COMPARATIVE ANALYSIS OF THE CONTRIBUTIONS OF STRABO AND ERATOSTHENES TO THE DEVELOPMENT OF GEOGRAPHY

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ABSTRACT

This paper examines the comparative contributions of Strabo and Eratosthenes to the development of geography. Geographic thought during the ancient world varied from the act of map making, nature of places, origin and conception of the earth, methods of measurement, conception and description of the known world, through methods of construction of roads and pyramids. Strabo was an explorer and used his experience from travels to describe the varied places of the world and how people lived and were governed. Strabo was the first to introduce the concept of classification and regionalization in geography. He was the first to describe the weather patterns and the theory of profoundness of the earth. Strabo was criticized for being a descriptive geographer but remains the first scholar to be named as a professor of Geography. Eratosthenes on the other hand, was a scientist, discoverer, explorer and observer of geographic phenomena, he made great measurements, calculation and discoveries of places, objects, events and phenomena of the earth's resources. Eratosthenes was the first to measure and calculate the radius and circumference of the earth, he was the first to calculate the tilt of the earth, the size and shape; and distance of the earth to the sun. Most of his observations and measurements of heavenly patterns and objects were absolutely accurate and of high esteemed, these findings and discoveries serves as focal and reference points for geographic thought during the ancient time and a base for modern geography. Eratosthenes was criticized of as a jack of all specialties', having vast knowledge in diverse field of disciplines. The study utilized the methods of pure content analysis and review of literature. Findings revealed that there is need to assess the geography of ancient time for presence understanding and to make future projection and also to examine the contributions of and relevance of Strabo and Eratosthenes to the development of geography.

Key words: Comparative analysis, Contributions, Eratosthenes, Geography and Strabo.

INTRODUCTION

Strabo and Eratosthenes are universally identified as key figures of the ancient world that laid the foundation of modern geography. Though the root of geography as a field of study dates back to classical antiquity, its establishment as separate modern science was essentially the works of the period between 64 BC to 24 AD and 276 BC to 194 BC. The first half of this period which is commonly referred to as the classical period of geography falls into the days and times of Strabo and Eratosthenes. Geography as an academic field of study cannot be understood without a dive into the past history and evolution of the discipline of geography and of what it was in the ancient world. The history and development of geography include various histories and events of

peoples and places that have occurred over space and time and between different cultural and political groups in Europe before its spread to other parts of the globe (Smith, 1921; Harvey, 1969; Onokerhoraye, 1994; Duana, 2015; Omofonmwan, 2016; Imafidon, 2017; Agbebaku, 2018).

In essence, the history and philosophy of geographic thought can be observed in three viewed points, these are; **(a)** to sort facts in relation through time **(b)** to sort facts according to the kind of objects study, and **(c)** to sort facts to study things as they are associated in space (Kant, 1724-1804; Smith, 1921; Hartshorne, 1939a; Onokorhoraye, 1994; Akinbode, 1995; Egerton, 2007). Geographers see the history and philosophy of geographic thought during the ancient world as the base from where the discipline navigates, its path of sojourn and destination (Onokorhoraye, 1994; Akinbode, 1995 and Encyclopædia of Geography, 2014). The present generation of scholars cannot do without a retrospective focus on the history and philosophy of geographic thought and the contributions of Strabo and Eratosthenes and other contemporary scholars which are named as founders of "ancient" geography (Johnson, 1985; Hartshorne, 1939b; Onokorhoraye, 1994; Holt-Johnson, 1999; Imanfidon, 2017: Omofonmwan and Agbebaku, 2017; Agbebaku, 2018; Strabo contribution, n.d; Eratosthenes contribution, n.d; Colorado contribution, n.d; Hartshorne contribution, n.d).

Research has shown that the values of modern geography are based on the ideology of the history of geography. However, in modern geography the history of ancient geography has been modified, transformed, sharpened and re-sharpened upon in recent times to answer the why questions and elucidate environmental problems. This development is traced to improvements in the approach and methodology of the discipline of geography (Egerton, 2007; Omofonmwan and Agbebaku, 2017). Strabo and Eratosthenes and other contemporary scholars laid the foundation upon which the discipline of geography rest, navigates and reference with as a field of study in academic, applied science and school discipline (Smith, 1921; Akinbode, 1995; Aigbe, 2014; Duana, 2015).

Geographic Thought during the ancient world focused on (a) conception of the world, (b) map making (regional), and (c) geography in some centres of civilization of the ancient world from the era of B.C, A.D down to Century period. These periods witnessed the growth of the history, philosophy and development of geographic thought of the Babylonian era (600 BC), Mesopotamia World (8th BC), Ancient Egyptian World (7th BC), Greek era (4th Century BC), Roman Period (37-179 AD) and, the Indian era (300 BC). All of these places had so much history and philosophy and had made relevant contributions and development to the study of geography in ancient times. In order to achieve the aim of this research, the main objectives of this paper will be to ascertain human's knowledge and perception of people of the history, philosophy and contributions of Strabo and Eratosthenes to the development of geography as an academic and applied field of studies. To this end, the specific objectives for this study are to examine the comparative contributions to the history, philosophy and development of geography during the ancient world, examine the contributions of Strabo and Eratosthenes to the development of geographic thought and compare the relative contributions of Strabo and Eratosthenes to the development of geographic thought.

MATERIALS AND METHODS

This paper is purely on content analysis and a review of literature of a comparative analysis of the history and philosophy of geographic thought during the ancient world and the contributions and comparison of Strabo and Eratosthenes in geographic studies. Secondary data were sourced from existing literature, academic journals, conference papers, thesis, internet materials and archival sources. In a nutshell, secondary data were sourced from documentary materials from established sources.

COMPARATIVE ANALYSES OF THE RELEVANCE OF THE CONTRIBUTIONS OF STRABO (64 BC - 24 AD) AND ERATOSTHENES (276-194 BC) TO THE DEVELOPMENT OF GEOGRAPHY

Biography

Strabo was born in Amaseia, a town in modern day Amasya now in Turkey in the year 64 BC. He was a Greek by tribe. He had great passion for exploration, sketches, and documentation of geographic phenomena. He traveled more on water than on land adventuring, documenting and publishing. He builded upon the knowledge of existing scholars of geography to propound theories and ideology about the discipline of Geography. He advocated that Geography is the study of the earth and the people thereof. He spent most of his time in Turkey documenting and publishing books. He died in 24 A.D and spent a total of 80 years on earth (Unwin, 1992; Onokorhoraye, 1994; Akinbode, 1995; Duana, 2010; Duana, 2014; Duana, 2015; Agbebaku, 2018; Strabo contribution, n.d).

Eratosthenes was born in 276 BC in the city of Cyrene 'then in Greece and now in Libya' and died in 194 BC. He was nicknamed "Beta" which means an encyclopedia of knowledge. He spent most of his life in Greece. He had great passion for exploration, measurement, dynamics and complexities of the world. He was a physical geographer and was well-endowed in mathematics and sciences, he measured and calculated the distance of places, radius and the circumference of the earth. He was a great scholar and an inventor. He was the founder of scientific chronology. He spent most of his time in Greek exploring, documenting and publishing books. He spent a total of 82 years on earth. (Hartshorne, 1939; Harvey, 1972; Unwin, 1992; Onokorhoraye, 1994; Akinbode, 1995; Peet, 1998; Egerton, 2007; Omofonmwan and Agbebaku, 2017; Duana, 2014: Duana, 2015; Eratosthenes contribution, n.d).

Educational Background

Strabo studied under several prominent teachers of various specialties throughout his early life at different stops along his Mediterranean travels. The first chapter of his education took place in Nysa (modern Sultanhisar, Turkey) under the master of rhetoric Aristodemus. He received quite a number of studies from sound educational instructors under the influence of his parent. He started his educational career at the aged of 21 in Turkey. He started his quest for knowledge with the study of philosophy, history and later geography, when he realized that geography embraces both history and philosophy (Onokorhoraye, 1994; Akinbode, 1995). Before now, he had a great passion for exploration and spatial phenomena about the earth. He studied under

great scholars of Arts and Social Sciences. He became a professor of history, philosophy and geography within a space of time. He learned grammar under the rich and famous scholar Tyrannion of Amisus while Athenodorus Cananitesa philosopher provided Strabo with information about religions of the different empires of the then civilized world (Onokorhoraye, 1994; Akinbode, 1995; Duana, 2010; Duana, 2014; Strabo contribution, n.d).

Eratosthenes studied under several prominent teachers of various specialties. He had all of his education in Greek. He studied under several prominent teachers of various specialties. He received quite a number of studies from sound educational instructors under the influence of his guidance. He started his educational career at the aged of 19 in Greece. He had great knowledge in geography, history, mathematics, statistics, poetry, astronomy and music but major in geography. His knowledge in mathematics, statistics and astronomy helped him a lot in his exploits and contributions in geography. He had a great flair for measurement of distances, places and objects due to his background in these specialties. Due to his worth of experienced, he tutored Alexandria the Great. He was appointed the Chief Librarian of Alexandria Library in Greece due to his knowledge in history and quest for kosmos. In general, after all his degrees and tremendous contributions to knowledge in diverse fields of studies, he later became an encyclopedia of knowledge and specialized in scientific and chloronogy geography, where he made further contributions to knowledge (Duana, 2014; Omomfonmwan, 2016; Agbebaku, 2017; Omofonmwan and Agbebaku, 2017; Eratosthenes contribution, n.d).

Travels

Strabo's life was characterized by extensive travels because of the quest for knowledge and passion for spatial phenomena. He travelled from the cities of Europe to Egypt, Ethiopia and Kush (Africa) and to Asia Minor. He took delight in the description of places, people and events of human and physical environment. He makes notes, sketches and mapped the features of the areas he explored. He spent a total of 80 years on earth; discovery and adventuring to places, sketching and documenting of the events of the ancient world. He was an admirer of Homer's poetry. He held important military and political posts due to his diverse knowledge and approach to societal issues (Onokorhoraye, 1994; Akinbode, 1995; Duana, 2010; Duana, 2014; Strabo contribution, n.d).

Eratosthenes' life was characterized by extensive travels of the continents of the earth. He traveled wisely with instruments for earth's measurement. He had a great quest for knowledge and passion for spatial phenomena. His travels and quest for knowledge led to the discipline of geography been termed as the study of ethnography and chronology that is "history of people, places and events". He sojourned to further define and ascertain geography as the science of the earth and aerial differentiation. His travels of the earth enable us to make calculation of the tilt of the earth's, size and shape; and distance, measurement, radius and circumference of the earth to the sun as well as the five divisions of the earth's climatic zones. His travels, revealed to the world, that there are the good and bad phenomena of the earth's resource in every nation (Duana, 2010; Duana, 2014; Omonfonmwan, 2016; Agbebaku, 2018; Eratosthenes contribution, n.d).

Strabo and Eratosthenes' Contributions to the Development of Geography

Strabo made so many contributions to geography than philosophy and history as an academic discipline. His works and contributions to geography were captioned as Historical Memoristo which means Strabo's exploration and documentary about man' interrelationship, interaction and spatial differentiation of the earth (Unwin, 1992; Onokerhoraye, 1994; Akinbode, 1995). His wealth of experience served as a reference point to many disciplines of earth sciences and present-day geography. Strabo's work provided sources of information about the ancient world which are still referred to, till date. He advocated that geography entails the history of the known world and also that geography is concerned with the identification of the name of places, people and events. He avoided giving long and dry catalogue of name to places. He produced maps of varied types and kinds of the places he visited in Europe and other parts of the world. He translated these maps from Roman language to Latin and later to Greek language for ease of interpretation. He used his wealth of knowledge and experience, as a professor of geography and other disciplines to described places and events of the human and physical environment. In addition, he was the first to introduce the concept of classification and regionalization of places and features of similar species in geography. He also made some invaluable contributions in the field of political and military spheres in the Roman Empire (Duana, 2014; Encyclopædia of Geography; Agbebaku, 2018).

Strabo described the Iberian Peninsula (in-between Spain and Portugal) as an area that has alternate warm and cold temperature, he stated that the north of the peninsula is extremely cold while the south is very fertile and that the area is characterized by abundant fruits and many species of fishes (Onokorhoraye, 1994; Akinbode, 1995; Peet, 1998 and Egerton, 2007). Furthermore, he stated that the presence of large deposits of metals (in form of gold, silver and iron) in the river valleys results from the deposits of alluvial soils. During his reign, there was no classification of rocks fragments and climatic patterns, except of the terms as wet, hot and cold. He came up with the theory of profoundness of the earth from the opinion of Eratosthenes (276-194 BC) and other scholars of geography. The doctrine of the profoundness of the earth is about the cause of marine shells in the earth's crust and causes of great elevation and distance from the sea. The doctrine advocated that because the land are originally covered by water from the sea at different altitude, this results to the rise, subsided and inundated parts of the earth. These actions result to the gradual uplift, subsidence and depressed state of the geology of the earth (Unwin, 1992; Onokorhoraye, 1994; Akinbode, 1995; Duana, 2010; Duana, 2014; Strabo contribution, n.d; Eratosthenes contribution, n.d).

Strabo's describes the flow of waters and other features of the seas and beneath the land surface results to the abundance of marine shells of the earth. He further states that some measures of daily occurrence; such as deluges, earthquakes, volcanic eruptions, and sudden swellings of the land beneath the sea are responsible for the uplift and depression of the earth. From the above, Strabo concluded that an increase in groundwater volume may results to the uplift of the land; while a decrease in groundwater results lead to the depressed landscape. He was optimistic that the seasonal increase and decrease in the volume of waters of the seas, the uplift and depressed states of the earth's crust are responsible for the spread of marine shells and shape of the earth (Smith, 1921; Wall, 1995; Peet, 1998; Egerton, 2007; Duana, 2010; Duana, 2014). He documented some of his works in quotations (mostly the works of maps) and these were later translated and acknowledged after his death in 24 AD (Unwin, 1992). This gave insight and clear

picture of the status of what geographic knowledge was and which, till date, remains valid in the history of geographic thought. Finally, Strabo was more of a human Geographer. He showed a non-scientific approach to geography. He made so much description of places, people and events (Onokorhoraye, 1994; Akinbode, 1995; Wall, 1995).

Strabo was the earliest geographer in the first Century A.D. His works show how people lived and how people were governed. He gave no room for plagiarism; the authorities of his facts were discussed (Onokorhoraye, 1994; Wall, 1995; Egerton, 2007 and Akinbode, 1995). He worked with many people of social, cultural and political importance. His contributions to geography were more of adventure, discovery, identification and description of places, people and events of the activities of man on the earth's surface (Onokorhoraye, 1994; Wall, 1995; Egerton, 2007; Akinbode, 1995; Duana, 2014; Agbebaku, 2018; Strabo contribution, n.d).

Eratosthenes' contributions to geography were his observations and measurements which were absolutely accurate and highly esteemed; these served as the focal and referenced points of geographic thought during the ancient time. Eratosthenes laid down many astronomical and mathematical rules that make geography to be studied scientifically. Eratosthenes was the first to use the word "geography" as the "study of the earth" and of places and phenomena of the earth's surface. He yearned to understand the dynamics and complexities of the world. He was the first to introduce the word sieve in geography "method of identifying prime numbers". He was the first to measure and calculate the radius and circumference of the earth. He applied a measuring system known as "stadia" without leaving Egypt to determine the angle of the sun. He was able to achieve this angle with aid of "sunbeam" and the "gnomons". This was the standard earliest unit of measurement as at that time. He added that, at local noon of the summer solstice the sun was directly overhead.

Eratosthenes was able to ascertain through the shadow of someone looking down a deep well at that time in Syene, blocked the reflection of the sun on the water at a right angle. He was the first to measure the sun's angle of elevation at noon on the same day in Alexandria. The method of measurement was to make a scale drawing of that triangle which included a right angle between a vertical rod and its shadow which turned out to be $1/50^{th}$ of a circle. He therefore concluded that the earth's circumference was fifty times that distance. He was the first to calculate the tilt of the earth axis and also the distance of the earth to the sun. He was also the first to describe the size and shape of the earth. He divided the earth into five (5) climatic zones, two freezing zones (towards the poles), two temperate zones (in-between the poles and equator) and a zone compassing the equator or the tropics (Duana, 2014; Agbebaku, 2018; Strabo contribution, n.d)..

His famous book titled; air, water and places led to major discoveries of the dynamics and complexities of the earth's resources. Furthermore, he discovered and invented the leap year from the calendar months. He created and produced the first topographical maps of the world. His map incorporated the lines of latitude and longitude which linked places of the world. His ideals were based on the availability of geographical knowledge of that era. In addition, he had access to travel books during his time (quanti--in geography). During his tenure as the Chief Librarian, he expanded the Library holdings and devoted a whole section of the library to the examination of the works of homers (another cream scholar of geography). He was the founder of scientific chronology and was the first to introduce the used of the term "sieve in Eratosthenes".

He was the first to write on choreographies of dates of importance and beginning of the events and places of the world such as the Trojan War and list of past kings of Egyptian. He invented the auxiliary sphere and circular motion of the celestial bodies. His works were highly esteemed for its accuracy. In addition, he made important contributions in the field of natural sciences (mathematics and sciences) and was a friend to Archimedes. He invented some terminologies in geography that is still used today. More so, he believed that there was the good and bad in every nation but that the positives are more than the negatives. He was viewed by Strabo as a mathematician among geographers and a geographer among mathematicians. He was regarded as the father of geography. He tutored Alexandria the Great. He was a physical geographer but made further valuable contributions in human geography (Duana, 2010; Duana, 2014; Agbebaku, 2018; Eratosthenes contribution, n.d).

A Critique of Strabo's and Eratosthenes' Contributions to Geography

During Strabo's time of studies, there was no specific area of specialization for scholars in a particular field of study. For instance, the then Professor of geography was regarded as a jack of all and a master of no specialty in the field of geography unlike now where one can be a professor of geography and specialized in a sub-unit of geography e.g. a professor of climatology, cartography, remote sensing and geographical information system or a fluvial geomorphologist (Duana, 2014). Once you are a professor, you are expected to know everything about the field of study. For instance, before the indigenization phase (1961-70) of geography in Nigeria, the study of geography was more of foreign places and features than indigenous studies (Onokerhoraye, 1994; Akinbode, 1995; Omofonmwan and Yesuf, 2017).

Strabo's was ignorantly accused as a jack of all and master of none because people from the outside world saw and believed that as a professor of so many disciplines and diverse knowledge (philosophy, history, literature and geography) they never knew of what his ambition and passion for a particular discipline was. Furthermore, people were ignorant that there could be a linkage between and among one discipline and another. As a professor of philosophy, history and geography which Strabo was, there were so many levels of synergy, linkage and resemblance between one and another e.g. between archaeology and history, mathematics and physics, physics and meteorology, geographical information system and remote sensing and biogeography and conservation studies. Strabo was the only one that studied and travelled widely and attained a professorial status from three distinct disciplines among his contemporaries hence he was accused as a jack of all and master of none (Onokorhoraye, 1994; Akinbode, 1995; Wall, 1995; Duana, 2014; Agbebaku, 2018; Eratosthenes contribution, n.d, Strabo contribution, n.d).

Secondly, Strabo was criticized to have contributed more to human geography than the physical arm of geography, hence he was better described as a descriptive geographer. As at the time of Strabo's contribution to geographic studies (64 BC-24 AD), the system of approach and methods of study were at the rudimentary stage, as any person(s) of knowledge, could explain and describe geographic phenomena based on their understanding and personal views until there was a paradigm shift in approach and methods (Duana, 2014). In a nutshell, there was no scientific revolution in the approach and methods of studies during Strabo's time. Geographic studies during Strabo's era were termed as "gazeteergraphia, ethnography and cosmographia". Furthermore, due to the constraint of writing materials and technology; Strabo wrote in quote, sketches and described most of his observations on local materials and maps (Onokerhoraye,

1994; Akinbode, 1995; Agbebaku, 2018). His sojourn to most parts of the world for facts and knowledge about the earth were sometimes delayed because of poor transportation and communication network system. Furthermore, because of his deficiency in mathematics and statistical techniques, Strabo made a details description of his findings in 43 volumes of books.

However, Strabo did not just make description of places and events based on their face value but with better understanding of the underlying concepts and approach to the features. Most of the description and summation Strabo made of his knowledge of geography like in his description of weather patterns; transportation systems; landforms, uplift and depression; causes of marine shells and regionalization and classification among other are valid today and serves as the bedrocks and reference points to most of the contemporary studies in the discipline of geography (Onokerhoraye, 1994; Akinbode, 1995; Duana, 2014; Duana, 2015; Agbebaku, 2018).

Thirdly, Strabo was criticized for his weakness and bias against mathematical geography. Ideally, Strabo was completely silent on the area of mathematics and statistical technique in geography because he was deficient in arithmetic studies during his days in school (Duana, 2014). As stated earlier, Strabo started his career as a philosopher and later moved to study history. All these he studied to professorial level before he chose to study geography based on his passion for spatial patterns and study of the earth as the home of man (Duana, 2014). Furthermore, the disciplines of philosophy and history as distinct fields of study are art based, while geography is a social science discipline. However, Strabo felt that there was no need for quantification in geographic studies because of his background in the liberal arts and that geography can be studied discriptively. In addition, going by the date of Strabo existence, there was not much of quantification and analytical approach to geographic studies.

Geographic studies then, were more of qualitative and descriptive than quantitative approach as evisaged in modern geography (Onokerhoraye, 1994; Akinbode, 1995; Duana, 2014). Furthermore, quantification in geography began in the mid-1950s. This was when geographers saw the usefulness of quantification and formulated geographical theories and models and subjected these theories and models to empirical test by using statistical methods (especially hypothesis testing). Finally, as at the time of Strabo's contributions to geographic studies all the means of statistical and mathematical tools and techniques were yet to be developed (Unwin, 1992; Duana, 2014; Duana, 2015; Agbebaku, 2018).

Eratosthenes was ignorantly accused and criticised as a jack of all specialties', having vast knowledge in diverse field of disciplines (geography, mathematics, statistics, history, music and poetry). Apart from being an authority of geography of ancient time, he majored in scientific geography but had great flair for mathematics, statistics and astronomy (measurement and quantifiation of places, distance and objects). In addition, he made insignificant contributions to chronology mainly in human geography. Chronology in geographic studies centered on records on series of happenings of past events in geographic studies and this attributes compelled people to wonder what his passion was as a physical geographer. In a nutshell, people were ignorant that there is synergy and linkage between and among one discipline or area of specialization and another such as in the physical and human geography. Furthermore, due to his passion for measurement of objects and quantification he was able to induce the art of empirical and experimental studies in the fields of geography. Eratosthene's added, that there are needs for quantification in geographic studies and based on his background that geography is more to

science and quantitative studies than art. In addition, despite the date of existence of Eratosthenes (276 -194 BC), there was not much of quantification and analytical approach to geographic studies, but he was able to distinguish himself out. Geographic studies then, were more of qualitative and descriptive than quantitative approach (Onokerhoraye, 1994; Akinbode, 1995; Duana, 2014).

However, Eratosthenes was the only one in the history of ancient geographic scholars that was described by Strabo as a mathematician among geographers and a geographer among mathematicians. This was due to his prowess and exploits for mathematical, statistical and atronomical studies in geography as well as his flair for kosmos, chronology, music and poetry among his contemporaries, hence he was critically accused as a jack of all specialties, having vast knowledge in a diverse field of disciplines (Duana, 2014; Duana, 2015; Agbebaku, 2018).

Secondly, Eratosthenes was criticized to have contributed equally in physical and human geography hence, he was better described as a physical geographer. He was also criticised for his choice of specialty in geography, unlike in the case of Strabo's a human geographer that made cleared explanations of his observations of descriptive analyses of the earth's phenomena. But in all of these critics, kudos should be given to Eratosthenes because as at the time of his existence and contributions to geographic studies (276 – 194 BC), the system of approach and methods of measurement were rudimentary and in spite of these, he yearned with all humility to understand the dynamics and complexities of the world, he made valuables impacts on measurement, quantification, classification and regionalization of the places, distance, shape, size and tilt of the earth's. In addition, he was the first to measure and calculate the radius and circumference of the earth and invented the leap year. He was the first to divide the earth into five (5) climatic zones. Above all, he had a great flair for kosmos, chronology, music and poetry (Duana, 2014; Duana, 2015; Agbebaku, 2018; Eratosthenes contribution, n.d; Strabo contribution, n.d).

However, Eratosthenes did not just make measurement and description of phenomena and events based on their face values but with a better understanding of their underlying concepts, process and approach to these features. The measurements and summations made by Eratosthenes in geography include calculation of the tilt of the earth, the size and shape; and distance of the earth to the sun and measurement and calculation of the radius and circumference of the earth. He observed that at local noon of the summer solstice the sun was directly overhead, incorporated lines of lat. and long. and invented the leap year from the calendar months. He also affirmed that**)** the earth was at the centre of the universe and the sun and star revolved around it, and his writing on choreography 'date of important events and places' formed the base and reference point and are still valid in modern geography (Akinbode, 1995; Duana, 2014; Agbebaku, 2017; Eratosthenes contribution, n.d; Strabo contribution, n.d).

Thirdly, Eratosthenes was accused for his explanations that the then human race was of two tribes; the Greeks (civilized) and Barbarian (uncivilized and uncultured). But the fact remains that in modern geography, there is no particular race that can be termed as completely pure and civilised (Duana, 2014; The Encyclopædia of Geography, 2014). Finally, as at the time of Eratosthenes contributions to geographic studies all the means of statistical and mathematical tools and techniques were yet to be developed (Agbebaku, 2017; Omonfonmwan and Agbebaku, 2017; Eratosthenes contribution, n.d; Strabo contribution, n.d).

Difference between Strabo and Eratosthenes Contributions to Geography

Strabo was more of an explorer of geographic phenomena. He used his wealth of experience to describe places of the world, political groups and military spheres in Rome. He was more to human geography than physical geography. His works were captioned as Historical Memoristo which mean Strabo's exploration and documentary about man' interrelationship, interaction and spatial differentiation of the earth (Unwin, 1992; Onokerhoraye, 1994; Akinbode, 1995). His works were characterized by how people lived and are governed. He was the first to introduce the concept of classification and regionalization in geography. He was the first to describe weather patterns of the world. He identified and classified these patterns into three; hot, wet and cold regions. He was the first to propound the theory of profoundness of the earth (uplift, depression and the cause of marine shell). He wrote in quotations which were later translated into volumes of books. His works were acknowledged by his contemporaries. He was better described as an arm-chair geographer. Strabo spent 80 years on earth adverturing and discovering places, people, events and other geographic phenomena in Europe, Asia, and Africa. He was more of an explorer of geographic phenomena. He gave no room for plagiarism, he provided authors and reference materials for all his works. He was criticized for being a descriptive geographer but remain the first scholar to be named as a professor (Omomfonmwan and Agbeaku, 2017; Agbebaku, 2018).

Eratosthenes was more of a physical geographer. He had so much passion for mathematics and statistics notation. This enabled him to make measurement of distances, places and objects, and answered the "why" questions that is frequently asked in geographic studies (Aigbe, 2014; Uluocha, 2015; Agbebaku, 2017). Eratosthenes was optimistic that no other discipline either in the field of arts and social sciences would understand and give explanations, dynamics and complexities of the description of places, people and events of the earth's phenomena like the discipline of geography. In addition, Eratosthenes was the first to classify human race into two; the people(s) of Greeks and Barbarian. He added, that the Greeks are of higher racial purity than the Barbarian. Eratosthenes spent 82 years on earth, was an adventurer and a scientist, discoverer, explorer and observer of geographic phenomena, he made great and valid measurements, calculations and discoveries of places, objects, events and phenomena of the earth's resource. Eratosthenes was the first to measure and calculate the radius and circumference of the earth, he was the first to calculate the tilt of the earth, the size and shape; and distance of the earth to the sun. However, he was criticised as a jack of all specialties', having vast knowledge in diverse field of disciplines (Agbebaku, 2018; Eratosthenes contribution, n.d; Strabo contribution, n.d).

Similarities of the Works of Strabo and Eratosthenes to Geography

Their works serve as wealth of experience and function as a reference point to many disciplines of earth sciences and the present day geography as an academic field of study. Their works provided sources of information about the ancient world which are still referred to till date in the field of geography (Harvey, 1969; Agbebaku, 2018; Eratosthenes contribution, n.d; Strabo contribution, n.d).

CONCLUSION

Geographic thought started about 800 years Before Christ (B.C) and continued through the Anon Dominion (A.D) till this 21st Century. Since the era of B.C and A.D lasted for 800 years, it can be asserted that the study of geography has a history of about 2,900 years. Geographic thinking evolved independently at various centres of civilization such as Babylon, Mesopotamia, Egypt, Greece, Rome, Indian and Syria.

In conclusion, whether geography is thought of, as a school subject or as a basic feature of our world, developing an understanding of the subject in ancient time is important, as this will help us to sharpen our understanding of the discipline of geography at the present time, and for future projections. Some grasp of geography is essential as people seek to make sense of the real world and understand their place in it. Thinking geographically helps people to be abreast of the relationships between and among places of the earth and to see how events have been shaped over time. Finally, after the era of Strabo and Eratosthenes contributions to geographic studies there has been a paradigm shift in the discipline from the initial method of gazetteer geography, ethnography to regionalization, quantitative revolution and present analytical geography.

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