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PIERRE TEILHARD DE CHARDIN
PALAEONTOLOGIST, PHILOSOPHER, THEOLOGIAN

by

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Pierre Teilhard de Chardin was born on 1 May 1881 at the Château de Sarcenat, near Clermont-Ferrand in the Auvergne. He was educated at the Jesuit College of Notre Dame de Mongrès at Villefranche-sur-Saône from 1892 to 1897, before entering the Order of the Society of Jesus in 1899, first in Aix-en-Provence, then in 1900 in Laval where he joined the Jesuit novitiate.

After staying in Jersey from 1901 to 1905 then at the College of the Holy Family in Cairo from 1905 to 1908, he studied theology in London from 1908 to 1912 and was ordained a priest in 1911.

From early childhood onwards he was inspired by a dominant passion which he himself described as the passion for the Absolute. This passion, which obsessed him throughout his life, guided all his activities and thought on a journey of exploration which was to enable him to reconcile science and religion in a vast cosmic synthesis.

Geologist, palaeontologist, anthropologist, philosopher, theologian, but also priest, Pierre Teilhard de Chardin always sought to take responsibility for his different vocations and, in his immense desire for the Absolute, to reconcile them.

The family background, his first studies at the Jesuit College of Notre-Dame-de-Mongrès and his meeting with Father Auguste Valencin in 1899 were major influences, determining the fundamental decision of his existence which led him to the Society of Jesus and to ordination as a priest in 1911. He was to remain a priest all his life. Despite many difficulties and misunderstandings he always remained faithful to his vows and his obedience to Rome was total.

It was during the many family excursions in the forests of the Massif Central with his father (a graduate of the Ecole des Chartes who then administered his estate and five castles) and his many brothers and sisters that, from an early age, he learned to love nature and was fascinated by the mysteries of our universe, whose secrets he was always keen to discover, seeking for explanations to its origin and operation.

Throughout his life, chance events made him oscillate constantly between West and East.

PRELIMINARY RESEARCH IN THE FIELD

From 1901 to 1912 in Jersey in the Channel Islands, then in Egypt and lastly in England, he came into contact with eminent palaeontologists and geologists, collected samples and laid up a store of observations, and the many friendships formed in the course of his work strengthened his scientific vocation.

While staying at the College of the Holy Family in Cairo from 1905 to 1908 he visited the famous deposits of Fayoum and discovered fossil mammals in the river and lake formations of the Oligocene period which were to set the course of his own private research work later.

PALAEONTOLOGICAL RESEARCH IN EUROPE

In July 1912 he met Professor Marcellin Boule at the Laboratory of Palaeontology of the National Museum of Natural History. This meeting was to "set him off", as he put it, on a lifetime of exploration and adventure in the field of palaeontology.
Marcellin Boule, who like himself came from the Auvergne, was attracted to Pierre Teilhard and invited him to work in his laboratory, assigning to him the study of the fossil carnivores in the phosphorite pockets of the Quercy region. This marked the beginning of a new phase in the life of Father Teilhard. From 1912 to 1923 he worked essentially as a palaeontologist, devoting the major part of his research to the study of the mammals of the Lower and Middle Tertiary in Europe: the fauna of the phosphorite deposits of the Quercy, of the Sparnacian in Epernay, of the Palaeocene in Reims, and microvertebrates of the Sparnacian at Orsmaël in Belgium.

On 22 March 1922 he presented at the Sorbonne his doctor's thesis on the "Mammals of the Lower Eocene" in France.

At the Laboratory of Palaeontology of the Museum, but also at the Institute of Human Palaeontology he was in daily contact with the leading French palaeontologists and prehistorians: Marcellin Boule, the Abbé Henri Breuil and his young associate Jean Piveteau. He was gradually introduced to research in human palaeontology. Marcellin Boule had at that time just completed his monumental study on the Fossil Man of La Chappele-aux-Saints, which had been discovered on 3 August 1908 by the Abbés A. and J. Bouyssonie and J. Bardon.

EXPLORATION IN EASTERN ASIA

From 1923 to 1945, almost the whole of his time and energy was taken up with work in the Far East. For Father Teilhard this was a new life, as regards both research and his own thinking.

Sent on mission by the Museum and the Institute of Human Palaeontology, in 1923 he arrived in China where he was to work for twenty-two years, only returning to France from time to time for short periods. He worked with Father Emile Licent and in 1929 was appointed adviser to the Geological Service of China. From 1927 onwards he was invited to co-ordinate and direct the study of the mammalian fauna discovered in the course of the excavations organized by Davidson Black, then by Frantz Weidenreich, in the Chou-k'ou-tien cave near Peking. He was thus involved in the extraordinary adventure of excavating this important site and in the discovery of Sinanthropus.

During this period he took part in many missions: the Central Asian Expedition (Roy Chapman Andrews Expedition) of the American Museum of Natural History in 1930; the Haardt-Citroën expedition (Yellow Cruise) in 1931 to 1932; the Yale-Cambridge expedition in northern and central India in 1935 and 1936; the Harvard-Carnegie expedition in Burma in 1937 to 1938; in Java where he visited the Pithecanthropus sites in 1936.

In 1928 and 1929 he had carried out a scientific mission to the Red Sea, French Somalia and the Harrar (Ethiopia), partly in collaboration with Henry de Monfreid, of whom he had become a close friend.

His long stay in the Far East, and in particular his exile in Peking from 1940 to 1945 during the Japanese occupation, encouraged reflection and meditation. During that period he devoted much of his time to working out his major syntheses, defining his views of the problem of the history of life, the origins of man and man's place in nature.

He left China in 1946.
THE RETURN TO FRANCE

In 1947, on his return to France, he was appointed Director of Research at the National Scientific Research Institute and Corresponding Member of the Institut (Academy of Sciences). However the Society of Jesus did not allow him to accept the post of Professor at the Collège de France.

During his stay in France from 1946 to 1951, he devoted all his time to the final definition of his major syntheses and in particular to his book "The Phenomenon of Man". His reputation and influence were considerable, and although his works had not yet been published he had already made a profound impact on his contemporaries.

VISITS TO SOUTHERN AFRICA

In 1951 and 1953 he made two short visits to southern Africa which enabled him to visit the Australopithecus sites and to go more deeply into the problems of the origins of man and the beginnings of hominisation.

EXILE IN AMERICA

The American phase of his life, in 1951 to 1955, was a period of real intellectual solitude.

He had many friends among the geologists and palaeontologists, but they did not always understand his vision of the world or his ideas on man's place in nature.

He died peacefully among friends, in his seventy-fourth year, on Easter Day, 10 April 1955.

The scientific work of Teilhard de Chardin is impregnated by his metaphysical concepts. Palaeontology attracts him because it enables him to glimpse the meaning of the universe, to understand the origin of living beings and the laws which regulate their evolution.

"Each thing is necessarily situated in space beside another thing which extends it, and in time beside another thing which introduces it. Nothing has a totally new beginning, everything emerges from a previous being."

Nothing shows better, he wrote, in connection with the carnivorous fauna of the phosphate rock deposits of the Quercy, that life is flexible and in perpetual development.

But this evolution has a sense, and a direction. Constant laws govern the gradual complication of living beings. Among the mammals and the early men in particular there is a tendency to acquire a larger brain, marking the transition from simple instinct to thought.

Palaeontology shows us the progress of the brain throughout the evolution of the vertebrates from the Primary era to present times. Man with his larger, and above all more complex, brain was the result of that evolution.

It is therefore not surprising that Father Teilhard was especially attracted by the many discoveries of fossil hominids which occurred during his lifetime.
At the Palaeontological Laboratory of the Museum, where he worked from 1912 onwards, he heard the impassioned debates on the Neanderthal Man of La Chapelle-aux-Saints, which Marcellin Boule had just finished investigating, and on the discoveries at La Ferrassie.

During his mission in 1927 to study the fauna discovered on the Chou-k'ou-tien site, he was present in 1929 at the discovery by Pei Wen Chung, a young Chinese researcher, of the first Sinanthropus skull. This was the first time in the world that the complete skull of a fossil hominid pre-dating Neanderthal Man had been discovered. His brain capacity, estimated at 1050 cc, was smaller than that of either modern man or Neanderthal Man. Nevertheless, he was already producing tools and had learned how to use fire.

In 1936 Father Teilhard visited the Island of Java where G.H.R. von Koenigswald had just discovered new fragments of Pithecanthropus skulls. With him he brought to light the industries of the Lower Palaeolithic in Patjitar. Like the Sinanthropus of Chou-k'ou-tien the Java Pithecanthropus belongs to the Homoerectus group.

From 1951 to 1953, thanks to the Wenner Gren Foundation, he was able to visit the famous caves of southern Africa: Taung, Sterkfontein, Kromdrai and Makapan where, on even older sites, extremely ancient hominids were discovered which could not yet be called men, and which had an even smaller brain capacity: 450 cc for the Plesianthropus transvaalensis of Sterkfontein and 500 cc for the Paranthropus Crassidens of Swartkrans.

Thanks to these many expeditions, his observations in the field and in the laboratory and deep reflection, Father Teilhard was able to present a broad and coherent synthesis of the evolution of the primates and of man. The main outlines of his pattern, despite the many recent discoveries in the field of palaeontology, still remain valid.

By realizing with greater urgency and clarity, he wrote in 1923, how deeply our nature is rooted in the entrails of the Earth, we shall acquire a more glorious idea of the organic unity of the universe; we shall measure a little more accurately the sacredness concealed within the gift of life; we shall experience more acutely the weight of the responsibility conferred upon us by our freedom, through which we must ensure the successful conclusion of a process which has been going on for millions of years.

But the secret of man, he wrote, does not lie in his past, in the successive stages of his embryonic life (whether ontogenetic or phylogenetic), but in the spiritual nature of the soul. The soul, whose whole activity is synthesis, refuses to be pinned down by science, which is essentially concerned with analysing things into their constituent parts and their material antecedents. Only our inner sense and philosophical thinking can discover it.