

## EVOLUTION OF GEOGRAPHICAL THOUGHT

### PAPER-601 SEM-VI

## **Carl Ritter** (August 7, 1779 – September 28, 1859)

**Carl Ritter** (August 7, 1779 – September 28, 1859) was a German geographer. Along with Alexander von Humboldt, he is considered one of the founders of modern geography. From 1825 until his death, he occupied the first chair in geography at the University of Berlin.

German geographer Carl Ritter is commonly associated with Alexander von Humboldt as one of the founders of modern geography. However, most acknowledge Ritter's contributions to the modern discipline to be somewhat less significant than those of von Humboldt, especially as Ritter's life-work was based on the observations of others.

### **Childhood and Education**

Ritter was born on August 7, 1779, in Quedlinburg, Germany (then Prussia), ten years after von Humboldt. At the age of five, Ritter was fortunate to have been chosen as a guinea pig to attend a new experimental school which brought him into contact with some of the greatest thinkers of the period. In his early years, he was tutored by the geographer J.C.F. GutsMuths and learned the relationship between people and their environment.

At the age of sixteen, Ritter was able to attend a university by receiving tuition in exchange for tutoring a wealthy banker's sons. Ritter became a geographer by learning to observe the world around him; he also became

an expert at sketching landscapes. He learned Greek and Latin so that he could read more about the world. His travels and direct observations were limited to Europe, he was not the world traveler that von Humboldt was

## **Career**

In 1804, at the age of 25, Ritter's first geographical writings, about the geography of Europe, were published. In 1811 he published a two-volume textbook about the geography of Europe. From 1813 to 1816 Ritter studied "geography, history, pedagogy, physics, chemistry, mineralogy, and botany" at the University of Gottingen.

In 1817, he published the first volume of his major work, *Die Erdkunde*, or Earth Science (the literal German translation for the word "geography.") Intended to be a complete geography of the world, Ritter published 19 volumes, consisting of over 20,000 pages, over the course of his life. Ritter often included theology in his writings for he described that the earth displayed evidence of God's plan.

Unfortunately, he was only able to write about Asia and Africa before he died in 1859 (the same year as von Humboldt). The full, and lengthy, title of *Die Erdkunde* is translated to The Science of the Earth in Relation to Nature and the History of Mankind; or, General Comparative Geography as the Solid Foundation of the Study of, and Instruction in, the Physical and Historical Sciences.

In 1819 Ritter became a professor of history at the University of Frankfurt. The following year, he was appointed to be the first chair of geography in Germany - at the University of Berlin. Though his writings were often obscure and difficult to understand, his lectures were very interesting and quite popular. The halls where he gave lectures were almost always full. While he held many other simultaneous positions throughout his life, such as founding the Berlin Geographical Society, he continued to work and lecture at the University of Berlin until his death on September 28, 1859, in that city.

One of Ritter's most famous students and ardent supporters was Arnold Guyot, who became a professor of physical geography and geology at Princeton (then the College of New Jersey) from 1854 to 1880.

### **The Great Work**

Carl Ritter's 19 part (21 volume) masterwork, "Erdkunde im Verhältnis zur Natur und zur Geschichte des Menschen oder allgemeine, vergleichende Geographie, als sichere Grundlage des Studiums und Unterrichts in physicalischen und historischen Wissenschaften", is one of the most extensive works of geographical literature written by a single author.<sup>[3]</sup> The first two volumes were published by G. Reimer in 1817 and 1818 respectively, after which the third would not be published until 1822. During this time, Ritter wrote and published "Vorhalle der europäischen Völkergeschichte vor Herodotus um den Kaukasus und um die Gestade des Pontus, eine Abhandlung zur Altertumskunde", which marked Ritter's interest in India. It was also to serve as a transition to a third volume of "Erdkunde" that appeared first in 1835.<sup>[3]</sup>

In total, Ritter intended to write an all-encompassing geography spanning the entire globe. His work was to consist of three parts:

1. The solid form or the continents
2. The fluid form or the elements
3. The bodies of the three realms of nature <sup>[3]</sup>

Part one was to undertake the continents of the globe beginning with the "Old World" and work to the "New World". The dynamic of old and new proposed here does not correspond to contemporary notions, rather refers to the evolution of human activity on the planet as Ritter understood it. Consequently, as noted by Hanno Beck, "The most extreme parts of the world, in Ritter's opinion, in the North, the South and the East are in practical terms as much a part of the New World as America".<sup>[3]</sup> Due to the colossal scale of his project, Ritter was never able to complete it, but the final section of the first part should have concluded by recapping each continent and its "main forms and its

effects on nature and history: this was to be achieved in a brief form and used as a contribution to a survey of the "great whole".<sup>[4]</sup>

Part two was to deal with the fluid forms; by this was meant water, air, and fire. These elements correspond approximately to the studies of Hydrography, Meteorology, Climatology, as well as Volcanology. This part, too, was to be examined within the framework of the whole system.

The final part of the proposed work was to be dedicated to the interrelationships of organic life with geography and history. Part and parcel of Ritter's approach to geography was to identify the relationship between the variables at stake. He was particularly interested in the development of these relationships over time and how their constituent components (animals and the earth) contributed to this evolution. Borrowing the concept of "organic unity" used by Alexander von Humboldt, Ritter went further saying a geography is simply not possible without it.<sup>[5]</sup>

### **Methodology**

The methodology employed by Ritter was an inductive one, consisting of compiling large sums of information and material, and creating theories from those texts. This style of research was much criticized by his contemporaries. August Wilhelm Schlegel, in a letter to Johannes Schulze, bemoans how "It is in fact high time that the studies of Indian monuments be made serious. It is fashionable in Germany to have one's say in it without knowing the language which leads to aberrations. We see a woeful example of this in the "Vorhalle" of otherwise estimable Ritter."<sup>[6]</sup> As Ritter prepared for his move into Asia the sources accumulated even further, thus compounding the problem raised by Schlegel.

A consequence of his inductive research methods, Ritter was increasingly interested in observing the planet as an organism composed of geographical individuals. In the introduction of to the "Geography" he states, "Thus the large continents represent the surveying view of so many more or less separate wholes, which we consider here as the big

individuals of the earth in general." <sup>[5]</sup> First after identifying the individuals of the earth, and then describing them through extensive research, could Ritter conceive of a whole, whose whole is greater than the sum of its parts.

Ritter elucidates the development of a geographical individual and strives to establish a natural geographical system. Comparing Geography to language theory or philosophy, he believed that it was necessary to understand each "Erdgegend" (area of the Earth) and its characteristic appearances and natural relationships without relying on the absolute work of pure description and classification. In partitioning the Earth into "Erdgegende" he has developed a theory of area, which he views as indispensable to geographical inquiry. Furthermore, Ritter believed that areas existed a priori and were formed by humans. <sup>[5]</sup>

Constructing a geographical theory around the area allowed Ritter to make the comparative work would seek to do in the conclusion to his great work. Elevating the importance of the area, he then investigated the peculiarities of each of the localities, remembering of course, to reflect the impact of organic life, mainly humans, on that locality. Once completed, this process would allow the last component in the method of Ritter, the comparison. <sup>[5]</sup>

The wealth of knowledge aspired was to serve as a foundation on which comparisons could then be made between the localities or areas researched. The knowledge would have allowed a "pure science" to emerge from the exhaustive research. Inherent to Ritter's understanding of area, is the role of God in its creation. He believed the shape of the Earth functioned as a way for God to speak with humans, so that his will could be done. God's will was the development and fulfilment of the areas created. <sup>[5]</sup>

### **Format of the Work**

At the time of his death, Ritter had produced an astonishing amount of geographical literature contained in his "Erdkunde" alone. It amounts to 21 volumes comprising 19 parts which can be roughly divided into 6 sections

1. Africa (I) 1822
2. East Asia (II-VI) 1818-1836
3. West Asia (VII-XI) 1837-1844
4. Arabia (XII-XIII) 1846-1847
5. Sinai Peninsula (XIV-XVII) 1847-1848
6. Asia Minor (XVIII-XIX) 1850-1852

Ritter's masterwork, the 19-volume *Die Erdkunde im Verhältniss zur Natur und zur Geschichte des Menschen* (*Geography in Relation to Nature and the History of Mankind*), written 1816–1859, developed at prodigious length the theme of the influence of the physical environment on human activity. It is an encyclopedia of geographical lore. Ritter unfolded and established the treatment of geography as a study and a science. His treatment was endorsed and adopted by all geographers.

The first volume of *Die Erdkunde* was completed in Berlin in 1816, and a part of it was published in the following year. The whole of the first volume did not appear until 1832, and the following volumes were issued from the press in rapid succession. *Die Erdkunde* was left incomplete at the time of Ritter's death, covering only Asia and Africa.

Many of Ritter's writings were printed in the *Monatsberichte* of the Berlin Geographical Society, and in the *Zeitschrift für allgemeine Erdkunde*. His *Geschichte der Erdkunde und der Entdeckungen* (1861), *Allgemeine Erdkunde* (1862), and *Europa* (1863) were published posthumously. Some of his works have been translated into English by W. L. Gage: *Comparative Geography* (1865), and *The Comparative Geography of Palestine and the Sinaitic Peninsula* (1866)

### **Die Erdkundes:**

Ritter's monumental work is entitled as Erdkunde. Erdkunde is a comprehensive German word which stands for science of the earth in relation to nature and history. Ritter remarks that “the earth and its

inhabitants stand in the closest reciprocal relations and one cannot be truly presented in all its relationships without the other.

Hence, history and geography must always remain inseparable". Land influences the inhabitants and in turn the inhabitants transform the landscape. In Europe, for example, only in the east (Russia), there was uniformity of geographical features and uniformity of history. But, in the west, there was variety of environment and history, and in the diverse south (Europe) too history was rich, studded with the efforts and achievements of Egyptians, Carthageans, Greeks, Romans, Gauls and Iberians. In *Erdkunde*, he advanced the theory of the north-west movement of civilization in Europe.

The first two volumes of the *Erdkunde* were intended to be followed by a study of history. Between 1817 and 1859, he completed 19 volumes of *Erdkunde* but these volumes cover only Africa and parts of Asia. In spite of the fact that he lived long, he was not able to finish his work of Europe.

Through his writings, Ritter tried to prove that the earth is made for man: "As body is made for soul, so is the physical globe made for mankind." The most logical development of Ritter's work is to be found in the writings of the geographers who studied the interaction of the various phenomena—relief, climate, vegetation, and man in a particular area.

**The major geographical concepts of Ritter may be summed up as follows:**

1. Ritter conceived geography as an empirical science rather than one based on deduction from rational principles or apriority theory.
2. There is coherence in the spatial arrangement of terrestrial phenomena. Areal phenomena are so interrelated as to give rise to the uniqueness of the areas as individual units.
3. Boundary lines, whether wet or dry (such as rivers or mountains), were instruments for understanding the real purpose of geography which is understanding the content of areas.
4. According to Ritter, geography was concerned with objects on the earth as they exist together in an area. He studied areas synthetically, in their totality.
5. Ritter holds a holistic view with respect to the content and purpose of geographic study, and the whole study was focused on and culminated in man.
6. He believed that the earth was an organism made, even in its smallest details, with divine intent, to fit the needs of man to perfection. He was a teleologist in his approach.

Both Humboldt and Ritter laid great stress on the unity of nature, though one has a scientific and other a religious approach. They both believed

that the ultimate aim of research was to clarify this unity and, in this respect, were in accord with the idealistic philosophies of their time. Humboldt did not pursue idealism in the same way as Ritter, for his concept of the unity of nature was more aesthetic than religious.

In this respect he had more in common with Goethe than with Ritter. Unlike Ritter, he saw no reason to explain unity and order in nature as a God-given system to further humanity's development. Humboldt was very much engaged in the gradual development of natural science, and his greatest contributions lay in the field of systematic physical geography. Ritter was, on the other hand, to a considerable extent a regional geographer.

**Some of the important geographical societies which promoted the cause of geography are given below in a chronological order:**

1. The societe de Geographie de Paris—1821
2. The Gesellschaft fur Erdkunde zu Berlin—1828
3. The Royal Geographical Society London—1830
4. The Geographical Society Mexico—1833
5. The Geographical Society Frankfurt—1836
6. The Geographical Society Brazil—1838
7. The Imperial Russian Geographical Society in St. Petersburg—1845

## 8. The American Geographical Society—1852

The main work of these societies was to give support for expeditions and for their publication of yearbooks and journals which included maps and other material from expeditions.

### **Principle of Unity in Diversity:**

The fundamental principle evolved by Ritter was “unity in diversity”. According to him, there is a fundamental unity in the biotic and abiotic components of habitat in which man sculptures his cultural environment. In such an approach, all the physical and cultural components of environment are taken into consideration and their interrelationship is established in understanding the geography of an areal unit. This is a regional approach. Unity in diversity means that every naturally bounded area is a unity in respect of climate, production, culture, population and history. Ritter makes few deterministic observations; he seldom does more than repeat what Humboldt had already written and gives the same synthetical accounts of continents.

The merit of Ritter’s work comes not from his description of the continents but from his ability to deduce these from a system of laws governing “the concept of regional association of terrestrial phenomena at various levels over the earth’s surface”.

Ritter’s method is said to be deductive because it deduces new conclusions from fundamental assumptions or from truths established by

other methods. So far there is little to distinguish Ritter's ideas from Humboldt's and in the spatial arrangement of terrestrial phenomena, there is marked similarity between the two colleagues.

Ritter introduced many stimulating ideas. He stressed the idea of land and water hemispheres, the distinction between the rates of heating and cooling of land and water, the difference between the northern and the southern hemispheres in their proportion of land and water. He averred that there were differences between the continents. Africa had relatively short and the most regular of all coastlines and its interior had least contact with the sea, whereas Asia was better provided with sea inlets, but the interior had little marine contact and Europe was the most varied of all, with an ease of approach along its shore-line of comparatively great length.

He identified each continent with a different race, having a different colour. For example, according to him, Africa is a continent of black people, Europe of white people, Asia of yellow people and America of red people. This overgeneralization created much obscurity in the world of geography. About the universal and regional laws in geography his opinion was that "the earth itself must be asked for its laws".

In brief, Ritter's theme was that the physical environment was capable of determining the course of human development. His ideas were strengthened by the publication of Darwin's *Origin of Species* in 1859

with its emphasis on the close relationships of organism and their habitat (environment).

Ritter, in his *Erdkunde*, conceptualized regional geography as contrasted with systematic geography of Humboldt. He was a teleologist and believed in deductive approach. He emphasized repeatedly that he was teaching a 'new' scientific geography, in contrast to the traditional "lifeless summary of facts about countries and cities, mingled with all sorts of scientific incongruities". Ritter saw all of his studies of "the earth and man as revealing more and more of God's plan".

Ritter considered the earth as the home of man. He stressed that "the outer shell of the earth is the area of geographical study and not the entire earth".

Ritter is known for his *Erdkunde*, which conceptualized regional geography as contrasted with systematic geography of Humboldt.

Ritter's writings thus also had implications for political theory. His organic conception of the state could be abused to justify the pursuit of *Lebensraum*, even at the cost of another nation's existence, because conquest was seen as a biological necessity for a state's growth. His ideas were adopted and transformed into an expansionist ideology by the German geostrategist Friedrich Ratzel. It is to be doubted, however, whether Carl Ritter can be held responsible for this interpretation, which was developed under the influence of Darwinism, which was to become a leading and popular ideology in Germany only after Ritter's death.