Epistemological Implications Of Maluku Spices Against European Minds In XIV-XVII Century

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Abstract: Human knowledge about spices has been known since the history of European civilization in the ancient era, the Middle Ages, until the beginning of the modern age. Pepper, cloves, nutmeg, and cinnamon are the main spices of Europeans. Exotic spices coming from the eastern world were introduced by Arab traders through Constantinople and Alexandria and then headed to a number of cities in Greece and other cities in Europe. Since the spice had entered and become part of the European mind, spice knowledge gave birth to various influences and implications for various aspects of human life. Colonialism and imperialism, the discovery of the new world, maritime technology and natural knowledge, including medical science and culinary traditions, and geospatial world are parts of the influence and implications of spices on European mind from the XIV century to the XVII century. The chronicles of the history of spices cannot be separated from the view of life of European mind in viewing the eastern world especially Maluku as the place of origin of clove and nutmeg spices, a world laden with mythical traditions of ancient times, the effects of "anesthetic worldly pleasures" that conflict with medieval spirits, including freedom of thought which is a symbol of modern human patrons. The adverse effects and benefits of spices for the European mind also gave birth to knowledge that had epistemological implications for various scientific narratives in the history of human life.

Index Terms : Spice; Maluku; History; Epistemological.

1. INTRODUCTION
Maluku Spice has become a legend in Europe as the largest source of wealth in the east [1], [2]. Clove and nutmeg are the products. Cloves, (Syzygium Aromaticum, or Eugenia Aromatica or Kuntze) flower buds dried from clove trees come from five small islands in the northern part of Maluku namely Ternate, Tidore, Moti, Makian and Bacan [3]. Cloves were first recorded in western literature in a Greek report from the seventh century AD [1]. Nutmeg (Myristica Fragrance) originates from the Banda Naira archipelago located on the southeast of Ambon island [4]. Ancient Greeks had used spices to taste food as cooking spices since thousands of years ago. The exotic spices coming from the eastern world were brought by Arab traders through Constantinople and Alexandria and then headed to a number of cities in Greece and other cities in Europe. The major ports in Tyre, Greece and in Venice, Italy became the main ports of Maluku spices entering European life and civilization. Apart from being a cooking spice, medicinal herbs, and ingredients for fragrances, cloves and nutmeg are also a main ingredient of food preservatives during the seasons [5], [6], [7].

Herodotus, a Greek historian who was born in Halicamassus, Caria, and lived in the 5th Century BC (484 BC - 425 BC) mentioned that the 3 most basic yet the most expensive ingredients of mummification were using spices, including the heroic legend of the Trojan War during the period Ancient Greece, which also involved spices [8]. In the field of medicine, Hippocrates (460-377 BC), the ancient Greek philosopher and known as the "Father of Medicine" and the originator of a medical code of ethics whose name was always included (Hippocratic Oath), recorded a number of medicinal plants made from herbs with various ways of use in the medical world, including turmeric, cinnamon, coriander, mint, and marjoram. Hippocrates detailed approximately 400 samples of medicinal plants made from herbs, half of which are still in use today. The ancient Greek philosopher and scientist Theophrastus (372-287 BC), who in some literature was referred to as "the Father of Modern Botany," wrote two books On Odors and An Inquiry into Plants, summarizing various treatises on plants related to aromatic plants, fatigue, fainting, paralysis, weather, and theriacs (a kind of antidote to poisonous animal bites consisting of various "strange" ingredients such as opium, and spices). Theophrastus showed that most of the fragrant spice plants came from hot regions in Asia that were abundant in sunlight.[9]. The word "Spice" which is famous in the western world or rempah in the Eastern world, evokes something more than just a seasoning, but a sensation that is full of echoes of the past, including loaded with a wealth of tastes and consequences beyond reason. The implication of spices on health and food also gave birth to the famous Hippocrates’s phrase in medieval medical world: “Let your food be your medicine and your medicine be your food”. The spices and trade have become one of the commodities that according to Edward Said is an imagination of orientalism, which is full of beauty, glamour, romance and enduring adventure stories, from Sinbad’s story to the same amazing series of non-fiction notes. When this very important eastern product reaches the West, spices not only gain meaningful historical content that can only be equated with a number of other types of snacks such as bread, salt and grapes, all of which have three great symbols in the Middle Ages. The symbol of bread contains the expression "give our bread rations today", (demands of blessing and affection); the salt symbol contains the expression “salt of the world” or reflects the maturity of one's life experience, and the representation of grapes contains the symbol of “truth, death, falsehood or excessive deeds as a reflection (behavior) of a person”. Spice symbolism is even more diverse. The spice symbol contains a stronger ambivalence than the three types of food. When the spice arrived by boat or caravan from the east, there was also an invisible charge full of mythical and fantasy interrelations that was disgusting for some people but also enchanting for others [10]. In addition to cloves and nutmeg, pepper can also add flavor to a piece of dried and salted meat in the early part of the modern European century, including being used for various other mystical purposes such as calling on God, casting out demons, and curing diseases or
driving out plague. In some circles, spices are considered to be a prohibited food; the taste is full of ambiguity and paradox. Its effects on health and sexual arousal are interpreted as a series of sins which include arrogance, luxury, greed and lust. This is clearly far from the sacred word contained and comes from the appeal of spices. In this context, spices fill a special place, ignoring the fact that herbs in the context of nutrition are not important; the most important thing is how the spices are according to Jared Diamond and Gunter Grass, that food has played an important role in shaping human destiny [7], [10]. Various voyages carried out by Europeans in turn marked the epic voyage of humanity in the “century of discovery” in crossing continents and vast oceans that were first recorded in human history [11]. The teachings of Copernicus and Galileo stating that “the earth is round” greatly influenced and encouraged Spanish and Portuguese seamen and other European countries to sail across the ocean in search of new “colony” areas. It is noted that famous spices seekers in history such as Bartholomeus Diaz, Christopher Colombus, Vasco da Gama, Ferdinant Magellan and Juan Sebastian El cano tried to find new shipping routes to India and the Maluku Spice Islands. The story of the journey of Marco Polo, a merchant from Venice, to China (1271-1292) has inspired the spirit of Western European sailors to go sailing in search of new countries. The story of Marco Polo’s journey written in the book of Imago Mundi (Wonders of the World) was widely read and used as a handbook for the explorers who came later [12]. Unlike the Western explorers, two sailors and Muslim explorers had previously sailed to the east, in the XIV century, the place where the spices came from. Ibn Battuta (1304-1368) and Admiral Cheng Ho Chinese naval commander in the XV century (1371-1433) who finally died on the seventh voyage after returning from India’s Kalikut, carrying crystal, gold, silver, deer antlers and rhino horns, including various types of cloth and medicinal ingredients from spices, such as cloves, incense, pepper, and other aromatic oils. Ibn Battuta and Cheng Ho became seafaring adventurers by means of peace and friendship. The spiritual / religious dimension also marked the sailing era significantly. This situation is different from other western exploration colleagues who come with the aim of making a profit as big as monopoly and full of ambition of conquest which results in oppression [13]. How important the spices of the Archipelago (Indonesia) are, including clove trees and nutmegs from Maluku at that time, encouraging various European nations to explore foreign regions in the eastern hemisphere and far from their origin, implying that spices, especially cloves have a central role in World civilization. In the spirit of the Renaissance era, Europeans in the late Middle Ages until the beginning of the modern century competed to establish social status and identity as a “dignified” and powerful nation and wanted to civilize other nations, especially their colonies, through religion, besides reaping the benefits of the spices obtained from the east as much as possible.

3 RESULTS

Since ancient times, the middle ages, until the modern age, the spices of Maluku and Indonesia have played important roles in various aspects of human life. Utilization of Spice with its influence and implications has given rise to the value of new knowledge that has multi-faceted aspects. Spice does not merely have implications for the emergence of imperialism and colonialism alone. Likewise various spice products known in Europe from ancient times to the present era, they do not always lead to mere economic value. With spices there are various dimensions of knowledge contained therein and can provide added value in various aspects of human life. For spices in the realm of critical knowledge related to this study, the authors found in broad outline among Europeans that spice knowledge has a contribution to thinking on educational, historical and cultural values even though ecologically Europeans are not conditioned to a tropical nature that can foster a number of important spices from Indonesia including Maluku. European knowledge about spices not only gives rise
to multiple interpretations in history, but also gives birth to multiple aspects of knowledge with various implications in human life. Researchers divided the seven aspects of the implications of spices on European knowledge to aspects of education, economics, culture, politics, religion and medical. This is done with the consideration that these seven aspects are more dominant in giving a dimension of knowledge to what is being studied. In the aspect of education, health manuals towards the end of the Middle Ages and the beginning of the Renaissance, led to the announcement of the “Sanitatis Regiment” relating to herbs as a medicinal and health prevention ingredient published by the Salerno Medical School, in Italy. Including when the bubonic plague hit Europe in the 14th century, and attacked almost all regions of Europe known as the Black Death, the disaster was among the worst disasters ever experienced by humanity which claimed the lives of up to 25 million people. Educated people in Paris, France, believe that the Black Death Plague began to plague on March 20, 1345. French scholars claimed that the triple conjunctions of Saturn, Jupiter and Mars coincided or paralleled with one another in March 1345, producing “evil air” which directly caused an epidemic [19]. To stop this disaster, King Philippe VI of France ordered the Paris Faculty of Medicine to find the cause and treatment for the outbreak. The Faculty of Medicine, University of Paris submitted detailed reports by mobilizing all available medical and scientific knowledge. The results of the recommendations from the Faculty of Medicine include: recommending that everyone should avoid bad air from the South, and to eliminate the air, fumigation must be done by burning spices or aromatic plants; do not eat or drink excessively, boil all meat using spices in cassia soup, cinnamon, wine, vinegar, and ginger, plus cloves when making sauce. In addition, another recommendation was that people should bring incense bags called pomme d’ambre. In the incense bag, there were Asian spices such as pepper, ginger, cinnamon, cloves, cardamom, kencur, or turmeric [20], [21]. The implications of the spice in medieval medical education knowledge were also introduced by the Greek philosopher Hippocrates who was later called the “Father of modern medicine”. Hippocrates’ famous legendary quote about medicine and food that indicates the spices in it, “Make your food as medicine, and make your medicine as food”, has become a trend until now in the medical field to motivate healing or disease prevention for everyone. A number of eastern spices had a significant role in the tradition of medicine. In the economic aspect of the Maluku Spice it had implications for the economy of the Europeans in the late Middle Ages to the early Modern Century. Financial gains were the main reason for European travelers to find a route to the Maluku Spice Islands. It included European economic activity before the “discovery” of the new world by Christopher Columbus in 1492. In the 12th century to the 14th century AD, the markets in Champagne and Bruges are among the most famous markets in Europe. These markets simultaneously revived economic life in Europe. Trade cities such as Venice, Genoa and Pisa in Italy established markets along the Syrian coast replacing the position of Muslim traders in the Mediterranean and Byzantium. Spices, which was one of the most valuable commodities at that time, began to generally circulate in the international market. The markets in Champagne and Bruges were among the most famous markets in Europe. These markets have revived economic life in Europe. Simultaneously with the revival of trading cities, trade leagues also appeared and a number of banks to facilitate trading activities were also established [22]. The city of Amsterdam (Netherlands) in the early 17th century AD was the first modern financial center in the world. The city offered the Maluku and Wisselbank spice trade, the Amsterdam stock market (Amsterdamsche Beurs or Beurs van Hendrick de Keyser), Korenbeurs (commodity market), large-scale insurance, brokerage and cross-country trading companies known in various world markets until the present time [23]. The first financial system revolution and globalization was in Amsterdam (the Netherlands) in the early 17th century AD, created by Mega Corporation, Trans-National and Semi-Government or better known as the VOC (Verenigde Oostindische Compagnie) [24]. The VOC controlled the spice trade monopoly throughout the 17th century AD and the VOC also helped establish the administrative and trade center of its administration in Jayakarta under the name Batavia (now Jakarta). Since then, over the next 200 years, the VOC acquired ports as a base for trading and securing its business interests along the spice trade route from the Middle East-Africa-Asia to Nagasaki, Japan and Maluku. On Maluku side, the economy of Maluku was no longer dependent on spice products. In the cultural aspect, spice knowledge had implications for culinary traditions during the Middle Ages and early modern era. Spices became part of the tradition of banquets for aristocrats and aristocrats, so that in European society at that time, spices had their own stigma that food affairs became a measure of social status in society. Spices such as pepper, cloves, nutmeg, cinnamon, ginger and turmeric were a number of herbs that were always included in the culture of early European cuisine. In the fiscal report from 1424 to 1425 the Talbot family from Shropshire in England consumed exclusively spices in a number ranging from 7.5 kg of pepper, 6.5 kg of ginger, 1.5 kg of turmeric and 6.5 kg of spice other herbs. Likewise at a banquet during a wedding session in Italy in the 15th century, there were reports that invited guests present consumed about 80kg of cinnamon, 35kg of nutmeg, 40kg of cloves and 175kg of black pepper which were spent in just a few days [25]. It can be said that European culinary culture was closely related to the presence of Eastern Spices. In addition to spicy dishes, there was also a spice-flavored red wine known as the “Hippokras Red Wine”. The political aspect was a complex aspect in European knowledge especially related to the Maluku spices. The dispute between Spain and the Portuguese in the Maluku Islands regarding the territory of control of the Spices through the Treaty of Tordesillas (1494) marked the initial phase of the domination of European countries in Asia and the world at large. The world was divided into two zones of influence and commercial territory over the spice trade. The Treaty of Tordesillas (1494) and Saragossa (1529) were the initial traces and symbols of the geopolitical supremacy and dominance of world trade in the 15th-16th century AD. The presence of Spain in Maluku made the Treaty (Agreement) of Tordesillas signed between Spain and the Portuguese on 7 June 1494 on the initiative of Pope Alexander VI to open conflict in Ternate and Tidore because each claimed its demarcation limits and wanted to monopolize the spices of Maluku. It was although this demarcation limit was also established through the Treaty of Zaragosa on April 22, 1529 where Spain had to release Maluku after obtaining compensation of 350,000 gold dukats. Spain had recorded 19 governors in Maluku from 1606 to 1663 [26].
The implication of the Maluku spice in the political aspect was the existence of an agreement between the Netherlands and the United Kingdom regarding the exchange of the Run Island (Maluku) with Manhattan (New York now). The beginning was the British getting spices from Venice (Italy) or Lisbon (Portuguese) with very expensive prices. However, since 1580, when King Philip II seized the throne of power in Portugal, the Lisbon markets closed the door for spice shipments to England. With the support of Queen Elizabeth I, the Lancaster voyage marked British official involvement in a voyage to the East Indies to fight for spices. On December 25, 1616, Captain Nathaniel Courthope reached Run to defend it from VOC claims. A contract with the locals was signed who accepted the King of England as the sovereign leader of the island. After four years of siege by the Dutch and the killing of Nathaniel Courthope in an ambush in 1620, the British and local allies left the island without resistance. According to the Westminster Agreement which ended the First Anglo-Dutch War of 1652-1654, Run had to be returned to England. The first attempt in 1660 failed because of tensions with the Dutch; after a second attempt in 1665, British traders were expelled the same year and the Dutch destroyed nutmeg trees. After the Second Anglo-Dutch War of 1665-1667, Britain and the United Provinces of the Netherlands made provisions in the Breda Agreement: Britain occupied the island of Manhattan, which was illegally occupied by Duke of York (later James II, brother of Charles II) in 1664, and changed its name from New Amsterdam to New York City and Rhun (Run Island) was handed over to the Dutch.

4 DISCUSSION

The Europeans in the Middle Ages looked at the Eastern world based on the work of the Second Century Claudius Ptolemy entitled “Tetrabiblos”. The view of the Greeks was generally illustrated in Ptolemy’s work, that the Earth was divided between two poles; the Northern “Oikumene” temperature region or inhabited area with “civilized” humans and the Southern “Equator” temperature region, as the uninhabited region, and even if it is inhabited, its human form and cultural characteristics differed from the Northern temperature region. The southern temperature region or the Equatorial region was believed to be unable to sustain life due to the climate being too hot [27] [3]. Temperature, along with climate and region, was given top priority in medieval European medical history. Humoral theory explained that one’s health affected the environment or climate in which they lived. Even the “Heart” of Western European medical science in the Middle Ages was rooted in the systematic humoral theory developed by Hippocrates and Galen. The essence of Humoral theory is harmony between humans and the universe. This Humoral Theory, (Natural Balance and its inhabitants) was adopted from the Philosopher Empedocles (493-433 BC), concerning the Universe which consists of four elements: Earth, Water, Fire, and Air. Each of these elements has a different warmth and humidity. The earth has cold and dry properties, water has cold and wet properties, fire has warm and dry properties, and air has warm and wet properties. The teaching about the four factors was a great influence later in Natural Sciences until the 17th century [28], [29], [30]. The theory of humors in the medieval medical world that referred to the 4 elements above gave a place to a number of Asian spices which tended to be dry as an alternative treatment for human health. Due to the correlation between spices as a treatment and supported by the temperature / climate where humans lived (Humors), there was a justification through a book entitled “Circa instans” written by a famous doctor Matthaeus Platearius from Italy. The book which can then be compared to Medieval Famacology Encyclopedia referred to books from Dioscorides, Galen, Oribasius, and Constantine from Africa. Throughout the 13th century this book was translated into French, English and German. This book explained in detail, the effects and uses of spices such as: Pepper, Ginger, Cinnamon, Cloves, Nutmeg, and Mace. These six main Asian spices were the most sought after by medieval Europeans. Humoral theory had not rarely been challenged since the Renaissance era and the era afterwards, but still played a central role in European medical science until the 18th century. According to humoral theory, physical health can be divided into 3 categories - healthy, sick, or between the two (between healthy and sick). The main reasons for the human body from being healthy to being sick are congenital abnormalities, trauma, and humoral imbalances. Apart from congenital abnormalities and trauma, which will be the responsibility of the surgeon, most imminent diseases stem from humoral imbalances [31]. Therefore, the Europeans at that time considered the balance of humor to be very important for maintaining a healthy body. The belief that humoral balance played an important role in maintaining physical health was shown by the fact that people put great pressure on the liver and spleen that controlled the production and circulation of humor. At that time, the suspicion of jaundice was caused by the collection of rotting bile. It was just like the belief that Melancholia sufferers appeared when the spleen absorbed toxic black bile. Belief in humoral theory, based on six external factors: air, food, excretion, exercise, sleep, and emotions affected the flow and balance of humor. To balance humor, doctors at that time extracted excessive humor or neutralized using drugs with different properties of humor. To extract excessive humor, doctors often let blood come out and used laxatives [21]. Black pepper and fig grapes were used to remove thick bile from the lungs and respiratory organs). Asian spices such as cinnamon, nutmeg, and cloves in hot and dry qualities could also be used for the treatment of the uterus for a woman after giving birth. Cinnamon powder and cumin were efficient for vaginal care after childbirth. Pregnant women with enlarged abdomen were advised to use cloves, wild celery, mint, slices etc. Cloves, nutmeg, and spikenard were used to treat cold uterus. Cloves, nutmeg, and galangal were used to calm the uterus pain due to cold or miscarriage [32].

Effects of Asian Spices in Medical Book “Le Livre des Simples”

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<tr>
<th>Types of Spices</th>
<th>Effects</th>
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<tr>
<td><strong>Pepper</strong></td>
<td>It is hot to the beginning of the fourth degree and dry to the middle of the fourth. Item, the wine in which black pepper has cooked with figs removes the thick sticky phlegm from the chest and respiratory organs, and it is very effective for asthma caused by cold. Item, powdered pepper gnaws away the dead flesh of sores.</td>
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<tr>
<td><strong>Ginger</strong></td>
<td>It is hot to the third degree and moist to the first. Item, the wine which has been cooked with figs and raisins de Carême is good for cough of cold cause and for cold of the chest. Item, the wine in which ginger has cooked with cumin is good for stomach pain provoked by flatulence, and this procures good digestion. Item, for tenesmus, put powdered ginger on a cloth onto the anus. The powder put into food is good for heart weakness and syncope.</td>
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<tr>
<td><strong>Cinnamon</strong></td>
<td>It is hot in the third degree and dry in the second. It fortifies the brain by its good smell, if forms scars and weakness of the body.</td>
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**References**

[27] [28] [29] [30] [31] [32]
knits together the wounds. Item, for weakness of the stomach and liver and to help digestion weakened by cold, put into the patient’s food and sauces powdered cinnamon and caraway. Item, to restore appetite lost through humors of the stomach, make a sauce of cinnamon powder, sage, parsley, and vinegar and use it. Item, for recently cracked lips and other sores, put powdered cinnamon on the sore. Item, for heart ailments and syncope, give powdered cinnamon with powdered leaves of the clove tree. Item, the large kind of cinnamon is used in strong medicine.

Clove

They are hot and dry in the third degree. Item, by their good smell they fortify, and by their quality they spread and dispense humors. Item, to aid digestion, give the wine in which these cloves have been cooked with fennel seed. Item, for suffocation of the womb, make a preparation of powdered cloves and strongly perfumed wine and apply to the fundament or make a pessary on it. Item, for diarrhea caused by a very strong medicine, boil 9 or 10 cloves in a glass phial with rose water and mastic, and give it to the patient slightly warmed. Item, for heart pains and syncope, give powdered cloves with borage juice.

Nutmeg

It is hot and dry to the second degree. It fortifies by its good smell and qualities. Item, for cold of the stomach and bad digestion, and to improve the color of the face, give in the morning 1 dram of nutmeg, this is very good. Item, the wine in which nutmeg has cooked with anise and cumin, cures pain of the stomach and intestines caused by flatulence. Item, the wine in which nutmeg has cooked with mastic should be given to convalescents so that they recover their good spirits. To fortify the brain and respiratory organs, let the patient breathe in the fragrance of this nut, it is good.

Mace

It is hot and dry to the second degree. Item, to aid bad digestion and cold of the stomach, the wine in which mace has cooked is good. Item, to purge the brain of excess of humors, chew some mace and keep it in the mouth for a long time so that its scent may rise to the brain. For weakness of the stomach and liver from cold cause, for the dropisy we call leukophlegmacy, for gripes, asthma, and other diseases of the chest caused by thick phlegm, cook mace in fennel juice. Finally, when it is cooked, add a little wine, strain, and give to the patient, it is a sovereign remedy.

Source: (The Le Livre des Simples Medecines, [33]).

5 CONCLUSION

"Why were Spices so important to Europeans in the Middle Ages and the beginning of the modern era? "To answer this, of course, it requires an in-depth search and is not merely based on historical data or facts that are displayed just like that. Considering that the object of study to be examined concerns the past which cannot be brought back chronically according to the momentum of events from the past to the present, there is a need for a historical search that is considered philosophically and not merely historical history. That is, there must be a critical reflective effort in the context of historical rectification. A reliable approach to doing that is Critical Historical Philosophy. R.G. Collingwood (1889-1943) saw that history is about the actions of the human past. These actions are always based on thought. Therefore, talking about history means talking about the development of thought. To gain historical knowledge, what needs to be done is re-enactment of past thoughts [34]. Spices are aromatic plants or parts of plants that are used in food with the main function of giving flavor. As part of plants used as herbs, fragrances, and food preservatives, spices have long been used as medicine, cosmetics and antimicrobials. With the increasing awareness of humans on the importance of spices, the value of knowledge on herbs should be appreciated by the government. It was realized that the knowledge of the importance of spices had not yet had a broad impact in terms of its utilization which could be consumed by the public in a practical and general manner like other herbal products. The importance of spices for the Indonesian people has not yet been realized to be maximally empowered so it is necessary to educate the values of knowledge about spices to all walks of life. Spices are one of the riches of the Indonesian people who play an important role in the life of the nation. In its history, spices have even played an important role in the global economy which brings economic competition among European countries. Cloves are native plants of the Maluku islands, which until the 15th century could only be found in the northern Maluku, or precisely located west of Halmahera Island, namely Ternate, Tidore, Moti, Makian/Makeang (Machian) and Bacan. In the 16th century clove cultivation expanded to the southern Ambon islands, namely to Ambon and Seram. In the second half of the 18th century clove cultivation expanded beyond the Maluku Islands. It was the same with Nutmeg fruits which until the 18th century were only produced in Banda Islands [35].

REFERENCES


