aq\bar{a}l\bar{i}m)$ into which the earth (ard) has been divided, as I have seen the Indian Map $(al-S\bar{u}ra\ al-Hind\bar{v}ya)$ in al-Quwādhiyān, and even if it is accurate it creates much confusion. Instead I have prepared for each section that I single out a shape and form that communicates the location of the region. Then I have mentioned what surrounds it in the way of places $(am\bar{a}kin)$ and territories $(biq\bar{a}')$; what belongs to it in the way of cities (mudun) and provinces $(asq\bar{a}')$; what it has in the way of imposts and tributes; what it has in the way of rivers and seas; what it necessary to know of all that the region $(iql\bar{i}m)$ comprises in the way of varieties of wealth, levies, tithes, taxes, and distances along the roads; and what it has in the way of exports and trade, since this is the knowledge with which reigning princes, people of consequence, and leaders of all classes are the ones occupied (Antrim, 2012, p. 111).

Since the works of Balkhī School centered on the realm of Islam, less information and attention were given about the Far East. In the section on account of the seas and rivers of *Aḥsan al-Taqāsīm fī Ma 'rifat al-Aqālīm* by Al-Muqaddasī, he quoted Abū Zayd al-Balkhī in reference to the description and extent of the seas surrounding the realm of Islam, saying:

Abū Zayd, for his part, has given it the form of a bird with its beak at al-Qulzum – but he does not notice the gulf of Wayla ['Aqaba] – its neck in al-'Irāq, its tail between Abyssinia and China (Muqaddasī, 2001, p. 9).

The techniques applied by the Balkhī School of Geographers and the so-called pre-Islamic Persia and Hellenistic approach of those before them were summed up in the work of later generation of Islamic geographer al-Sharīf al-Idrīsī, in his treatise entitled *Nuzhat al-mushtāq fī ikhtirāq al-āfāq* (The Book of pleasant journeys into faraway lands).

2. Life and Works of Al-Sharīf Al-Idrīsī

Al-Sharīf al-Idrīsī was born in 1100 C.E. He belonged to the family of 'Alī Ibn Hammūd of the Hammūdid dynasty who ruled various towns in Andalus-Spain from 1016 to 1058 C.E. His family were claimants of the 'Alawī-Idrīsīd dynasty who once ruled Morocco between 789 to 926 C.E. The founder of the Idrīsīd dynasty was Idrīs I (d. 793 C.E.) who belonged to the lineage of Fātima (May God be pleased with her), daughter of Prophet Muhammad (Peace and blessing be upon him); thus, the title "*al-Sharīf*" (the Noble) given to the descendant of 'Alī (May God be pleased with him) of Islam.

When the Umayyad dynasty collapsed in 750 C.E. following their defeat against the Abbasids, the Idrīsīds together with a surviving member of the Umayyad family fled and migrated to North Africa and Iberia (Brotton, 2012). Idrīs I successfully founded a state in Morocco with the support of the Zenata Berbers who commended him because of his descent from the family of the prophet. On the other hand, around 755 C.E., 'Abd al-Raḥmān I (fl. 750 – 788 C.E.), also known as al-Dākhil, successfully established a rival caliphate in Spain, and made Cordoba its capital (Encyclopedia Britannica, 2017). During this time, the family of al-Sharīf al-Idrīsī ruled Malaga on the Iberian Peninsula and most of Morocco in

North Africa. The period of the eighth (8th) and ninth (9th) centuries was the height of Umayyad rule in Europe. Its capital city of Cordoba was one of the largest cities in the world with a rough estimation of its population during that time of around 300,000 (Brotton, 2012). They built mosques, schools and a university, baths, dams, irrigation system, reservoirs and water towers, introduced new crops – oranges and lemons, cotton, date palms, rice, exploited the island's mines and fishing grounds, and amassed a library of 400,000 books that rivaled those in Baghdad and Cairo (Brotton, 2012). In 985 C.E., unable to sustain their authority because of the prevailing conflict and feud, the Idrīsīd dynasty collapsed and was absorbed by the ruling Umayyad dynasty. In 1031 CE, the Umayyad dynasty in Europe collapsed, and was finally taken over by the Almoravids in 1091 C.E (Brotton, 2012). The family of al-Sharīf al-Idrīsī were forced to move out of Spain on that same period.

We only know little information about the life of al-Sharīf al-Idrīsī, particularly from the passages in his magnum opus entitled *Nuzhat al-Mushtāq fī ikhtirāq al-āfāq* (The Book of pleasant journeys into faraway lands) and biographies written by Ibn Abī Uşaybi'a in his 'Uyūn al-anbà fī tabqāt al-atibbā', Ibn 'Abd al-Man' im al-Himyarī in his *Al-rawd al-mi'tār fī habar al-aqtār*, and al-Ṣafadī in his *Al-wāfī bil-wafayāt*. It is not clear where he was born exactly. Some historians have reported without evidence that he was born in Africa, particularly in Ceuta, or in Andalus. This ambiguous hypothesis about his place of birth is a by-product of scarce written sources about his early life. But Amara and Nef (2001) wrote a sound theory quoting al-Ṣafadī (d. 1363 C.E.) who mentioned that the father of al-Sharīf al-Idrīsī settled down in Sicily, and gave a suggestion that al-Sharīf al-Idrīsī was born in the South of Italy. His full name was Muḥammad ibn Muḥammad ibn 'Abd Allāh ibn Idrīs ibn Yahyā ibn 'Alī ibn Ḥammūdī ibn Maymūn ibn Aḥmad ibn 'Alī ibn 'Ubayd Allāh ibn 'Umar ibn Idrīs ibn 'Abd Allāh ibn al-Ḥasan ibn al-Ḥasan ibn 'Alī ibn Abī Ṭālib al-Sharīf al-Idrīsī (Al-Ṣafadi, 2010). According to Amara and Nef (2001), al-Ṣafadī's work on the life of al-Sharīf al-Idrīsī's biography because of his reliance on primary sources from Sicily and al-Andalus, such as *Tārīḥ Ṣiqiliyya* by Ibn Abī Zayd al-Gamārī, the *Tārīḥ Balansiyya* by Muḥammad ibn al-Ḥafal inda small historical treaty by Ibn Baskuwal. Al-Ṣafadī wrote and I quote:

"Idrīs b. Yaḥya b. 'Alī b. Hammūd (the rest of his ancestors have been indicated in the notice of al-Mutåayyad). He was sworn allegiance in Malaga in the year 434 (1042-1043 C.E.). His *laqab* is al-'Alī (...). Al-'Alī was attacked by his relatives who provoked crisis in his kingdom and retreated to some mountainous regions. Because of their mistakes, the situation became difficult for a long time. Finally, the Hammūdid Dynasty disappeared. Bādīs b. Habbūs al-Ṣanhāgī, lord of Granada, took over Malaga, and Banū Hammūd were dispersed into different countries. Among them was Muhammad b. 'Abd Allah son of al-'Alī Idrīs, whom we are talking about here, returned to Sicily. The rumor says he was Mahdī, who also bears the name of the prophet (blessings be upon him), and that of the father of the prophet. Ibn al-Ṭimna, the Sicilian rebel, tried to kill him on this island, but God prevented him. In the same era, Roger the Frank conquered Sicily, and when he was reported that Muhammad b. 'Abd Allah was from the prophet family, he showed him generosity. His son, Muḥammad b. Muḥammad b. 'Abd Allah, lived in the entourage of Roger. He was both literate (Sharīf), poet, and passionate with geography. He composed for Roger the book known to all as that of Roger." (*Translated from Amara and Nef's French translation of the text*)

Amara and Nef (2001) are of the opinion that the father of al-Sharīf al-Idrīsī moved to Sicily at a young age and settled there between the end of 1050 C.E. and the beginning of 1060 C.E. By the time of the Norman conquest of Sicily, it is not certain if his father had left the island. He might have moved to Ceuta in North Africa where al-Sharīf al-Idrīsī was born as commonly believed by historians as his place of birth; he might have moved to Mileto which is also in the South of Italy, as Amara et. al. hypothesized to be the case, where al-Sharīf al-Idrīsī would have been born; or he stayed in Sicily when the father of King Roger II showed him generosity after knowing that he belonged to the family of prophet, and al-Sharīf al-Idrīsī was born in Sicily. Whatever the case was, one thing is definite that Roger the Frank knew the family of al-Sharīf al-Idrīsī was invited by the Norman ruler of Sicily, King Roger II (1095-1154 C.E.), to his royal court in Palermo.

Their meeting was kind of melodramatic per se as if two brothers met after being separated for a long time, as al-Sharīf al-Idrīsī entered the hall of the palace, King Roger II met him and walked him across the carpeted marble towards the honorary place beside his throne (Gies, 1977). Here is a passage written by Damascus scholar al-Ṣafadī about their meeting:

Roger, King of Franks and lord of Sicily, loved learned men of Philosophy, and it was he who had al-Sharīf al-Idrīsī brought to him from North Africa [...] When he arrived Roger welcomed his guest ceremoniously, making every effort to do him honor [...] Roger invited him to stay with him. To persuade him to accept, he told him: "You are from the Caliphal house, and if you remain with me you will be safe". After al-Idrisi had accepted the king's invitation, the latter granted him an income so large as to the princely. Al-Idrisi was accustomed to ride to the king on a mule, and when he arrived Roger stood up and went to meet him, and then the two sat down together (Brotton, 2012).

Amara and Nef (2001) contradicted the interpretation of the shore that faces a place as North Africa, but instead designated it as the Calabrian Coast, where Mileto is located, and close to the land once ruled by the Hammūdid in Sicily in the 11th century.

Sicily, during the reign of King Roger II, was a thriving kingdom in Europe. A Spanish Muslim by the name of Ibn Jubayr, referring to Sicily, mentioned:

[...] the prosperity of the island surpasses description. It is enough to say that it is the daughter of al-Andalus in the extent of its cultivation, in the luxuriance of its harvests, and in its well-being, having an abundance of varied produce, and fruits of every kind and species [...] The Christians treat these Muslims well and have taken them to themselves as friends, but impose a tax on them to be paid twice yearly (Brotton, 2012, p. 70).

Ibn Jubayr was astonished by the splendor of the palaces and their marvelous gardens, and went on to say about its manner of legal, administrative and regal authority with resemblance to the Muslim kings (Brotton, 2012). King Roger II, despite growing opposition from almost every corner of Christendom because of his annexation or usurpation of several regions of Italy, even sarcastically dubbed as tyrant, half-heathen king, and the baptized sultan of Sicily, was far more of an accomplished king than any other ruler Europe had ever had, making his kingdom the best governed state in medieval Europe. He was a well-educated man and had great passion for scientific inquiry. Al-Sharīf al-Idrīsī was probably with the authority to best describe King Roger II, to quote:

In Mathematics, as in the political sphere, the extent of his learning cannot be described. Nor is there any limit to his knowledge of the sciences, so deeply and wisely has he studied them in every particular. He is responsible for singular innovations, such as no prince has ever before realized (Gies, 1977, pp. 14-19).

Al-Sharīf al-Idrīsī spoke lavishly of his patron. But it should not be taken literary since it was a conventional way to praise patrons in such way. The king commissioned al-Sharīf al-Idrīsī to undertake the task of the creation of the most accurate and scientific map of the entire known world. Al-Sharīf al-Idrīsī, referring to King Roger II, mentioned that the king:

[...] wished that he should accurately know the details of his land and master them with a definite knowledge, and that he should know the boundaries and routes both by land or sea and in what climate they were and what distinguished them as to seas and gulfs [what was the shape of the coastline] together with a knowledge of other lands and regions in all seven climates whenever the various learned sources agreed upon them and as was established in surviving notebooks or by various authors, showing what each climate contained of a specific country (Maqbul, 1992, p. 159).

Together, they set up an academy of geographers, with King Roger II as the director and al-Sharīf al-Idrīsī as the permanent secretary (Gies, 1977). They gathered all the information on geography within their disposal. They utilized the works on geography of previous scholars on the field. Maqbul (1960) mentioned six (6) written sources used by al-Sharīf al-Idrīsī, to wit: 1) *al-Ğuġrafyā* by Claudius Ptolemy (d. 168 C.E.), 2) *Kitāb al-Ḥayawān* by Abū 'Uthmān 'Amr

b. Baḥr al-Jāḥiẓ (d. 868-9 C.E.), 3) *Kitāb al-'Ajā'ib* by Abu al-Ḥasan 'Alī ibn al-Ḥusayn al-Mas'ūdī (d. 956 C.E.), 4) the non-extant *Kitāb al-Masālik wa al-Mamālik* by Abū 'Abd Allāh Muḥammad ibn Aḥmad al-Jayhānī (d. 922 C.E.), 5) *Kitāb al-Masālik wa al-Mamālik* by Abu al-Qāsim 'Ubayd Allāh ibn 'Abd Allāh ibn Khurdādhbih (d. 911 C.E.), and 6) *Kitāb al-Masālik wa al-Mamālik* by Abu al-Qāsim Muḥammad ibn Ḥauqal (d. 977 C.E.). Maqbul (1992) wrote that al-Sharīf al-Idrīsī made used of *al-Ğuġrafyā* by Ptolemy as his reference for the description of the Earth, but it remained undetermined which Arabic version of Ptolemy's work he used. Sezgin (2005) added that al-Sharīf al-Idrīsī also used the book of Ursiyus al-Anṭākī or Paulus Orosius (d. 418 C.E.), the book of Aḥmad b. 'Umar al-'Udhrī, the book of Khānākh ibn Khāqān al-Kīmākī, the book of Mūsā ibn Qāsim al-Qaradī, Aḥmad ibn Abī Ya'qūb al-Ya'qūbī (d. 897) and his *Kitāb al-Buldān*, the book of Isḥāq ibn al-Ḥasan, and the book of Qudāma ibn Ga'far.

King Roger II was determined, and paid much attention, importance, and interest to gathering information from across the known world, to the extent of summoning scholars to his court. Al-Sharīf al-Idrīsī, referring to King Roger II, quoted as saying:

They studied together, but he did not find much extra knowledge from [other scholars] over what he found in the aforementioned works, and when he had convened with them on this subject he sent out into all his lands and ordered yet other scholars who may have been travelling around to come and asked them their opinions both singly and collectively. But there was no agreement among them. However, where they agreed he accepted the information, but where they differed, he rejected it (Maqbul, 1992, p. 159).

The gathering of new information even included inviting merchants and travelers who visited the ports of Sicily in the royal court, being asked either by King Roger II or al-Sharīf al-Idrīsī or both specific questions on the places they had visited (Gies, 1977). There was even a claim made by Ohji Toshiaki, a Japanese scholar, that al-Sharīf al-Idrīsī used Chinese maps in his work, citing similarities in the presentation of the coastline of China (Park, 2012). But this claim was dismissed by Park (2012), citing that the coastline adopted by al-Sharīf al-Idrīsī was also in resemblance to that of the maps of the al-Balkhī School. He further added that al-Sharīf al-Idrīsī relied much on the information provided by his predecessors to talk about China, and that he was not aware of the new capital of China during his time. The process of gathering and collecting all the information lasted for about fifteen (15) years. Al-Sharīf al-Idrīsī wrote, in reference to King Roger II, and I quote:

He wished to make sure of the accuracy of what these people had agreed upon both of longitudes and latitudes [and in measurements between places]. So, he had brought to him a drawing board [*lawh al-tarsīm*] and had traced on it with iron instruments item by item what had been mentioned in the aforementioned books, together with the more authentic of the decisions of the scholars.

All this he examined closely until he was convinced that the information was correct (Maqbul, 1992, p. 159).

In relation to the quotation above, Hans von Mžik disagreed somehow because of the disappearance of the significant use of geographical longitudes and latitudes in maps in al-Sharīf al-Idrīsī's work. He acknowledged that some can still be seen for certain geographical elements but only served as recollection of the past assembled on a map (Sezgin, 2005). F. von Richthofen criticized al-Sharīf al-Idrīsī's work, aside from creating uproar in Europe, as horribly made in addition to his lack of judgement and non-admission of ignorance (Sezgin, 2005). But other scholars gave positive criticism on Al-Sharīf al-Idrīsī's work such as Lelewel, Günther, Hennig, Sarton, among others. Sarton considered Al-Sharīf al-Idrīsī as one of the greatest geographers and cartographers of the Middle Ages (Sezgin, 2005).

Al-Sharīf al-Idrīsī, together with his team, moved on to the final stage of their overwhelming task by engraving the images from *law h al-tarsīm* or drawing board into a silver disk forming a world map. This is what al-Sharīf al-Idrīsī had to say about this work:

[...] a disk [*dā'ira*] should be produced in pure silver of a large extent and of 400 Roman ratls in weight, each ratl of 112 dirhams and when it was ready he had engraved on it a map of seven climates and their lands and regions, their shorelines and hinterlands, gulfs and seas, watercourses and places of rivers, their inhabited and uninhabited parts, what [distances] were between each locality there, either along frequented roads or in determined miles or authenticated measurements and known harbors according to the version appearing on the drawing board, not differing from it at all and thus following what had been decided there without any variation (Maqbul, 1992, p. 159).

Finally, on January 1154 C.E., al-Sharīf al-Idrīsī, together with his team working on the project, completed the silvermade world map and a book entitled *Nuzhat al-Mushtāq fī ikhtirāq al-āfāq* (The Book of pleasant journeys into faraway lands), also known as the *Book of Roger*, containing one (1) image of the world map and seventy (70) sectional maps with detailed descriptions and explanations. But there is much debate and talks as to the origin of al-Sharīf al-Idrīsī's maps. Scholars such as Hans von Mžik, Konrad Miller, Hoenerbach and Needham believed that al-Sharīf al-Idrīsī relied on Ptolemy's work. Von Mžik even counted al-Sharīf al-Idrīsī together with al-Khwārizmī as dependent on Ptolemy (Sezgin, 2005). Needham (1959), in reference to the world map of al-Sharīf al-Idrīsī, wrote and I quote:

This was fully in Ptolemaic tradition, using nine parallels of latitude (climates) and eleven meridians of longitude, but arranged on a projection like Mercator's and making no attempt to allow for the earth's curvature. In this respect, it resembled the Chinese grid-maps (Needham, 1959, pp. 563-564).

Hoenerbach made an interesting observation of al-Sharīf al-Idrīsī's work and Ptolemy. As reported by Sezgin (2005), Hoenerbach stated that the Gulf of Taren was illustrated more realistically by al-Sharīf al-Idrīsī than Ptolemy; the Land of Orbetello, the Gulf of Genoa, the Bay of Saint Michael, and Bay of the Seine were not present in Ptolemy's work but appear in al-Sharīf al-Idrīsī's. Even Kimble (1938) praised al-Sharīf al-Idrīsī's method in comparison to Ptolemy. He claimed that Ptolemy's authority no longer commands unreserved approval especially on the discussion of the Nile and places in Africa. Al-Sharīf al-Idrīsī gave an idea of a dual Nile by introducing the Western Nile, which was discovered only in the 19th century. The mentioned places in Nuzhat al-Mushtāq, such as Ghana, Silla, Tacrour, the salt trade in Oulil are interesting reports that also prove the superiority of al-Sharīf al-Idrīsī's work to that of Ptolemy. And maybe it should be the case since it is not well-established if Ptolemy himself came up with a world map. And this is exactly why Sezgin contradicted their claims citing key points that al-Sharīf al-Idrīsī used the Ma'mūn atlas as reference for his maps. Sezgin is convinced that al-Sharīf al-Idrīsī misquoted the *Geography* of Al-Ma'mūn as Ptolemy's *al-Ğuġrafyā* based on his examination of the sections of Nuzhat al-Mushtāq. Sezgin supported his claims by citing the adoption of al-Sharīf al-Idrīsī's map of the Nile that he thinks to be incorrectly linking the river to the Niger, the incorrect position of the island of Madagascar, and the presence of the so-called Dragon's Tail in the smaller version of the world map of al-Sharīf al-Idrīsī. According to Sezgin (2005), all these characteristics adopted by al-Sharīf al-Idrīsī in his map are found in al-Ma'mūn's Map. Whatever is the case, there is no doubt that both al-Sharīf al-Idrīsī's map and Ma'mūn's atlas had ptolemaic influence. Furthermore, I believe that al-Sharīf al-Idrīsī's map is a hybrid of both the Ptolemaic and the al-Balkhi Schools of Geography. Aside from al-Sharīf al-Idrīsī's adoption of Ptolemaic method of nine parallels of latitude and eleven meridians of longitude, he also used al-Balkhi School of Geography's portrayal of a south-oriented map, all-encompassing water, and an elongated depiction of Africa towards the continent of Asia. Al-Sharīf al-Idrīsī was commissioned by a Christian king. It should not come to us by surprise that his work had both an Islamic and Christian fusion.



Figure 1: The World Map of al-Sharīf al-Idrīsī from the 14th century copy of *Nuzhat al-Mushtāq fī ikhtirāq al-āfāq* (MS Arabe no. 2221) preserved at the Bibliothèque Nationale de France.

After a few weeks of the completion of the silver-made world map and the Book of Roger by al-Sharīf al-Idrīsī, King Roger II died on 26 February 1154 C.E. He was succeeded by his son William I. Some scholars believe that al-Sharīf al-Idrīsī wrote treatises for William I entitled Rawd al-uns wa nuzhat al-nafs (Gardens of Intimacy and Pleasure of the Soul) as mentioned and quoted by the Sicilian-Arab poet Ibn Bashrun and Abu al-Fidā' in his Taqwīm al-Buldān. The treatise can no longer be found. Another two treatises were found in Istanbul attributed to al-Sharīf al-Idrīsī entitled Uns al-muhaj wa rawd al-farağ (Intimacy of souls and gardens of pleasure) and Rawd al-farağ wa nuzhat al-muhaj (Gardens of Pleasure and Recreation of the Soul) (Magbul, 1992). But some scholars seem to have different opinions of these latter works of al-Sharīf al-Idrīsī because of their contradiction to his original work, Nuzhat al-Mushtāq or Book of Roger. During the reign of William I, the king's political inefficiency resulted in a growing rebellion amongst local leaders in his kingdom. Anticipating what would be the outcome of the event, al-Sharīf al-Idrīsī decided to go back to North Africa. And he was right. In 1160 CE, the rebels ransacked the kingdom of William I, including the silver-made world map and Tabula Rogeriana, which were broken into pieces (Sezgin, 2005). Fortunately, the book Nuzhat al-Mushtāq fī ikhtirāq $al-\bar{a}f\bar{a}q$ by al-Sharīf al-Idrīsī has a surviving copy dated 1300 C.E. that exists today in Paris, under the protection and preservation of the Bibliothèque Nationale de France. This manuscript gives us a glimpse of the feat made by al-Sharīf al-Idrīsī and his team of scholars on the work commissioned by King Roger II. Al-Sharīf al-Idrīsī passed away on 1165 C.E., probably in Ceuta. He was 65 years of age.

3. Translation



Figure 2: Map of Section Nine (9) of Climate One (1) in al-Sharīf al-Idrīsī's fourteenth (14th) century copy of *Nuzhat al-Mushtāq fī ikhtirāq al-āfāq* (MS Arabe 2221) preserved at the Bibliothèque Nationale de France.

1.	Qamarun	6. Ashūr	12. Kalah	18. Shamil
2.	Sabūma.	7. Lankabālūs	13. Salāhit	19. Khānfū
3.	Al-Qamar and	8. Jalus	14. Rami	
	Island of Malay	9. Hizlij	15. Mayid	
4.	Māyid	10. Tonūmah	16. Qamār	
5.	Sanda-fulat	11. Mābit	17. Lūqīn	

- 1. The ninth section of the first climate contains a part of the Indian Ocean which is also known as the China Sea. In it, there is a part of the sea under the name *Darlarowa*. In this sea, there exists a group of islands that we shall mention later with the help of God. On the southern part of the Indian Ocean, we find towns and cities like the city of *Jasta*, which is part of the country of *Sofāla*. It is a small city where a lot of gold nuggets exist that serve as a source of income and livelihood for the inhabitants. Their food consists of sea turtles and the meat of seashells; and they also have a little corn. This city is located on a big bay where the boats enter. The people of *Jasta* have neither boats nor livestock that they can trade with. Instead, they barter among themselves and benefit from each other. The people of *al-Qamar* and the traders from the country of *Mihraj* socialize and trade with them.
- 2. From the city *Jasta* to the city of *Daghota*, there is a three days and nights voyage by sea. From it to the *al-Qamar* island, there is only one passage. The city of *Daghota*, which has gold nuggets on a big bay, is the last city from the country of *Sofāla*. Its inhabitants are naked. They do not clothe themselves with anything. However, they cover themselves with their hands when they meet with other traders coming from the rest of the neighboring islands. Their women are hidden. They do not enter the market or the congregation because they are naked. Therefore,

they ought to stay in the places accommodated for them. Gold nuggets exist in this city and the rest of its land, just like the ones existing among the other lands of *Sofāla*.

- 3. The land of *Sofāla* is connected to the land of *Al-Wāqwāq*. It contains two dispraised cities. Its population is small due to the harshness of its living environment and its difficult livelihood. One of the islands is called *Dadwā* and the second is *Banhana*. They are followed by a big town called *Daghragha*. Its people are black skinned and deformed creatures. Their language is a kind of whistling. They are naked and do not cover themselves with anything. The people visiting their lands are few. Their food consists of fish, shells and the meat of turtles. They are connected to the islands of *Al-Wāqwāq* that we shall mention with the help of God.
- 4. Every single one of these countries is located on a big bay. Their lands do not contain any gold. They do not trade nor own any boats and livestock. As for the island of *Jalūs*, its people are black skinned and naked. They eat anything they can get their hands into, just as we mentioned before. They have a mountain. The soil of their mountain is silver. If it is touched by fire, it disintegrates and turns to silver. From it to the island of *Lankabālūs* island is a journey of two days. From the island of *Lankabālūs* to the island of *Kalah* is a voyage of five days. It is a vast island inhabited by a king named *Jabāba* the Indian. In this island, you can find a lot of mixed lead with tin metal. The essence of the substance is pure. The traders exploit it. After taking it out, they prepare it
- 5. for other lands. The inhabitants of this land use wraps as clothing. Their women and men cover themselves with one single wrap. In this island, the bamboo grows. It also contains good camphor, which is a big tree that resembles a willow tree. However, its shadow can cover up to a hundred men or more. The camphor is extracted from this tree by picking the top of the tree which causes the latex to drip. If the running liquid substance ceases, the much lower part of the tree which is the middle part is picked that causes portion of the camphor which is the sticky substance of the tree to drip. However, if it is congested inside the tree, making it inactive, it dies and seeks another. The wood of the camphor tree is light-colored. In this island exist miracles which can cause suspicion on the sayings and stories of its narrator.
- 6. After this island, there is the island of *Jāba*, *Salāhit* and *Hizlij*. Between each one of them and its neighboring island are two *farsakh*. These islands belong to one king named *Jāba*. The king wears gold accessories and a hat adorned with gold, pearls and sapphire. Their dirhams are printed with pictures of the king. Their king worships Buddha.
- 7. And *Budud* is the name of the temples derived from the Indian language. The *budd* of the king is well-made and structured. Its sides are made with marbles. Inside, it is surrounded by idols in every corner. The idols are made of white marbles and on top of their heads are adorned crowns, and the rest of the clothing is made of gold and the like. Their prayers are either composed of singing and melodizing, and a nice clapping with the hands. On the other hand, the beautiful servants dance and use types of magic and lewdness. All of these rituals are exposed to the worshipers and the rest in the *budd*. For each *budd* possesses several female servants that eat and dress from its money.
- 8. According to their tradition, if a woman gives birth to a beautiful girl, she offers her daughter to the *budd*. When the daughter grows, her mother dresses her up and takes her by hand surrounded by her family, men and women, to the *budd* and gives her to its servants, and leaves. When the girl is in the hands of the servants of the *budd*, she is given to the women, who have knowledge over dancing and acts of lewdness and the rest needed. If the girl accepts to learn, she is dressed with the best clothing and crowned with the best and most valuable accessories. Therefore, she settles in the *Budd* where she cannot leave or separate from it. The same is practiced by the Indians who worship Buddha.
- 9. In these islands, men can find plenty of coconut trees, best bananas, and cedar trees. And in this island of *Hizlij*, there is a very big abyss that no one is able to know its depth and it is one of the witnessed wonders of the world.

And the island of $J\bar{a}ba$ is connected to the island of $M\bar{a}bit$. It is under the king $J\bar{a}ba$. It contains coconuts, bananas, cane and rice. And in the island of $Sal\bar{a}hit$, there is plenty of sandalwood, wheat, and cloves. The description of the clove trees is like the plant

- 10. of Hennah trees such as the precise resemblance to its branches and its redness. It has flowers which resemble the blossom of bitter orange. If the blossom falls, it is harvested. It is soaked in water until it is ready to be used. After that, they take what they need and dry it on a wooden rack. They sell it to the incoming merchants that buy it and resell it to other consumers. On the end of this island, there is a 100 yards long volcano. In the morning, the volcano releases smoke, while at night, flames are released.
- 11. On the left side of the island of *Mābit* is the island of *Tonūmah*. Between them, there is a day journey. It is an inhabited island. The clothes of its people are wraps. It contains freshwater, rice, sugarcane, coconuts and also mines of pearl. And in the island of *Tonūmah*, there is agarwood, camphor, and the leaves and branches of aloeswood plants resembling the leaves and branches of a plant named *al-Ṣāṣa*. The aloes-wood is extracted in a specific timing after cutting its branches months before. And then its top is carved and its soft part removed. Its heartwood is firm. It is taken and stripped with *al-askirfāj* which is a way to cool down the aloes-wood until it is cleaned. Then, it is stripped off with glass and placed in vessels canvas for refinement. It is then taken off from those vessels and sold to the traders who they themselves trade it with to the rest of the country.
- 12. From the island of *Tonūmah* to the island of *Qamār* is a five-day journey. The *Qamāri* aloes-wood is attributed to this island. However, the *Ṣanuf i* aloes-wood is more valuable and better than the *Qamāri* aloes-wood. In this island, there is sandalwood and rice. Its inhabitants are dressed with wraps, and they socialize with traders. They are well-behaved with others, and behave with justice, great respect and righteousness. They worship idols and *Budud*, and they burn their dead with fire.
- 13. The *Qamār* Island is connected by a coast to the *Şanuf* Island. Between these two islands is a distance of three miles. In this island, there is the *Şanuf* i aloes-wood better than the *Qamāri* aloes-wood, because it can be submerged in water due to its quality and heavy weight. In this island, there are also cows and buffaloes with no tails. There are also coconuts, bananas, sugarcane and rice. Its inhabitants do not slaughter any kind of four-legged animals nor vermin nor insects. The cow is eaten if it dies. However, most of them try to heal them if they can. The one who kills a cow is either executed or his hand is chopped off. On the other hand, if the cow becomes impotent, it is then to be placed in a house until it dies naturally. In this island, there is a king named *Zinbud*. Its inhabitants are brown skinned. Every one of the inhabitants dresses with two wraps; one is used for waist wrapping and the other for covering. The water of the island is fresh. From this island to the island of *Sanda-fulat* is a ten-day voyage. From the island of *Şanuf* to the city *Lūqīn* is of three marāhil voyage, and it is the first port of China. It possesses
- 14. embroidered brocade and the Chinese silk. From there, it is traded to every direction. It is also the location where the Chinese porcelain is produced. These products are also prepared for the rest of the countries, both neighboring and distant ones. There is also rice, beans, coconuts and cane. Its inhabitants wear wraps. They socialize with other traders. Their country possesses noble and good spirits. They use types of goods more than the rest of India.
- 15. From the city of *Lūqīn* to the city of *Khānfū* is a journey of four days by sea and twenty days by land. It is the greatest Chinese port. It is ruled by a powerful king that has a great empire, plenty of elephants, army and weapons. Its inhabitants eat rice, dairy products, coconuts, sugarcane and bdellium. It is located on a bay from where the ships travel for two months to the city of *Bājah*, which is the city of *Baghbugh Baghbugh*. He is the king of all China. The travelers from the western countries culminate to his city. It contains all kinds of fruits, legumes, wheat, barley and rice.

- 16. However, there are neither dates nor figs in the country of China and India. Instead, they have fruit trees which are called *al-Shakī* and *al-Barkī*, that are usually found in the country of pepper. It is a tree that has a thick trunk and its leaves resemble the leaf of the green cabbage. The length of its fruit is almost four spans. They have a circular shape that resembles a watermelon. It has a red rind, and inside it is a grain that looks like the ones of oak. It is roasted with fire and eaten just like chestnuts, and tastes the same. The pulp of this fruit, if eaten, tastes mouthwatering since it has a combination of savor of an apple, pears, a little of the taste of bananas and bdellium. This fruit has a splendid description and a delicious taste, and it is most valuable in the Indian country.
- 17. In India, there is also a plant called *al-'Anbā* (mango?) which is a big tree that resembles walnut trees and their leaves are the same. Its fruit is similar to the fruit of sweet bdellium. If it is entangled while unripe, it is harvested. Then, it is mixed with vinegar and its taste turns to an olive-like taste. They have them as one of their rich seasonings. From the city of *Khānfū* to the city of *Khanku* is an eight-day journey that we shall mention in the tenth part after this.
- 18. From the coastal city of *Sanuf* to the island *Shamil* is a four-day journey. It is an island located at the end of the *Sanuf* Sea. It is full of buildings and crowded with people across its diameter. It possesses wheat, rice, plenty of bananas and sugarcane. It also has a huge fish which is delicious. If a man eats that fish, he will not crave for meat. From the island of *Shamil* to the island of *Ashūr* is a four-day journey. It is an island with a few inhabitants. Its land is harsh in which there are plenty of scorpions and snakes. Its mountains are connected. From the latter to the island of *Malay* is a light day journey. It is a big island that extends from west to east. It contains a city inhabited by the king of the islands. Its dirhams are made of silver named *Tatariyah* dirhams. He has an army, elephants and plenty of ships.
- 19. It also has bananas, coconuts, rice and cane. According to its inhabitants, this island is said to be connected to the Sea of *Zeftī* from the last end of china. In this sea which is called *Sanuf* Sea, there exist different kinds of sea creatures and plenty of other wonders which they use as guide to indicate peace or harm. We shall mention further information in the last section of the second climate. And we shall also mention the narrations of other travelers and what was shared by other voyagers. And also, what was agreed among the narratives depending on the energy and the efforts with the help of Allah.
- 20. The ninth section of the first climate, thank God, is followed by the tenth section with the will of God.

Conclusion

Al-Sharīf al-Idrīsī was neither born in Ceuta in North Africa, Andalus Spain, nor Mileto in South Italy. He was born in Sicily. In fact, Needham (1959) calls al-Sharīf al-Idrīsī the great Sicilian geographer, instead of Moroccan/*Maghrebī* geographer or Andalusian geographer. When Roger the Frank, father of King Roger II, knew that Muḥammad ibn 'Abd Allah, father of al-Sharīf al-Idrīsī, came from the family of the prophet, and offered him generosity in return, al-Sharīf al-Idrīsī's father decided to stay in Sicily instead of leaving the kingdom. Roger the Frank most probably offered him (Muḥammad b. 'Abd Allah) protection if he stayed in his kingdom. He knew how valuable Muḥammad b. 'Abd Allah's presence in his kingdom, and how important for him to stay in Sicily in order to prevent or discourage any possible attack or uprising from the remaining Muslim loyalists to the Hammūdid dynasty in the neighboring coast particularly in Calabria, which used to be under the Hammūdid dynasty. The rumor alone that Muḥammad ibn 'Abd Allah was the Mahdi was reason enough to mobilize Muslim fighters not just from the South of Italy, but from different realms of Islam, to fight under his leadership. His presence in Sicily was somewhat a form of political maneuver or leverage for Roger the Frank against his enemies in order for him to establish a strong grip of his newly conquered land. Ibn Timna, who tried to assassinate Muḥammad ibn 'Abd Allah, died in 1062 C.E. His death and the goodwill showed by the new ruler of Sicily made Muḥammad ibn 'Abd Allah stay in Sicily until his son al-Sharīf al-Idrīsī was born. Thus, al-Sharīf al-Idrīsī and

King Roger II knew each other even before the latter invited him to his royal court in Palermo. But al-Sharif al-Idrisi had to leave the kingdom when he was young, most probably at the age of nine to go to North Africa. Some historians wrote that al-Sharīf al-Idrīsī visited Ephesus in Asia Minor, modern-day Turkey, when he was nine years old. But Amara and Nef (2001) stated that his travel to Ephesus did not happen, instead his voyage to Loja was confused with Ephesus due to a careless speedy translation of the text. Al-Sharīf al-Idrīsī stayed in North Africa until he attained the age of maturity, and proceeded on his travels and education around North Africa and Iberian Peninsula. If this is true, which I strongly believe to be the case, it was not surprising why King Roger II prepared a grand ceremony to welcome al-Sharīf al-Idrīsī back to Sicily. Their meeting can be likened to two good brothers who had been separated by time, and the feeling of longing was quite overwhelming. Thus, such grandiosity of ceremony was appropriate. King Roger II was a smart politician like his father. He also knew quite well that in order for him to maintain and keep their flourishing and thriving kingdom intact, he needed al-Sharīf al-Idrīsī to be with him, just like his father had thought, as a political puppet, as other historians have suggested. But no doubt, King Roger II's brotherly affection towards al-Sharīf al-Idrīsī is unquestionable. Although al-Sharīf al-Idrīsī was not a politician himself, but the fact that he was *al-Sharīf*, his words were powerful to suppress any uprising from his fellow Muslims who would think of going against King Roger II in mainland Europe. Unrivalled by the Muslims in Europe, King Roger II was able to consolidate his power to stay powerful in his kingdom and proceed to his ambition of expanding his territory. The camaraderie displayed by al-Sharīf al-Idrīsī and King Roger II, strengthened by their mutual love and keenness for scientific knowledge despite their religious differences, was a testament of how far both worlds, Muslim and non-Muslim, could achieve together in the field of science. We might give the impression that King Roger II took advantage of the intellectual knowledge of al-Sharīf al-Idrīsī, but this kind of divisive view should be outright dismissed. The present world has a lot to learn from this extraordinary friendship that existed hundreds of years ago. Indeed, it was an exemplary history of unity and achievement.

As for the treatise of al-Sharīf al-Idrīsī entitled *Nuzhat al-Mushtāq*, it can be considered as the pinnacle of Arabic-Islamic geographical feat. For some historians, the period in which he lived, i.e. the twelfth (12th) century, also marks the beginning of the decline of Arabic-Islamic leadership in the field of geography. But Needham (1959) mentioned that after al-Sharīf al-Idrīsī, the Islamic world still produced good names in the field in the 13th century, and I would say even after that period, but unable to claim any great originality. Al-Sharīf al-Idrīsī was praised for his precise elaboration and rich information in other sections of *Nuzhat al-Mushtāq*, but at the same time, he was also largely criticized for his poor and confusing depiction of kingdoms and islands in the Far East. The mapping of the Far East in al-Sharīf al-Idrīsī's *Nuzhat* is probably the most complicated part of his work. Maqbul (1960) finds it more confusing and less accurate in comparison to the Mediterranean regions and Europe because of al-Sharīf al-Idrīsī's incorporation of reference material from the time of Ptolemy to contemporary Persian and Islamic sources. Al-Sharīf al-Idrīsī seemed to have confused himself with the Arabic word *Jazirah*. Earlier scholars used *Jazirah* to mean either island or peninsula. But al-Sharīf al-Idrīsī understood it to mean, by its literal meaning, an island. These are noticeable in his representation of the Korean Peninsula known in Arabic as as-Sīlā as the islands beyond China, Khmer empire or the modern-day Cambodia as island of Qamār, and Malaysian Peninsula as island of Kalah. As for the case of Qamār, Abū Zāyd was careful enough to correct the erroneous interpretation of this kingdom as an island to a part of a larger landmass.

But despite all these imperfections thrown against al-Sharīf al-Idrīsī and his depiction of the Far East, his works, including the contributions of previous Islamic geographers before him, made a great stride toward our understanding of the Far East. We must not forget that back in the early Middle Ages, in fact for many centuries before Vasco de Gama reached the southern tip of Africa, there was a scarcity of information about the Far East in Europe, and the Islamic world filled in the gap by providing rich and new information. The information provided by al-Sharīf al-Idrīsī about the Far East has no doubt of its significance especially on how he elaborated and put more value and importance to the civic and cultural life of the people living in the region, as well as the description of manners and their diet, flora and fauna, distance between kingdoms and islands, with special mention of the availability of freshwater, name of products and how they were extracted or prepared for trade, language and religious belief of the inhabitants of the region. I also find his method

of describing plants found in every place quite fascinating and impressive. His description is detailed-oriented, as if he had seen it by himself, and the way his imaginative comparison of things allows its audience to visualize what he wanted to convey in writing. There are many instances when he applied this technique to simplify completely unknown plants or products common in the Far East. For instance, al-Sharīf al-Idrīsī described a tree from Kalah that resembles a willow tree and has light-colored wood in which good camphor are extracted by plucking the top of the tree until its middle part enabling the latex to drip. So here, he compared a camphor tree to a willow tree to allow the imagination of his reader to picture out what a camphor tree is. Another example is the clove trees found in Salāhit, which he compared to a hennah tree in terms of its branches and redness. The flowers of the clove tree were compared to the blossom of bitter orange. He also compared the leaves and branches of aloes-wood to that of the plant called *al-Sāsa*. In China, al-Sharīf al-Idrīsī mentioned fruit trees called *al-Shakī* and *al-Barkī*. He described these trees as having a leaf like that of a green cabbage, its fruit to watermelon, its grain to that of oak and its taste if roasted on fire to that of chestnuts, and its pulp to the savory of apple, pears, bananas and bdellium. In India, he compared the *al-'Anbā* tree, which I believe to be a mango tree, to a walnut tree. From the sections of Nuzhat al-Mushtāq translated, al-Sharif al-Idrisi mentioned vital information about the region and what makes first climate distinct from other climates. He said that the following can only be found in the first climate, the majority of which are from the far east, to wit: elephants, rhinoceros, giraffes, monkeys with tails, cows and buffaloes that do not have tails, *al-Nasanis*, snakes that can eat and swallow elephants and buffaloes, emeralds, different kinds of sapphires, al-Baba, al-Ghida, al-Ghara, Saqangura, camphor, aloes-wood, the inhabitants having red and darkskinned color, and the nights and days of same length. He also greatly spoke about the mines of gold found in different places in the Far East. Mainland China, the majority of which belongs to the second climate, had great wealth that al-Sharīf al-Idrīsī spoke about as well. These riches included the luxurious silk, porcelain, and artworks that merchants from the west sought for in the Far East. These achievements are beyond comparison to that of Islamic geographers' predecessors, the Greek geographers. Even Kimble felt surprised by why such a great work by al-Sharīf al-Idrīsī was overlooked by European scholars. Kimble wrote and I quote:

In view of its modernity and high intrinsic worth, it is difficult to understand why Idrīsī's work, composed as it was at the chronological and geographical point of contact between the Islamic and Christian civilizations, remained so long unutilized by the Christian scholars in Sicily, Italy or other Christian countries, until we remember that the primary – we might almost say the sole – interest of the Latin West in Arabic literature centered in the preparation of calendars, star tables, and horoscopes, and the recovery of ancient lore. It was not much concerned in the twelfth century with the descriptive geography of Africa and Asia (Kimble, 1938, pp. 59-60).

Even if he did not travel to the Far East, as a generally accepted fact, he utilized eyewitness accounts of the region by employing the work of Ibn Khurdādhbih, as well as the works of other Islamic scholars like al-Mas⁴udi who made used of the information provided by Abu Zayd al-Hasan al-Sirafi who had written about the Far East by adopting the work of Sulayman al-Tājir, a famous sailor and traveler to the Far East. Al-Sharīf al-Idrīsī was quite critical also on his selection of information from his sources. He was more interested in geographical information about the place rather than paying attention to fantasies like the trees in al-Wāqwāq bearing a shouting human head-like fruit that other scholars widely quoted. Furthermore, al-Sharīf al-Idrīsī set the foundation and trend of mapping the region. His depiction of the islands and kingdoms in the Far East on a map can be considered as something cutting-edge in his time. It can be the earliest depiction of the Far East on a map covering today's Southeast Asian countries. A cartographical illustration of the Far East earlier than the 14th century copy of al-Sharīf al-Idrīsī's map of the region should be treated as the first cartographical work on the Far East. His maps might not be perfect and accurate, but definitely, he pioneered the trend for the mapping of the region.

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