

CHAPTER III:

Racism between Two Languages-A Critical Review

Social Darwinism (or Scientific Racism!) between Christian West and Islamic East:

The nation's history and its values are reflected in its linguistic vocabulary. The English language (like the Arabic language) is greatly influenced by its surrounding environment; its history is intimately linked to the history of western culture and its progress throughout various era of history.

Thomas Robert Malthus (1766 –1834), a British economist wrote in 1798 *An Essay on the Principle of Population*: he saw such ideas of endless progress towards a utopian society as vitiated because of the dangers of population growth: "The power of population is indefinitely greater than the power in the earth to produce subsistence for man: *Population, when unchecked, increases in a geometrical ratio. Subsistence increases only in an arithmetical ratio.* A slight acquaintance with numbers will show the immensity of the first power in comparison with the second". As an Anglican clergyman and Fellow of Jesus College, Cambridge (elected in 1793), Malthus saw that egalitarian societies were prone to over-population. Malthus wrote in dramatic terms: *"epidemics, pestilence and plague advance in terrific array, and sweep off their thousands and ten thousands. Should success be still incomplete, gigantic famine stalks in the rear, and with one mighty blow, levels the population with the food of the world"*. Malthus criticised the Poor Laws and argued that population was held within resource limits by two types of checks: positive ones, which raised the death rate (hunger, disease and war), and preventive ones, which lowered the birth rate, such as abortion, birth control, prostitution, postponement of marriage, and celibacy (sexual abstinence).

Malthus argued that as an increasing population would normally outgrow its food supply, this would result in the starvation of the weakest – called **Malthusian Catastrophe** (or **Malthusian crisis**). European historians still describe that the Spanish and European colonisation of Americas and the killing of its native people came as a result of Malthusian crisis!!!

While others regarded fertility as an economic advantage, because it increased the number of workers available for work, however, Malthus stood against it because he thought that even though fertility might increase the gross output, it tended to reduce output *per capita*.

He further argued that as the supply of labour increases with the increased population-growth at a constant labour demand, the wages earned would decrease eventually to subsistence, where birth-rate equals death-rate, resulting in no growth in population.

Malthus however, assumed a constant labour-demand in his assessment of England, and in doing so he ignored the effects of industrialization, which increased the level of technology and production, causing an increase in labour-demand.

He proposed the gradual abolition of **Poor Laws** by gradually reducing the number of persons qualifying for relief (Relief in dire distress would come from private charity). He reasoned that poor relief acted against the longer-term interests of the poor by reducing the

number of workers and thus raising the price of commodities and undermining the independence and resilience of the peasant. In other words, 'the Poor Laws' tended to "create the poor which they maintain".

He also supported the **Corn Laws**, which introduced a system of taxes on British imports of wheat. He thought these measures would encourage domestic production, and so promote long-term benefit. By encouraging domestic production, Malthus argued, the Corn Laws would guarantee British self-sufficiency in food.

Defects of Malthus Theory:

Malthus predicted a population crisis in mid-19 century, but nothing came! The neo-Malthusians in *The Limits to Growth* in 1972 predict another crisis, also erroneously.

Furthermore, attempts to limit the human growth by family planning are interventional and can be draconian (e.g. mass sterilization, or China's one-child policy) are often rejected by people naturally. Recently, the phenomenon of "*feminization of nature*" (because of the widespread chemical contamination of universe), is becoming an epidemic, resulting in infertility spreading like the plague (see **Deborah Cadbury's: The Feminization of Nature**, Hamissa Hamilton (Penguin), London 1997). Furthermore, **the Economist** (Oct/Nov 2009 issue, pages 35-38) published an article on falling fertility and how the population problem is solving itself, reducing the world's numbers from 9.2 billion in 2050 to 8.5 billion. The article made a link between wealthy rich families and lowered fertility, and vice versa; it states that wealth lowers fertility and lower fertility causes wealth. Colonisation of the New World by Europeans driven by Malthusian vision resulted in an **insatiable greed for food, for money, for power, and for domination of the others** (as if it is the birth right of the white superior race – see below). New World Colonization has indeed, resulted in initial annihilation of the Native American population with an acute shortage of working men population, and consequently increased demand for imported African slaves (i.e. many displaced by force from their countries) in order to solve the plantations problems to grow, on a massive scale, various crops of cotton, coffee, tobacco, sugar cane, sisal, various oil seeds, and rubber trees. Millions of slaves were also needed to accomplish colonial industrialization dreams, e.g. construction of Panama Canal alone ended in massive death of 28000 workers (because of yellow fever, malaria, and mudslides).

In fact, the Problem is not the rapid population growth (as Malthusians consider), but in the inequitable distribution among the population. More importantly, good planning results usually in food over-production; in other word, the principal problem lies in the **overproduction and mal-distribution**. The individual portion of food, and indeed the human meals had become much bigger than before; the morbid obesity is now becoming 'epidemic' in proportion. Indeed, the media are more concerned about the mountains of stored butter and cheese, melting away and/or disposed off (e.g. thrown in the sea) in order to fix the commodity prices at a high level, because of market forces: supply and demand. Similarly, there are mountains of grains (wheat, barley, oat), and lakes of milk and honey (not to mention lakes of wine); none of this surplus in food overproduction is being distributed equally at home and/or dispatched to poor countries.

Despite all these defects of Malthus theory, however Malthus had influenced politicians and decision-makers of colonisation of the New World to wage wars as a means of depopulation of the poor race for the advantage of the superior European white race settlers.

(enhancing the Euro-centric view of the world). In 1805 Malthus became Professor of History and Political Economy at the East India Company College (now known as Haileybury) in Hertfordshire (His students affectionately referred to him as "Pop" or "Population" Malthus).

Malthusian theory influenced the policy of British East India Company (James Mill, the Governor-General of India - in office 1828-1835, himself was a friend and a great admirer of Malthus). Another distinguished Malthusian was the British Prime Minister William Pitt the Younger (in office: 1783-1801 and 1804-1806), after reading the work of Malthus promptly withdrew a Bill he had introduced calling for the extension of Poor Relief. But more importantly, Malthusian social theory became the canon of socioeconomic theory that influenced the idea of the survival of the fittest, a term coined by anthropologist Herbert Spencer (1820-1903), or "The Gospel of Wealth" theory written by Andrew Carnegie.

Spencer's term 'survival for the fittest' inspired Charles Darwin, who with his co-discoverer Alfred Russel Wallace propounded their Theory of 'Natural Selection'. However, when Wallace met Darwin, he gave him the draft of his scientific paper. Although Wallace's first letters to Darwin have been lost, Wallace carefully kept the letters he received. In the first letter, dated 1 May 1857, Darwin commented that Wallace's letter of 10 October which he had recently received, as well as Wallace's paper "*On the Law which has regulated the Introduction of New Species*" of 1855, showed that the 'natural selection' was Wallace's idea adopted or plagiarized by Darwin, who attributed it to himself, despite that he initially praised Wallace, claiming that both were thinking alike and to some extent reaching similar conclusions, and said that he was preparing his own work for publication in two years time. Wallace's family, like many Scottish Wallaces, claimed a connection to William Wallace, a Scottish leader during the Wars of Scottish Independence in the 13th century. His advocacy of Spiritualism and his belief in a non-material origin for the higher mental faculties of humans strained his relationship with Darwin and with the scientific establishment, especially with other proponents of evolution.

Spencer's major work, *Progress: Its Law and Cause* (1857) was released 2 years before the publication of Darwin's *On the Origin of Species*, and *First Principles* was printed in 1860. Conversely, Spencer (a contemporary of Darwin) had later used Darwin's evolution theory in the 1870s, introducing the idea of 'social evolution' in attempt to scientifically formalize social thinking. Spencer applied social evolution to all areas of human endeavour, promoting an optimistic view of the future as inevitably becoming better. Spencer's 'Social Evolutionism' was later influenced by the 'biological theory of evolution' to propound the erroneous concept of Social Darwinism. Indeed, the 1798 Malthus's work *An Essay on the Principle of Population* was incredibly popular and widely read by social Darwinists.

Darwin and Wallace both read and acknowledged the role played by Malthus in the development of their own ideas. Darwin read Malthus' famous *Essay on a Principle of Population* in 1838, four years after Malthus' death. Darwin referred to Malthus as "that great philosopher", and said: "This is the doctrine of Malthus, applied with manifold force to the animal and vegetable kingdoms, for in this case there can be no artificial increase of food, and no prudential restraint from marriage". Wallace stated: "But perhaps the most important book I read was Malthus's *Principles of Population*".

Eugenics, was proposed by Darwin's cousin, Francis Galton, in 1865 and 1869. The word **eugenics** derives from the Greek word eu (good or well) and the suffix -genēs (born), and was coined by Sir Francis Galton in 1883, who defined it as "the study of all agencies under human

control which can improve or impair the racial quality of future generations". Galton argued that just as physical traits were clearly inherited among generations of people, so could be said for mental qualities (genius and talent). Galton argued that social morals needed to change so that heredity was a conscious decision, in order to avoid over-breeding by "less fit" members of society and the under-breeding of the "more fit" ones.

If Galton's view, social institutions such as welfare and insane asylums were allowing "inferior" humans to survive and reproduce at levels faster than the more "superior" humans in respectable society, and if corrections were not soon taken, society would be awash with "inferiors."

The following passage from Malthus showed his influence on Galton, where Malthus suggests (in *An essay on the principle of population*, 1798, Chapter IX, p72) that the techniques of animal husbandry could apply to humans, anticipating the idea which, in 1883, Francis Galton called eugenics:

It does not... by any means seem impossible that by an attention to breed, a certain degree of improvement, similar to that among animals, might take place among men. Whether intellect could be communicated may be a matter of doubt; but size, strength, beauty, complexion, and perhaps longevity are in a degree transmissible... As the human race, however, could not be improved in this way without condemning all the bad specimens to celibacy, it is not probable that an attention to breed should ever become general.

Such theories, which often postulated a "master race", usually "Nordic" and "Aryan", were along with eugenics, pioneered by Sir Francis Galton (among others) and popularized at the turn of the 20th century, a main influence of the Nazi racial policies and their program of eugenics. Galton developed the science of eugenics whose primary concept was "control" and promotion of quantification and analytical measurements of "desirable traits" so as to set a guide on how to obtain the "truly proper breeding". Apart from Arthur de Gobineau (one of the founder of "biological racism") who wrote in 1853 *An Essay on The Inequality of Human Races*, other scientific racist works that largely influenced Nazism include Madison Grant's 1916/1924 *The Passing of the Great Race* and Lothrop T. Stoddard's 1920 *The Rising Tide of Color Against White World Supremacy*. For the most part, however, scientific racism is a pejorative label sometimes given to modern theories or arguments that allege that scientific evidence shows significant evolutionary differences between races or ethnic groups.

Darwin read his cousin's work with interest, and devoted sections of *Descent of Man* to discussion of Galton's theories.

In Germany too, Malthus contemporary Friedrich Hegel (1770–1831) would also include a strongly evolutionist account of history in *Lectures on the Philosophy of History*, describing the development of the *Geist* (Spirit or Reasoning mind) in history through a series of incarnations in specific *Volkgeists* (Folk Spirit). Hegel's philosophy of history was explicitly biased in favour of Europe, and, in particular, of the Prussian state, conceived as the achievement of history (the "End of History"). In his chapter on the Geographical Foundations of Universal History, Hegel wrote that "each People represented a particular degree of the development of the Spirit," thus forming a "nation." This notion of *nation*, however, is not explicitly linked to physical or racial particularities, rather it is concerned and the concrete historical and geographical site where the *Spirit* unfold. Influenced, as many others, by Montesquieu's theory on the influence of climate on mores and laws, which the latter had

developed in *The Spirit of the Laws* (1748), Hegel wrote that: "It is true that climate has influence in that sense that neither the warm zone nor the cold zone are favourable to the liberty of man and to the apparition of historical peoples." (i.e. of peoples that "have" a history, in contrast with "savages" that allegedly have no history).

Unsurprisingly, Hegel thus favoured the *Geist* in temperate zones. Hegel finally made an account of "universal history," which started with the Oriental World, then the Greek Antiquity, then the Roman and the Christian World, and, ultimately, the Prussian World. In the same lessons, Hegel thus write that "America is the country of the future", but that "philosophy does not concerns itself with prophecies". It is surprising that Hegel's philosophy, as Kant for that manner, had reduced history dogmatically to such evolutionist statements. Eugenics however, were practised in Pre-Galtonian era; it can be found in the ancient civilizations, such as Rome, Athens. Sparta in particular, practised infanticide through exposure in the Apothetae near the Taygetus mountain. Trials for babies included bathing them in wine and exposing them to other elements. To Sparta, this would ensure only the strongest survived and procreated. Adolf Hitler considered Sparta to be the first "Völkisch State," and much like Ernst Haeckel before him, praised Sparta due to its primitive form of eugenics practice of selective infanticide policy.

It may be surprising to know that Hegel had a religious background. After he had received his theological certificate (*Konsistorialexamen*), and during the period 1793-96, he composed the text known as the "Life of Jesus" and a book-length manuscript entitled "The Positivity of the Christian Religion". While in Frankfurt, Hegel composed the essay "Fragments on Religion and Love". In 1799 he wrote another essay entitled "The Spirit of Christianity and Its Fate" which was not published during his lifetime.

Hegelianism Triad Influenced by his German predecessors (Kant and Fichte), Hegel's dialectic was characterized as a three-step process, "thesis, antithesis, synthesis"; namely, that a "thesis" (e.g. the French Revolution during 1789-1799) would cause the creation of its "antithesis" (e.g. the Reign of Terror that followed), and would eventually result in a "synthesis" (e.g. the Constitutional state of free citizens). What is wrong with the "thesis-antithesis-synthesis" approach is that it gives the sense that things or ideas are contradicted or opposed by things that come from outside them. For example, the French Revolution for Hegel constitutes the introduction of real individual political freedom into European societies for the first time in recorded history. But precisely because of its absolute novelty, it is also absolutely radical: on the one hand the upsurge of violence required to carry out the revolution cannot cease to be itself, while on the other, it has already consumed its opponent. The revolution therefore has nowhere to turn but onto its own result: the hard-won freedom is consumed by a brutal Reign of Terror. Hegel's writing style is difficult to read; he is described by Bertrand Russell in the *History of Western Philosophy* as the single most difficult philosopher to understand. Perhaps, this is partly because Hegel tried to develop a new form of thinking and logic, which he called "speculative reason" and which includes the more famous concept of "dialectic", to try to overcome what he saw as the limitations of both common sense and of traditional philosophy in the relation between thought and reality.

Friedrich Nietzsche (1844-1900) was a 19th-century German Philosopher. In fact, he began his career as a classical philologist before turning to philosophy. At the age of 24 he was appointed to the Chair of Classical Philology at the University of Basel (the youngest individual yet to have held this position), but he resigned in 1879 on basis of ill-health.

His philosophy is based on a mishmash of social Darwinism, anti-Christian atheism and nihilism. He is best-known for his statement "*God is dead*", occurring in several of Nietzsche's works (notably in **The Gay Science**). Thus, most regard Nietzsche as an atheist. In Nietzsche's view, recent developments in modern science and the increasing secularization of European society had effectively 'killed' the Christian God, who had served as the basis for meaning and value in the West for more than a thousand years. His concept, death of God led to nihilism, the belief that nothing has any importance and that life lacks purpose. Between 1889–1900, Nietzsche suffered a mental collapse. His mental illness was originally diagnosed as tertiary syphilis. Many argue that his breakdown may have been caused by a psychological maladjustment brought on by his own philosophy. Manic-depressive illness with periodic psychosis, followed by vascular dementia was confirmed; between 1898 and 1899 Nietzsche suffered at least 2 strokes which paralysed him leaving him unable to speak or walk. After contracting pneumonia in mid-August 1900, he sustained another stroke and died.

Ernst Heinrich Philipp August Haeckel (1834 - 1919), was an eminent German, biologist, naturalist, philosopher, physician, professor and artist who discovered, described and named thousands of new species, mapped a genealogical tree relating all life forms. As a philosopher, Ernst Haeckel wrote *Die Welträtsel* (1895–1899, in English, *The Riddle of the Universe*, 1901), and *Freedom in Science and Teaching* to support teaching evolution.

Haeckel's political beliefs were influenced by Lamarckism. Haeckel believed that racial characteristics were acquired through interactions with the environment and that **phylogeny** directly followed ontogeny. Haeckel was a zoologist, an accomplished artist and illustrator, and later a professor of comparative anatomy. Although Haeckel's ideas are important to the history of evolutionary theory, and he was a competent invertebrate anatomist most famous for his work on radiolaria, many speculative concepts that he championed are now considered incorrect. For example, Haeckel described and named hypothetical ancestral microorganisms that have never been found. He was one of the first to consider psychology as a branch of physiology. He also proposed many now ubiquitous terms including "**phylum**", "**phylogeny**", "**ecology**" ("**oekologie**"). Haeckel did not support of natural selection, rather believing in a Lamarckian inheritance of acquired characteristics (*Lamarckism*). For instance, Lamarck thought that the '**antelope**' can develop a long neck by its prolonged effort to reach high trees; the long neck then becomes an acquired characteristic which will then become inherited in the animal to develop into '**giraffe**'.

He supported the theory with embryo drawings that have since been shown to be oversimplified and in part inaccurate, and the theory is now considered an **oversimplification** of quite complicated relationships. Haeckel introduced the concept of "**heterochrony**", which is the change in timing of embryonic development over the course of evolution.

Haeckel was a flamboyant figure. He sometimes took great (and non-scientific) leaps from available evidence. For example, at the time that Darwin first published *On the Origin of Species by Means of Natural Selection* (1859), no remains of human ancestors had yet been found. Haeckel postulated that evidence of human evolution would be found in the *Dutch East Indies* (now Indonesia), and described these theoretical remains in great detail. Haeckel argued that human evolution consisted of precisely 22 phases, the 21st — the "**missing link**" — being a halfway step between apes and humans. He even formally named this missing link *Pithecanthropus alalus*, translated as "**ape man without speech**". He even

named the as-of-yet unfound species, *Pithecanthropus alalus*, and charged his students (Richard and Oskar Hertwig) to go and find it. One student did find some remains: a young Dutchman named Eugene Dubois went to the East Indies and dug up the remains of the so-called *Java Man*, the first human ancestral remains ever found. These remains originally carried Haeckel's *Pithecanthropus* label, though they were later reclassified as *Homo erectus*.

Polygenism and racism The creationist Polygenism of Samuel Morton (1799 – 1851) and Louis Agassiz (1807 - 1873), which presented human races as separately created species; despite being creationists, they were so radical in their time, because their Polygenism went against the orthodox standard reading of the Bible (which implied all human stock descended from a single couple: Adam and Eve). Polygenism was supported by Carleton Coon, (1904 – 1981). Coon wrote many books: **The Races of Europe**, **The White Race and the New World** (1939), and **The Origin of Races** (1962). He divided humankind into 5 separate races (**Caucasoid, Congoid, Capoid, Mongoloid, Australoid**); Coon hypothesized that modern humans, *Homo sapiens*, arose five separate times in five separate places from *Homo erectus*, "as each subspecies, living in its own territory, passed a critical threshold from a more brutal to a more *sapient* state".

The creationist Polygenism was rejected by Charles Darwin, who argued for the monogenesis of the human species and the recent African origin of modern humans. Haeckel however, put forward a doctrine of evolutionary Polygenism based on the ideas of the Linguist August Schleicher, in which several different language groups had arisen separately from speechless presuming *Urmenschen*, which themselves had evolved from simian ancestors. These separate languages had completed the transition from animals to man, and, under the influence of each main branch of languages, humans had evolved - in a kind of Lamarckian use-inheritance - as separate species, which could be subdivided into races. From this Haeckel drew the implication that languages with the most potential formed human species with the most potential, led by the Semitic and Indo-Germanic groups, with Berber, Jewish, Greco-Roman and Germanic varieties to the fore. Haeckel's view can be seen as a forerunner of the multi-regional hypothesis, which until the 1990s remained in contention with developments of Darwin's hypothesis of a recent African origin of modern humans. The multiregional view then fell from favour, and it is claimed that Darwin's view has more recently been validated by the decipherment of the human genome.

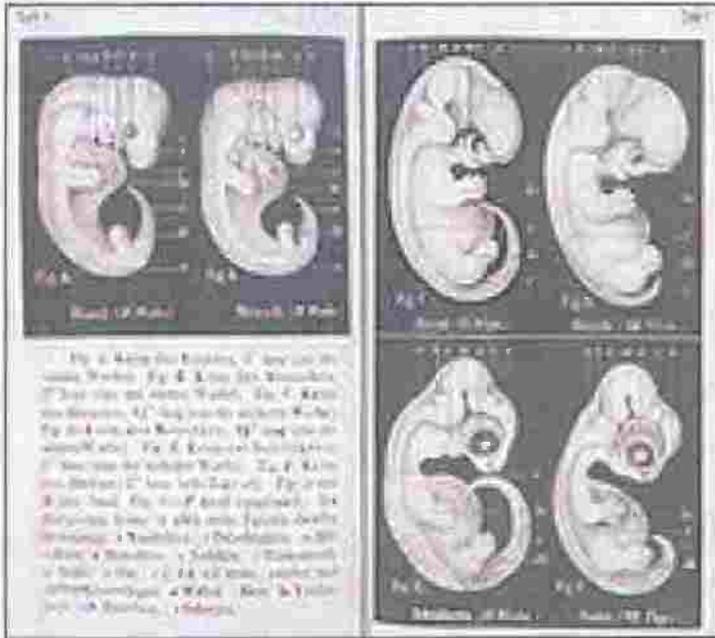
Haeckel did not hesitate to apply the hypothesis of Polygenism to the diversity of human groups in the most heavy-handed way, becoming a leading apologist of scientific racism.

Recapitulation theory and Haeckel's Embryological drawings:

When Haeckel was a student in the 1850s he showed great interest in embryology, attending the rather unpopular lectures twice and in his notes sketched the visual aids: textbooks had few illustrations, and large format plates were used to show students how to see the tiny forms under a reflecting microscope, with the translucent tissues seen against a black background. It was agreed by all European evolutionists that all vertebrates looked very similar at an early stage, in what was thought of as a common ideal, but there was a continuing debate since 1820s about the **Recapitulation Theory** that human embryos developed through stages of the forms of all major groups of adult animal. Haeckel used morphology to reconstruct the evolutionary history of life, in the absence of fossil evidence, using embryology as evidence of ancestral relationships. So he developed the controversial

“**recapitulation theory**” (“**ontogeny recapitulates phylogeny**”) claiming that an individual organism’s biological development, or **ontogeny**, parallels and summarizes its species’ entire evolutionary development, or **phylogeny**. His concept of recapitulation has been refuted.

Haeckel’s aim was a reformed morphology with evolution as the organising principle of a cosmic synthesis unifying science and religion. He was giving successful “popular lectures” on his ideas to students and townspeople in Jena, in an approach pioneered by his teacher Rudolf Virchow.



Dramatic, but forged, illustrations of dog and human embryos, looking almost identical at 4 weeks then differing at 6 weeks, shown above a 6 week turtle embryo and 8 day hen embryo, presented by Haeckel in 1868 as convincing proof of evolution. These pictures have now been accepted as thoroughly fraudulent.

To meet his publisher’s need for a popular work he used a student’s transcript of his lectures as the basis of his *Natürliche Schöpfungsgeschichte* published in Berlin in 1868, and presenting a *comprehensive gospel of evolution*. It was translated into English as “*The History of Creation*” in 1876; it was frequently reprinted until 1926.



Haeckel fake Drawings

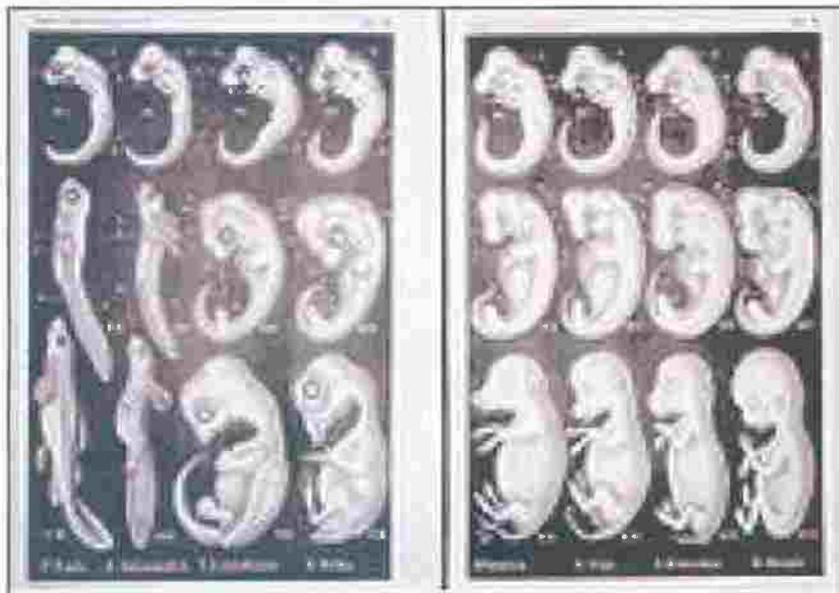
The book sold very well. Haeckel believed privately that his figures were both exact and synthetic, and in public asserted that they were schematic like most figures used in teaching. However, some anatomical experts hostile to Haeckel’s evolutionary views expressed *some private concerns that certain figures had been drawn rather freely; furthermore, the figures showed what they already knew about similarities in embryos*. The revised 1870 second edition of 1,500 copies attracted more attention, being quickly followed by further revised editions with larger print runs as the book became a prominent part of the optimistic, nationalist, anticlerical “**culture of progress**” in Otto von Bismarck’s new German Empire. The similarity of early vertebrate embryos became common knowledge, and the illustrations were praised by experts such as Michael Foster of the University of Cambridge. In the introduction to his 1871 *The Descent of Man*,

Foster of the University of Cambridge. In the introduction to his 1871 *The Descent of Man*,

and Selection in Relation to Sex, Darwin gave particular praise to Haeckel, writing that if his *Natürliche Schöpfungsgeschichte* "had appeared before my essay had been written, I should probably never have completed it". The fifth edition of Haeckel's book appeared in 1874, with a controversial frontispiece featuring the heads of apes and humans replaced by a heroic portrait of Haeckel himself.

Controversy Later in 1874, Haeckel's simplified embryology textbook *Anthropogenie* made the subject into a battleground over Darwinism aligned with Bismarck's *Kulturkampf* ("struggle of civilizations") against the Catholic Church. Haeckel took particular care over the illustrations, changing to the leading zoological publisher Wilhelm Engelmann of Leipzig and obtaining from them use of illustrations from their other textbooks as well as preparing his own drawings including a dramatic double page illustration showing **early, somewhat later and still later stages of 8 different vertebrates** (see figure below). It is said that Haeckel was charged with fraud by five professors and convicted by a university court at Jena.

Recent analyses (Richardson 1998, Richardson and Kenck 2002) have found that some of the criticisms of Haeckel's embryo drawings were legitimate, but others were unfounded. There were multiple versions of the embryo drawings, and Haeckel rejected the claims of fraud. It was later said that "there is evidence of sleight of hand" on both sides of the feud between Haeckel and his opponents.



1874 Haeckel Fake illustrations from *Anthropogenie* showing "very early", "somewhat later" and "still later" stages of embryos of fish (F), salamander (A), turtle (T), chick (H), pig (S), cow (R), rabbit (K), and human (M).

Some creationists have claimed that Darwin relied on Haeckel's embryo drawings as proof of evolution to support their anti-evolution arguments. This claim ignores the fact that Darwin published *On the Origin of Species* in 1859, and *The Descent of Man* published in 1871 predates Haeckel double page illustration of eight vertebrate embryos from 1874.

Darwin's 1859 book *On the Origin of Species* had immense popular influence, but it was a technical book rather than a work of popular science: long, difficult and with few illustrations. One of Haeckel's books did a great deal to explain his version of "Darwinism" to the world. It was a bestselling, provocatively illustrated book in German, titled *Natürliche Schöpfungsgeschichte*, 1868.

Thus, social Darwinism (the so-called Scientific Racism) was the fruitful outcome of Darwin's and Haeckel theories of Evolution. It is one of the ironies of history that *Aryan*, a word nowadays referring to the blond-haired, blue-eyed physical ideal of Nazi Germany (of Nordic type, supposed to be part of the master race), originally referred to a people who looked vastly different. Its history starts with the ancient Indo-Iranians, Indo-European peoples who inhabited parts of what are now Iran, Afghanistan, and India; this original meaning is no longer in technical use. Their tribal self-designation was a word reconstructed as *arya-* from Sanskrit *arya-*, *noble*. *Aryam*, where it is referred to the upper-crust of ancient Indian society. These words became known to European scholars in the 18th century.

As an adaptation of the Latin *Arianus*, referring to Iran, 'Aryan' has "long been in English language use". Its history as a loan word began in the late 1700s, when the word was borrowed from Sanskrit *ārya-* to refer to speaker of North Indian languages, or Iranian languages, the word 'Aryan' came to refer to the group of languages deriving from that ancestor language, and by extension, the speakers of those languages and the (now known to be an enable) position that Irish *Éire* was etymologically related to "*Aryan*", in 1837 Adolphe Pictet popularized the idea that the term "*Aryan*" could also be applied to the entire Indo-European language family as well. The shifting of meaning that eventually led to the present-day sense started in the 1830s, when Friedrich Schlegel, a German scholar who was an important early Indo-Europeanist, came up with a theory that linked the Indo-Iranian words with the German word *Ehre*, "honour," and older Germanic names containing the element *ario-*, such as the Swiss warrior *Ariovistus* who was written about by Julius Caesar. Schlegel theorized that far from being just a designation of the Indo-Iranians, the word **arya-* had in fact been what the Indo-Europeans called themselves, meaning something like "the honorable people." (This theory has since been called into question). Thus "Aryan" came to be synonymous with "Indo-European," and in this sense entered the general scholarly consciousness of the day. Not much later, it was proposed that the original homeland of the Indo-Europeans had been in northern Europe.

Following this linguistic argument, in the 1850s Arthur de Gobineau supposed that "*Aryan*" corresponded to the suggested prehistoric Indo-European culture (1853-1855, *Essay on the Inequality of the Human Races*). He believed that there were 3 basic races – white, yellow and black – and that everything else was caused by race-miscegenation, which de Gobineau argued was the cause of chaos. The "*master race*", according to de Gobineau, were the Northern European "Aryans", who had remained "*racially pure*". Southern Europeans (to include Spaniards and Southern Frenchmen), Eastern Europeans, North Africans, Middle Easterners, Iranians, Central Asians, Indians, he all considered racially mixed, degenerated through the miscegenation, and thus less than ideal.

Nazi Germany under Adolf Hitler was infamous for eugenics programs to maintain a "pure" German race. Timothy W. Ryback's *Hitler's Private Library – The Books that Shaped his Life*, published by Bodley Head London, 2009, wrote in page 109 and page 110, respectively:

in the first volume of a massive, two-part study: '*Teaching on Human Heredity and Racial Hygiene*', J. F. Lehmann wrote: "*To Mr. Adolf Hitler, as an important building block for deepening his understanding. Warmly dedicated J. F. Lehmann*".

A 1929 manual on sterilization by Otto Kankeliet, '*Terminating Reproductive Capacity for Racial-Hygienic and Social Reasons*',...has been inscribed to Hitler "in great friendship").

(Along with Grant's '*Passing of the Great Race*', the most notable books are those by Hans Gunther or as he was called Racial Gunther (Rassengunther) [i.e. *Racial Typology of the German People*, in 6 volumes, a compendium of Aryan identity], whose works Hitler included among his recommended readings for Nazi Party members).

The Nazis performed extensive experimentation on live human beings to test their genetic theories. The Nazi regime forcibly sterilized people viewed as mentally and physically unfit, an estimated 400,000 between 1934 and 1937. The Germans therefore, they set a precedent to be followed by many other countries.

In Sweden, the "Sterilization Act of 1934" provided for the voluntary sterilization of some mental patients. From about 1934 to until 1975, Sweden sterilized more than 62,000 people. Sweden sterilized more people than any other European state except Nazi Germany. Sweden's large-scale eugenics program targeted the deviant and the mentally ill. Two provinces in Canada carried out thousands of compulsory sterilizations, and these lasted into the 1970s. The large-scale eugenics program was also practised in the United States, Australia, Norway, France, Finland, Denmark, Estonia, Iceland, Switzerland, and China.

Scientific racism played a role in establishing Apartheid in South Africa. In South Africa, white scientists, like Dudley Kidd, who published *The essential Kafir* [from Arabic: Kafir] in 1904, sought to "understand the African mind." They believed that the cultural differences between whites and blacks in South Africa might be caused by physiological differences in the brain. Rather than suggesting that Africans were "overgrown children," as early white explorers had, Kidd believed that Africans were "misgrown with a vengeance." He described Africans as at once "hopelessly deficient," yet "very shrewd"!!!

The Carnegie Commission was concerned with the Poor White Problem in South Africa and later played a key role in establishing Apartheid in South Africa.

Gregor Mendel (1822 - 1884) "father of modern genetics" was born to a German family in Austrian Empire (now Czech Republic). In 1851 he was sent to the University of Vienna, returning to his abbey in 1853 as a teacher, principally of physics. Between 1856 - 1863 Mendel cultivated and tested some 29,000 pea plants (i.e. *Pisum sativum*). This study showed that one in four pea plants had *pure-bred recessive* alleles, two out of four were *hybrid* and one out of four were *pure-bred dominant*. His experiments brought forth 2 generalizations, the 'Law of Segregation' and the 'Law of Independent Assortment', which later became known as 'Mendel's Laws of Inheritance'. Mendel did read his paper, *Experiments on Plant Hybridization*, at two meetings of the Natural History Society of Brunn in Moravia in 1865. When Mendel's paper was published in 1866 in *Proceedings of the Natural History Society of Brunn*, it had little impact (it was cited 3 times over next 35 years).

Ironically, Darwin never found out. Furthermore, the results of Mendel were ignored until long after both he and Darwin were dead. At that time, most biologists held the idea of '*blending inheritance*' (which Darwin called *pangenesis*): it entails that offspring were an average between the two different characteristics of their parents. Also, **transmutation of species** was a term used by Lamarck in 1809 for his theory that described the altering of one species into another through environmental influence. Darwin suggested that according to

Pangenesis, body cells shed gemmules, which collect in the reproductive organs prior to fertilization. He speculated that characteristics of the parents were blended - like mixing paint - as they passed to the offspring. But if that was true, then how a *single fortunate mutation* (by chance or accident) could be spread through a species? It would be blended out, just as a single drop of white paint would be in a gallon of black paint; Darwin was unsuccessful and his 'natural selection' was undermined. Blending inheritance could not account for the way in which variations were conserved between generations; it remains one of the many so-called **missing links** of Darwin's theory. Indeed, the period from the 1880s to the 1930s represents "eclipse of Darwinism", when mechanisms of evolution were discredited.

However, *Mendel's concepts of genes* were rediscovered in the early 20th century, by Hugo de Vries (and separately by Carl Correns); it was Hugo de Vries (a Darwinist himself) who introduced the term '*mutation*' (as we know it), and for developing a '*mutation theory of evolution*' to find a more successful theory of discontinuous inheritance rather than blending inheritance of natural selection. The current Neo-Darwinism separates Darwin's ideas of natural selection from his hypothesis of pangenesis; the 'modern synthesis' combining Mendelian genetics with Darwin's theory of natural selection was invented over a decade (1936-1947) by **Julian Huxley** (Darwinian staunchest follower) who produced his book: '**Evolution: The Modern Synthesis**' (1942). So the original single fortunate mutation was replaced by numerous mutations, all by chance, and over millions of years!!! Today, it is widely assumed that the existence of fossil remains of numerous extinct species necessarily implies evolution, but most people are unaware that Darwin's most formidable opponents were not clergymen, but fossil experts. It seems that whenever fragments of bony fossils were found, they were assembled (though incompletely) and the shape was finally constructed with biased imagination, in order to claim the finding of a 'missing link'!!!

In fact, the Neo-Darwinism raised more questions than it could answer. Theories to be factual must be reproduced, yet no one had ever reproduced or witnessed the process of evolution in action, while transforming one species to another?

Where are the Intermediate Transitional forms?

Why the Man is at the top of evolution-ladder, if the mechanism is by multi-mutation?

What make these multi-mutations stop at Man-species?

How can the chance dictate mutations leading to a new species?

WAYNE JACKSON (23/12/2002) published on the internet an article entitled:

An Evolutionary Anomaly or "Barking Up the Wrong Tree" stating the irregularities in the evolutionary explanation of living creatures, that cast grave suspicion upon Darwin's theory of the origin of biological species, being contradicted by numerous examples of factual data.

According to Darwin's theory of evolution:

- One would expect that, at the very bottom of the fossil record, the remains of living creatures would be extremely sparse. Contrariwise, the earliest fossil stratum reflects an "explosion of life" that is so profuse it baffles Darwinists. They portray it as one of the "major" mysteries of the history of life. [See G. Simpson (1960), **The Meaning of Evolution** (New Haven: Yale University Press), page 18].

- The earliest forms of life should be characterized by a lesser complexity than that which supposedly evolved much later. But this is not the case. The so-called “simple” forms of life are “incredibly complex” [See G. Simpson (1960), *The Meaning of Evolution* (New Haven: Yale University Press), page 15]. The alleged upward swing of the evolutionary chain presents many problems. A fern, for instance, has 500 chromosomes in the nucleus of each of its cells, a crayfish has 200, while humans have only 46. This is a deviation from Darwin’s evolution theory. Supposedly, elephants evolved millions of years after dinosaurs already had become extinct. However, fossilized elephant and dinosaur tracks have been discovered in the same rock stratum [See Verrill, A. Hyatt. (1954), *Strange Prehistoric Animals and Their History* (Boston: L.C. Page & Co.) page 162].
- Evolutionists allege that the tiny marine organisms known as trilobites perished from the earth 500 million years before humans arrived. Yet fossilized trilobites have been found embedded in human sandal prints near Antelope Springs, Utah, U.S.A. [Lammerts, Walter A., Ed. (1976), *Why Not Creation?* (Grand Rapids: Baker) pages 188-189].
- Vertically-standing, fossilized tree trunks, some 20 to 30 feet high (2-3 stories), have been found in the record of the rocks [Lammerts, Walter A., Ed. (1976), *Why Not Creation?* (Grand Rapids: Baker) page, 153]. Some of these protrude through several rock strata that supposedly were formed over millions of years. Obviously, though, these strata were laid down *quickly* — before the trees had time to crumble and decay. This does not fit evolutionary theory.

Nature magazine published a scientific article [Powell, Kendall (2002), “Stone Age man kept a dog,” *Nature*, 22/11/2002) and asserted: “Chimps are our closest relatives ... but they cooperate and communicate with humans very poorly”. On the other hand dogs, with which we are supposed to be related only distantly “seem to have converged on some of our thought processes,” according to Brian Hare, an anthropologist at Harvard University. This phenomenon simply does not harmonize with the general theory of evolution.

Hominid family (According to Evolutionists):

(Latin *homo*, man-related, Arabic *hontam* حنّام أو همام, man or brave man) comprising man and his close extinct, bipedal ancestors. Remains of old fossilised species of man are called *Palaeo-lithic* (Greek *Palaeo-*, old and Arabic *hali* (old), and Greek *lithos*, stone). These Palaeolithic remains include:

1. *Australopithecus*, (from Latin *Australis*, southern, and Greek *pithekos*, ape)
2. *Homo habilis*, (able man - from Latin *habilis*, able, Arabic *qabil*), an earlier hominid who is able to walk upright.
3. *Homo erectus* (formerly, *Pithecanthropus erectus* (Greek *pithekos* ape and *anthropos* man)). The erect hominid are represented by **Java man** (see under Haeckel) and **Peking man** (fossil man first found in 1929 southwest Peking, and is related to Java man).
4. *Homo sapiens* (wise man) and *Neanderthal homo sapiens*, the one-existing species of man.

[Neanderthal is a Palaeo-lithic species of man whose remains were first found in 1857 in a cave in Neanderthal, a valley in Western Germany].

Evolutionists call man's so-called first ape-like ancestors *Australopithecus*, which means "South African ape." These living beings are actually nothing but an old ape species that has become extinct. Extensive research done on various *Australopithecus* specimens by two world famous anatomists from England and the USA, namely, Lord Solly Zuckerman and Prof. Charles Oxnard, shows that these apes belonged to an ordinary ape species that became extinct and bore no resemblance to humans.

Evolutionists classify the next stage of human evolution as "homo," that is "man." According to their claim, the living beings in the Homo series are more developed than *Australopithecus*. Evolutionists devise imaginary evolution scheme by arranging different fossils of these creatures in a particular order. This scheme has never been proved. Ernst Mayr, one of the twentieth century's most important evolutionists, contends in his book *One Long Argument* that "particularly historical [puzzles] such as the origin of life or of Homo sapiens, are extremely difficult and may even resist a final, satisfying explanation."

Furthermore, by outlining the link chain as *Australopithecus* > *Homo habilis* > *Homo erectus* > *Homo sapiens*, evolutionists imply that each of these species is one another's ancestor. However, recent findings of paleoanthropologists have revealed that *Australopithecus*, *Homo habilis*, and *Homo erectus* lived at different parts of the world at the same time!!!

(See Alan Walker, *Science*, Vol. 207, 7 March 1980, p. 1103; A. J. Kelso, *Physical Anthropology*, 1st ed., J. B. Lippincott Co., New York, 1970, p. 221; M. D. Leakey, *Olduvai Gorge* Vol. 3, Cambridge University Press, Cambridge, 1971, p. 272.

Moreover, a certain segment of humans classified as *Homo erectus* have lived up until very modern times. *Homo sapiens neanderthalensis* and *Homo sapiens sapiens* (modern man) co-existed in the same region!!!

(See Jeffrey Kluger, "Not So Extinct After All: The Primitive Homo Erectus May Have Survived Long Enough To Coexist With Modern Humans," *Time*, 23 December 1996).

This situation apparently indicates the **invalidity** of the claim that they are ancestors of one another. Stephen Jay Gould explained this deadlock of the theory of evolution although he was himself one of the leading advocates of evolution in the twentieth century: (What has become of our ladder if there are three coexisting lineages of **hominids** (*A. africanus*, the **robust australopithecines**, and *H. habilis*), none clearly derived from another? Moreover, none of the three display any evolutionary trends during their tenure on earth).

Put briefly, the scenario of human evolution, which is "upheld" with the help of various drawings of some "**half ape, half human**" creatures appearing in the media and course books, that is, frankly, by means of propaganda, is **nothing but a tale with no scientific foundation**.

Lord Solly Zuckerman, one of the most famous and respected scientists in the U.K., who carried out research on this subject for years and studied *Australopithecus* fossils for 15 years, finally concluded, despite being an evolutionist himself, that there is, in fact, **no such family tree branching out from ape-like creatures to man**.

Radiometric and Carbon dating have made it possible to identify fossils more than 3.5 billion years old and have indicated that animal species may have appeared **abruptly**, a phenomenon which Darwin himself found difficult to accept. **Animals seem to have**

remained more or less unchanged through all these years. Despite the collection of a huge number of fossils, nearly all of them being fossils of presently existing animals have created problems for the theory of evolution. If animals die a natural death, they are usually decomposed even before being fossilized.

However, sudden catastrophes can bury the animals and embed them deep in the earth. Some rocks and organisms that transformed to show fossils for years and decades were actually deposited within a short period of time. Newspapers frequently attract attention with such headlines as "20-Milion-Year-Old Spider Fossil Discovered" or "35-Million-Year-Old Lizard Fossil Unearthed."

Each of these reports is actually further proof that no evolutionary process had ever happened. The crocodile is a reptile that was living 200 million years ago, as is confirmed by the fossil record. Yet it is of course alive today. Ginkgo trees were living 125 million years ago, but living specimens were found in China in our own time. Neopilina molluscs were living 500 million years ago, the tuatara lizard 200 million years ago, and archaeobacteria as long ago as 3.5 billion years ago. These are still alive today, with all their complex systems and perfect structures. The nautilus, another mollusc, was living in the seas 300 million years ago, and these creatures are living, feeding and reproducing in exactly the same form in today's seas.

The Australian and African lungfish is another example of a living fossil that was alive 400 million years ago and still thrives in the present. Charles Darwin was astonished by the survival of these fish down to the present day, and in his *Origin of Species*, he therefore referred to them as "anomalous forms" that "may almost be called living fossils." This is by no means the end of the list of creatures that still survive today unchanged, in exactly the same form as they displayed millions of years ago. The sturgeon, mackerel, freshwater bass, herring, needlefish, lobster, crawfish and the Devonian-period shark are all examples of living fossils. Other examples include the jellyfish, sponges, frogs, bees, ants, butterflies and termites.

The 230-million-year-old dragonfly, soldier ants dating back 100 million years and the 150-million-year-old salamander are all still living today. The same applies to arachnids such as the spider and myriapods such as the millipede. Finally, a spider fossilized in amber, and estimated as being 20 million years old, was one of the most important discoveries of the 2000s. A statement from Manchester University announced that this spider, 4 centimeters long and 2 centimeters wide, was identical to present-day specimens. The Earth contains countless other fossil specimens from millions of years ago of organisms still living today, such as this spider, and of other creatures now extinct.

One famous British paleontologist, Derek V. Ager, admits, even though he is an evolutionist:

(The point emerges that if we examine the fossil record in detail, whether at the level of orders or of species, we find - over and over again - not gradual evolution, but the sudden explosion of one group at the expense of another).

This means that in the fossil record, all different living species suddenly emerge independently of one another, as fully formed (with all their different structures), without any (imaginary) evolutionary 'intermediate forms' in between. This is the opposite of Darwin's assumptions. Also, this is very strong evidence that all living things are created. Also, the only

explanation of a living species emerging suddenly and complete in every detail without any evolutionary ancestor is that it was created.

It is clear that fossil record evidence was manipulated (through false bone construction, with additional imagination to produce final drawings) in order to misconstrue and support a pre-conceived conclusion of Darwinist evolution.

The Newsweek Journal (3/11/1980) reported on a momentous if not historic conference, consisting of 160 of the world's most distinguished evolutionists, took place in Chicago (USA) during October, 1980. At that meeting a unanimous admission was made to the fact that the previous 120 years of fossil recovery had failed to provide one irrefutable case of an intermediate fossil. In other words, it was conceded that the long held Darwinian belief that evolution had occurred through infinitesimal small changes over immense periods of time was unlikely - to say the least!

Newsweek stated:

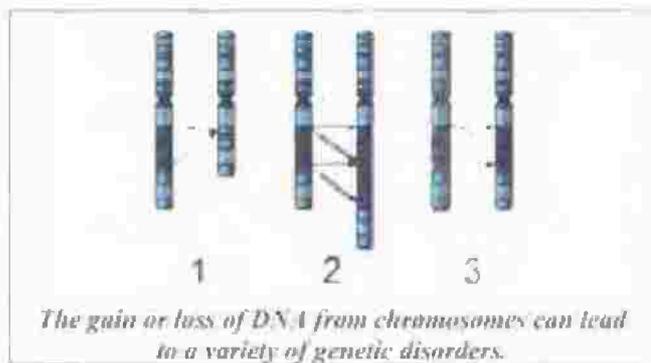
"The missing link between man and apes...is merely the most glamorous of a whole hierarchy of phantom creatures. In the fossil record missing links are the rule... The more scientists have searched for the transitional forms that lie between species, the more they have been frustrated...Evidence from the fossil record now points overwhelmingly away from the classical Darwinism which most Americans were taught in high school; that new species evolve out of existing ones by the gradual accumulation of small changes, each of which helps the organism survive and compete in the environment."

However, rather than renounce evolution, a previous theory (fancifully named 'the hopeful monster' theory) called 'punctuated equilibrium' was quickly evoked. This theory is now accepted by many scientists as the way in which life evolved. Conveniently, *punctuated equilibrium* does not require an intermediate fossil record of transitional creatures. Punctuated equilibrium is essentially a branch of evolutionary theory which proposes that - on occasion - one species will produce, or literally 'give-birth' to a completely different species. For this to happen, the infinitesimally small changes over immense periods of time would have to occur **instantaneously and collectively**, altering not just one particular gene but many (literally, thousands of genes would have to alter in complete synchronization for one species to produce a different species). But these rather peculiar, if not miraculous events, have greater mathematical improbabilities than the Darwinian theory (i.e. small changes over immense time periods). Thus, evolutionary theory without the evidence of a fossil record, moved sideways and was salvaged once again from the imposing threat of outright rejection!

It is abundantly clear that the Evolution Theory has been proposed in 3 consecutive forms: the original Darwinian theory of gradual evolution (of one species into another species, passing through intermediate forms, by means of 'natural selection' under the influence of 'Nature's forces'), was pre-conceived and forced on the scientific circles from the very beginning. But, when the 'Mendelian laws of Inheritance' discredited this original Darwinism, the evolutionists substituted it with the Neo-Darwinian theory through 'modern synthesis of evolution' with genetic mutations over immense periods of time. However, when the fossil records revealed the emergence of organisms suddenly and with their complete structures, and without intermediate transitional forms, the

Neo-Darwinism was discredited once again, forcing evolutionists to switch it with 'Punctuated Interrupted Equilibrium' to explain the emergence of new different species 'instantaneously and collectively' (through gradual, but massive and synchronised genetic mutations over immense periods of time), without the need for transitional forms. All these lame explanations were put forward in order to avoid the more logical, and indeed the scientifically-proven fact of creation of all living organisms, by the Creator.

However, so far as the genetic mutations are concerned (whether such mutations are singular or plural), and medically speaking, the main underlying cause of stillbirth, foetal deformities and mortalities is the gross chromosomal abnormalities, incompatible with life. Congenital abnormalities, such as phocomelia (congenital amputation) can be due to the influence of drug-intake during pregnancy. Even a mutation in one gene by deletion or addition may result in major birth defects and genetic catastrophe.



The 3 major single chromosome mutations: deletion (1), duplication (2) and inversion (3).

Chromosomal aberrations are disruptions in the normal chromosomal content of a cell, and are a major cause of genetic conditions in humans, such as Down syndrome. Abnormal numbers of chromosomes or chromosome sets, aneuploidy, may be lethal or give rise to

genetic disorders.

These are 5 Human examples (just to name few):

- **Cri du chat**, which is caused by the deletion of part of the short arm of chromosome 5. "Cri du chat" means "cry of the cat" in French, and the condition was so-named because affected babies make high-pitched cries that sound like those of a cat. Affected individuals have wide-set eyes, a small head and jaw, and are moderately to severely mentally retarded and very short.
- **Wolf-Hirschhorn syndrome**, which is caused by partial deletion of the short arm of chromosome 4. It is characterized by severe growth retardation and severe to profound mental retardation.
- **Down syndrome**, usually is caused by an extra copy of chromosome 21 (trisomy 21), namely, three copies of chromosome 21. Characteristics include decreased muscle tone, stockier build, asymmetrical skull, slanting eyes and mild to moderate mental retardation.
- **Edwards syndrome**, which is the second-most-common trisomy; Down syndrome is the most common. It is a trisomy of chromosome 18. Symptoms include mental and motor retardation and numerous congenital anomalies causing serious health problems. Ninety percent die in infancy; however, those that live past their first birthday usually are quite healthy thereafter. They have a characteristic clenched hands and overlapping fingers.
- **Klinefelter's syndrome (XXY)**. Men with Klinefelter syndrome are usually sterile, and tend to have longer arms and legs and to be taller than their peers. Boys with the

syndrome are often shy and quiet, and have a higher incidence of speech delay and dyslexia. During puberty, without testosterone treatment, some of them may develop gynaecomastia.

Mutation is nearly always harmful and purposeless.

How can then, multiple mutations (by mere chance!) over millions of years, result in the evolution from the simple to the more complex species?

How old is the Man?

How old is the earth itself?

It is therefore not surprising that numerous authorities wrote books to defy this imposed misconception of Darwin's evolution. The followings are 7 examples (just to name few):

- Michael Denton's **Evolution: A Theory in Crisis (1986)**;
- Philip Johnson's **Darwin on Trial (1991)**;
- Michael Behe's **Darwin's Black Box – The Biochemical Challenge to Evolution (1996)**
- Ha-ou Yahya's **The Evolution Deceit (1999)**;
- Michael Geoffrey Simmons' **Billions of missing links (2007)**.
- Eugene G Windeby's **The End of Darwinism (2009)**
- Benjamin Wiker's **The Darwin Myth (2009)**
- Maurice Bucaille's **'What is the Origin of Man? (1990)** is an excellent book. **Maurice Bucaille (1920-1998)** is a French medical doctor and a member of the French Society of Egyptology. In 1973, Bucaille was appointed family physician to King Faisal of Saudi Arabia. His other patients included members of President Sadat's family in Egypt. In 1976, while still in the service of the king, he published his book: **The Bible, The Qur'an and Science: The Holy Scriptures Examined in the Light of Modern Knowledge** (Translator: Alistair Pannell) which confirmed that the Qur'an contains no statements contradicting established scientific fact. **'What is the Origin of Man? (1990)** was another book. In 1991, Bucaille wrote; **Mummies of the Pharaohs: Modern Medical Investigations, was published in English.**

Malthus himself anticipated the social Darwinists in suggesting that charity could exacerbate social problems. The pseudo-science of social Darwinism was born. Even before Darwin's theory, the Nott's and Gliddon's *'Indigenous races of the earth'* (1857) used the misleading imagery to suggest that "Negroes" had been created to rank between "Greeks" and chimpanzees. Ludwig von Mises in his book *Human Action* defined social Darwinism as *"the individuals or groups achieve advantage over others as the result of genetic or biological superiority"*. Social Darwinism (or Scientific Racism! in reality a pseudo-science) bears Charles Darwin's name, but it is also linked with others, notably Herbert Spencer, Thomas Malthus, and Francis Galton, the founder of eugenics. In the United States, writers and thinkers, such as; Edward L. Youmans, William Graham Sumner, John Fiske, John W. Burgess, and others all developed theories of social evolution as a result of their exposure to the works of Darwin and Spencer. H. G. Wells was heavily influenced by Darwinist thoughts,

and novelist 'Jack London' wrote stories of survival that incorporate his views on social Darwinism.

The first Director-General of UNESCO, evolutionist and humanist Julian Huxley, wrote of *The crowded world* in his *Evolutionary Humanism* (1964), calling for a World population policy. Huxley openly criticised Communist and Roman Catholic attitudes to birth control, population control and overpopulation.

Malthus theory and social Darwinism had therefore influenced both Nazism and Marxism, the "two" ideologies that led to greatest genocides of the 20th century. Indeed, the writings of Karl Marx (*Capital*, 1867) and Friedrich Engels (*Outlines of a Critique of Political Economy*, 1844) though opposed but modified Malthus theory. Engels and Marx argued that what Malthus saw as the problem of the pressure of population on the means of production actually represented the pressure of the means of production on population. But in reality, Marxism replaced the race with the social class (the working proletariat struggle against the capitalists bourgeoisie), and emphasised its desire to remake humanity by coercive means (eugenics or social engineering) and the belief that humanity advances through a struggle in which superior groups (race or classes) triumph over inferior ones. Furthermore, Malthus had major influence on Stalin's purges and the Russian Revolution of 1917 in terms of demographic factors that drive political economy. He also influenced both Karl Marx, Mao Zedong. In fact, the 2 intellectual figures who dominated the whole of 19th century, Malthus and Marx, were and still are systematically opposed. A "clash of prophets" claimed in 1970 the title of an American textbook, which provided what Marx wrote against Malthus.

Finally, the anthropology had a great intellectual impact on the erosion and marginalisation of Christianity, which unfortunately did not rise up to the challenge. Furthermore, Human zoos or ethnographic exhibitions or Negro villages became objects of anthropology and an important means of bolstering "popular racism"; they were so popular from the 1870s until World War II, and the concept survived into the 21st century.

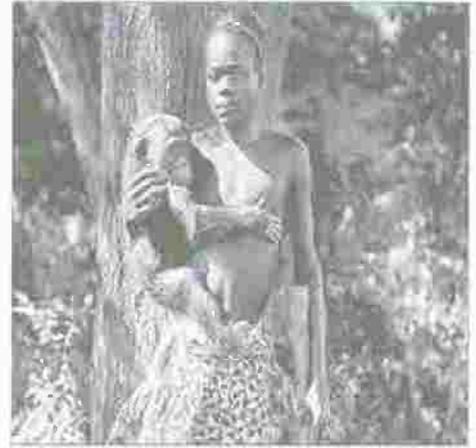
British TV Channel 4's **The Human Zoo: Science's Dirty Secret** documentary aired on Sunday 1st November 2009; in the 19th and early 20th centuries, scientists were so fascinated by race that thousands of 'exotic' and indigenous people were put on display in human zoos. They were not intended as merely entertaining freak shows but also scientific demonstrations of racial difference. Across the western world millions gawped in fascination at these 'uncivilised savages' and would depart convinced of the superiority of the white race. Some of the most spectacular were in Paris, Chicago, Hamburg and London. In 1924, King George V and Queen Mary inspected live exhibits at British Empire Exhibition at Wembley.

As the film reveals, it was only a short step from these human zoos to the horrors of Nazi Germany as pseudo-science that underpinned one, helped legitimise the other.

This documentary explores the phenomenon of human zoos and tells the poignant story of Ota Benga (c. 1883 – March 20, 1916), a Batwa pygmy from the Belgian Congo, who was brought to the United States through a missionary and businessman: Samuel Phillips Verner, who released Benga from slave traders in 1904 from his Belgian capturers who had attacked his village, killing Benga's wife and two children. Ota Benga was first put on display at the 1904 St Louis World's Fair and then the Bronx Zoo (USA) where he was put in an enclosure with a chimpanzee for a companion and labelled as the 'missing link' between apes and

Europeans to promote the concepts of human evolution and scientific racism. Many early anthropologists believed that pygmies, because so different to the white race, represented an earlier stage of man's evolution from the ape. Public outcry eventually led to Benga's removal from the zoo, and he was released into the custody of African American clergy.

Ota Benga would pass through the hands of four of America's leading scientists: the explorer Samuel Phillips Verner, the anthropologist William McGee, the zoologist William Temple Hornaday and Madison Grant - one of America's greatest racists. When the outbreak of World War I made a return to the Congo impossible, Benga became depressed. In 1916, he committed suicide with a stolen revolver.



Ota Benga at the Bronx Zoo in 1906

Grant was a wealthy conservationist and amateur anthropologist who had founded the Bronx Zoo. In 1906, he arranged for Ota Benga to be exhibited at the Zoo; an event designed not as a mere side show but as a means to educate the masses about Scientific Racism.

When Madison Grant died in 1937, it is said that his family burned all of his papers. His remaining legacy is a book - *The Passing of the Great Race*. A bestseller when it was first published in 1916, it promoted the idea that the survival of the white master race - 'the Nordics' as Grant called them - was threatened by the lower races. A believer in eugenics, Grant argued that evolution should not be left to chance. He lobbied for laws banning interracial marriages and limiting immigration. These laws were passed by people softened up by human zoos and now susceptible to Grant's arguments.

Grant's arguments were to find followers all over the world. In 1930, after *The Passing of the Great Race* was translated into German, Grant was bestowed with what he regarded as one of his greatest honours.

Leon Marks, an anthropologist at the University of North Carolina explains: "Grant received a fan letter from an aspiring politician in Germany, which said, your book is my bible, signed Adolf Hitler. Grant's correspondence has disappeared; that letter is not with us anymore. But there is eyewitness testimony that he brandished this letter at, at people to show how great and how influential both he was and how seriously the Germans were taking his ideas, which is something he was proud of."

Three years later, Hitler seized power in Germany and turned his hero's ideas into policy. The Nazis set about using scientific racism as the foundation of the Third Reich taking the ideas that were promoted in human zoos further than anyone else and instituting a systematic elimination of 'inferior' races, in the defence of their own superior, Aryan race.

In 1947, at the Nuremberg War Trials, Nazi doctors named Grant and his book in their defence - arguing that the Third Reich had merely been copying American ideas. In the wake of the Holocaust, mixing race and science became taboo and the ideas of Madison Grant and the early anthropologists were buried.

Anthropologists such as Madison Grant or Alexis Carrel built their pseudo-scientific racism, inspired by Gobineau's *An Essay on the Inequality of the Human Races* (1853-55) believing in the superiority of white European race (intellectual power over others) and that race mixing led to the collapse of civilization. In 1935, Carrel published a best-selling book titled *L'Homme, cet inconnu* (*Man, The Unknown*) which advocated, in part, that mankind could better itself by following the guidance of an elite group of intellectuals, and by implementing a regime of enforced eugenics. Carrel argued that "deviant" human types should be suppressed using techniques similar to those later employed by the Nazis (adult euthanasia). In the 1936 preface to the German edition of his book, Alexis Carrel added praise to the eugenics policies of the Third Reich, writing that: (the German government has taken energetic measures against the propagation of the defective, the mentally diseased, and the criminal).



A caricature of Saartjie Baartman, (the Hottentot Venus)

Another Human zoo specimen Saartjie "Sarah" Baartman (Saartjie, pronounced "Sahr-chey"): born in Eastern Cape, South Africa (1789 – 29 Dec 1815) was exhibited (for her unusual body features) as sidzshow attractions in 19th century Europe under the name Hottentot Venus—"Hottentot" as the then-current name for the Khoikhoi people, (now considered offensive) and "Venus" in reference to the Roman goddess of love. Baartman was a slave of Dutch farmers near Cape Town when the brother of her slave owner, suggested that she travel to England for exhibition, promising her that she would become wealthy. She left for London in 1810. Baartman was exhibited around Britain, forced to entertain people by gyrating her nude buttocks. Her exhibition in London, scant years after the passing of the Slave Trade Act 1807, created a scandal.

She was then sold to a Frenchman, who took her to France, and exhibited her under more pressured conditions for 15 months. French naturalists, among them Georges Cuvier, visited her and she was the subject of several scientific paintings. Once her novelty had worn off on Parisians, she began to drink heavily and was forced into prostitution to support herself. She died earlier than expected on 29 Dec 1815, aged 26, of pneumonia. An autopsy was conducted, and published in 1816 and then republished by French naturalist Georges Cuvier in the *Memoires du Museum d'Histoire Naturelle* in 1817. Cuvier notes in his monograph that Baartman was an intelligent woman who had an excellent memory and spoke Dutch fluently. Her skeleton, preserved genitals and brain were placed on display in Paris' Musée de l'Homme until 1974, when they were removed from public view and stored out of sight; a moulded casting was still shown for the following two years. The case became prominent after Stephen Jay Gould (an American palaeontologist) wrote *The Hottentot Venus* in the 1980s. After the victory of the African National Congress in the South African general election, 1994, President Nelson Mandela formally requested that France return the remains. After much legal wrangling and debates in the French National Assembly, France acceded to the request

on 6 March 2002. Her remains were repatriated to her homeland, on 6 May 2002 and she was finally laid to rest on 9 Aug 2002 over 200 years after her birth.

Even today, and after the election of Barack Obama, the first black President of United States of America in year 2009, racism remained as an important motivation driving many decision-makers in the united nations, heads of European States, leaders of European parties, the media, white judges in the courts, the employers in official and private establishments, the Police, the Army, and even in the scientific examinations, recruitment and decisions about who gets allowances and merit awards, driving such decision-makers (often, if not always) to stand discriminately unfairly and unjustly against the black and coloured subjects, biased secretly or publicly in favour of the white subjects. Cinemas still show movies about fantasy disasters threatening the human race with temporary annihilation and extinction (e.g. following the impact of an incoming comet with the Earth). In their disaster plan, only the white superior (and clever) race is allowed to enter the shelters to be salvaged, so that they will re-populate the earth again (leaving behind, all the coloured and black inferior people to die, unaided)!

Painful Linguistic Legacy of Racist Cast System:

The so-called Scientific Racism had deeply influenced the English and the European (especially Spanish) languages and provided their vocabulary with an array of shameful illegal words, so appalling to the extent that the present Europe tries to consider them *obsolete* and to sweep that particular history (attached to such words) under the carpet, under the legal influence of European Convention on Human Rights (drafted in 1950 and entered into force on 3 September 1953) and British Human Rights Act 1998 that provide the fundamental rights and freedoms, including: the right to life; freedom from torture and degrading treatment; freedom from slavery and forced labour; freedom of thought, conscience and religion, and freedom to express your beliefs; and the right to liberty.

The American Professor Ward Churchill in his book "A Little Matter of Genocide – Holocaust and Denial in the Americas 1492 to the Present" (published by City Lights Books, San Francisco, 1997) explained on pages 107-108, that colonial regimes throughout South and Central America, as well as Mexico and the south-western portion of the present-day United States, settled in to consolidating the **New Order** within their domains in accordance with rigid and often elaborate racial codes. Alexis de Tocqueville quoted: (*This man born in degradation, this stranger brought by slavery into our midst, is hardly recognized as sharing the common features of humanity. His face appears to us hideous, his intelligence limited, and his tastes low; we almost take him to be some intermediary between man and beast*). In a portion of one code, effective in 18th century New Spain, which is illustrative of all such lists compiled in Iberian-occupied America [illustrating the hierarchy of mixtures caste's or **Casta**, starting from the 3 pure original races in America: Caucasian white European, Black African, and Amerindian]:

1. **Spaniard** (Espanol) and **Indian** [Amerindian] beget **Mestizo**
2. **Mestizo** [or Mestiza woman] and **Spanish** (Espanola or Esapanol) beget **Castizo**
3. **Castizo** woman [or man] and **Spaniard** [Espanol or Espanola] beget **Spaniard**
4. **Spanish** woman [or man] and **Negro** [man or woman] beget **Mulatto**
5. **Spaniard** [or woman] and **mulatto** woman [or man] beget **Morisco**

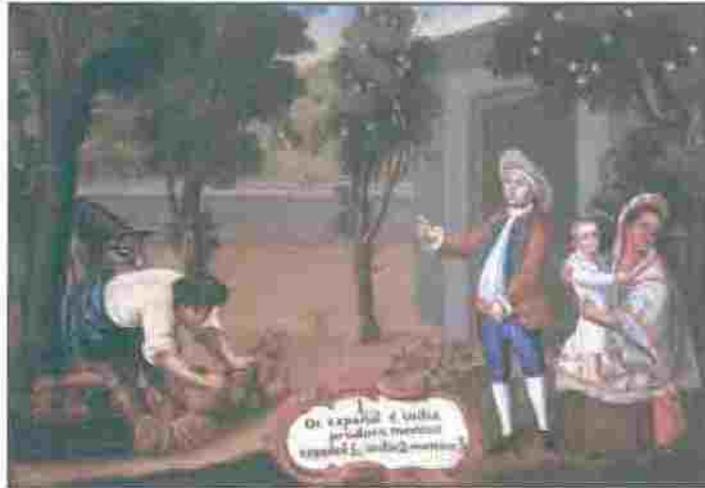
6. **Morisco** woman and **Spaniard** beget **Albino** (or **Chino**)
7. **Spaniard** and **albino** woman beget **Torna atras**
8. **Indian** [Amerindian] and **torna atras** woman beget **Lobo** [Sambo or Zambo]
9. **Lobo** and **Indian** [Amerindian] woman beget **Zambiago**
10. **Zambiago** and **Indian** [Amerindian] woman beget **Cambujo**
11. **Cambujo** and **Mulatto** beget **Albarazado**
12. **Albarazado** and **Mulatto** beget **barcino**
13. **Barcino** and **Mulatto** beget **Coyote** (literally, means North American *wolf*)
14. **Coyote** woman and **Indian**[Amerindian] beget **Chamiso**
15. **Chamiso** woman and **Mestizo** beget **Coyote Mestizo**
16. **Coyote Mestizo** and **Mulatto** woman beget **Ahi te estas**

In colonial Mexico, further complex pattern of social "racial" structure complete this shameful nomenclature (originally from the work of Nicolas Leon, 1924, *Las Castas Mestizaje Del Mexico Colonial o Nueva España*, quoted in M.D. Olien, 1973, *Latin Americans: Contemporary Peoples and Their Cultural Traditions*, pp. 94):

17. **Morisco** man and **Espanola** beget **Chino**.
18. **Chino** man with **Indian** [Amerindian] woman beget **Salta atras**.
19. **Salta atrás** and **Mulatto** woman beget **Lobo** (literally, means wolf from *lupus*).
20. **Lobo** man and **Chino** woman beget **Jibaro** (or **Gibaro**)
21. **Jibaro** man and **Mulata** woman beget **Albarazado**.
22. **Albarazado** man and **Negra** woman beget **Cambujo**.
23. **Cambujo** man and **Indian** woman beget **Sambaigo** (or **Zambiago**).
24. **Sambaigo** man and **Loba** woman beget **Calpamulato**.
25. **Calpamulato** man and **Cambuja** woman beget **Tente en el aire**.
26. **Tente en el aire** man and **Mulata** woman beget **No te entiendo**.
27. **No te entiendo** man and **India** woman beget **Torna atras**.

Indians were placed on the very bottom rung of these hierarchies, and were in many cases defined virtually out of existence. This attitude represents an extreme European obsessive-compulsive behaviour towards the non-Europeans.

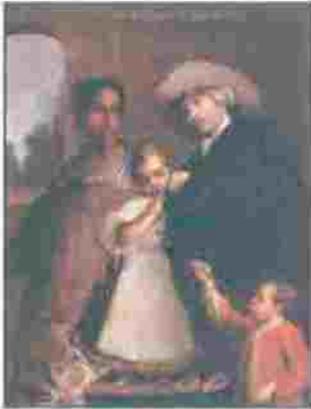
Today, the overt caste systems have been overturned by legislation, but the social prejudices and economic exploitation continue unabated. Even though overt racial oppression is no longer permissible by law, people may still hold personal opinions about members of other races based upon preconceived ideas. In 1976, the *Brazilian Institute of Geography and Statistics* (IBGE) conducted a study to stratify people on racial basis; they ask people to identify their own skin colour, resulting in 134 terms, listed in alphabetical order.



A representation of a Mestizo, in a Pintura de Castas from Mexico during the Spanish colonial period. The painting illustrates "A Spaniard and Amerindian, produce a Mestizo".



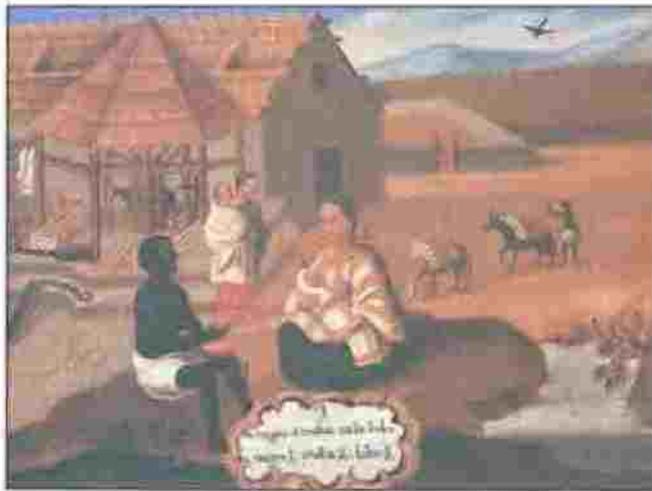
Black man and Spanish woman beget a Mulatto



Spaniard and Mulatto produce Morisco (c. 1763)



Spaniard and Mestiza produce a Castiza



The painting illustrates: Black and Amerindian produce a Lobo, here a synonym for Zambo. A representation of an infant Zambo, in an 18th-century "Pintura de Castas" from New Spain.



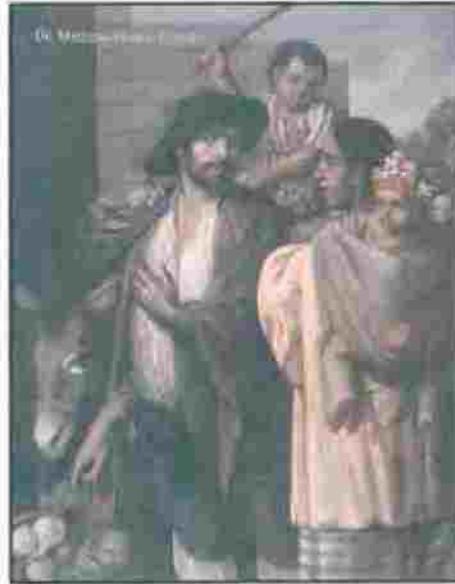
Mestizo and Amerindian produce Cholo



Amerindian and Mulatto produce Chino



*Black man and mulatto woman (mulata or mulatta) also produce Samba (zambo)
[Incan school, 1770]*



Mestizo and Amerindian begot Coyote



*Mestizo, Mestiza, Mestizo Sample of a Peruvian casta painting,
showing intermarriage within a casta category.*

[See also online: Yasmin Ramirez, "New World Orders: Casta Painting and Colonial Latin America at the Americas Society" *artnet Magazine* (December 2, 1996)].

Other *obsolete* names for those born to mixed marriages include:

Furthermore, *Terceron*, *cuarteron* (*quadroon*), and *quinteron* (*quintroon*) are self-explanatory. Peruvian Spanish still retains the terms *cholo* (mixed Mestizo and Amerindian ancestry) and *chino*. But who nowadays remembers the significance of such names as *castizo*, *morisco*, *lobo*, *jibaro*, *albarazado*, *cambujo*, *barcino*, *puchel*, *coyote*, *chamiso*, *galfarro*, *genizaro*, *grifo*, *jarocho*, and *sambago*, or the more picturesque *salta atras*, *tente en aire*, *no te entiendo*, *ahí estes*, and so forth?

In summary, **Miscegenation** (Latin *miscere* "to mix" or Arabic *mazj* "mixing" + *genus* "race" Arabic *riss*) is a term used by Europeans, and become global through European colonization since the Age of Discovery. Historically, the term was used in the context of laws banning interracial marriage and sex in USA, so-called anti-miscegenation laws. It is therefore a potentially offensive word. Miscegenation refers to mixing of different racial groups through marriage, cohabitation, sexual relations, and procreation. Broadly speaking, it involves 3 groups of offspring:

1. Spanish and Amerindians (such as Mestizos and Castizos)
2. Spanish and Africans (Mulattos and Moriscos)
3. Amerindians and Africans (Zambos, Lobos, and Koyots)

Compare and contrast European history with Islamic history. In European colonization of the New World, converting the native Americans to Christianity had never provided them with equal status; in fact, colonial degrading caste system and European cruelty (treating non-Europeans as sub-human and occasionally calling them by animal names, e.g. *lobes* and *coyotes*, meaning wolves) had resulted in revolts led by Europeans' own offspring (from miscegenation with Amerindians and/or Africans) against the Europeans themselves! In Islamic history however, many great Muslim leaders and Caliphs were the sons of slave non-Arab mothers; non-Arabs and non-Muslim slaves were treated so well according to the strict Islamic code of moral values, that many were freed for the sake of Allah. Slaves converted to Islam were either freed to be married as lawful wives and husbands, or were set free as their equal brothers and sisters in Islam, assuming the same human positions and the same duties and rights of other Muslim Arabs.

Mestizo is a colonial Spanish and Portuguese (**Mestiço**) term used in the Spanish Empire and Portuguese Empire in Latin America to refer to people of mixed European and Amerindian ancestry.

Mestizo people comprise much of the population of Latin America.

The word *mestizo* originated from the Latin word *mixticius*, meaning mixed, and from Arabic *mazeej* or *mazeju*, mixed derived from the verb *mazaja*, to mix. In the Portuguese and French languages, the words *caboclo* (or *caboco*, from Tupi *kaa'hoc*, 'who came from forest') and *métis* (in French Canada) were also used in their Empires to identify individuals of mixed European and native ancestry. According to historians Michael C. Meyer and William L. Sherman, early in the 16th century Spanish colonial usage of the term *mestizo* "was almost synonymous with *bastard*" (illegitimate child). Under the *Casta* system of Spanish America

and Spain, the term *mestizo* originally applied to the children resulting from the union of one European and one Amerindian parent or the children of two mestizo parents. During this era, a myriad of other terms including *castizo* (three-quarters European and one-quarter Amerindian), *cuarteron de indio*, and *cholo* (one-quarter European and three-quarters Amerindian), were in use to denote other individuals of European-Amerindian ancestry in ratios smaller or greater than the 50:50 of *mestizos*. They are used mostly with a negative connotation.

The *mulata* (from Arabic *moulladah*, the feminine of *mulatto* - from Arabic *moullad* or *moullad*) began as a product of Spanish imperialism and slavery on Cuba's tobacco and sugar plantations. She is the product of socioeconomic inequality and the sometimes violent exploitation of black women by white men. Mulata assumed another denigrating meaning by the Europeans: it was sexualized by white men in the 19th century, vilified as a "loose woman," and then used as a tourist attraction for European and North American men (possessed by sex) in the 20th century. The mulata is treated similarly throughout the Caribbean and Latin America, including in Brazil. In Cuba, as in Brazil, mulata became a national icon and symbol of Cuba's racial, economic, and gender hierarchies.

Sambo (or **zambo**) is a racial term for a person with mixed Amerindian and African heritage in the Caribbean, and can also be used less specifically for a black person in the USA and in the UK. It is considered a racial slur. The word "*sambo*" probably came into English from Latin American Spanish word *zambo*, which in turn may have come from one of three African language sources. Webster's (Third International Dictionary) holds that it may have come from the Kongo word *nzambu* (*monkey*). Another source holds that it is a Foulah word meaning "uncle" or a Hausa word for "second son". Yet The Royal Spanish Academy gives the origin from a Latin word which in modern Spanish means "bow-legged". *Zambo* is a Spanish term (the Portuguese term is *cafuzo*) used in Spanish Empire and today to identify individuals in the Americas who are of mixed African and Amerindian ancestry (the analogous English term, considered a slur, is *sambo*). The feminine word is *Zamba* (not to be confused with the Afro-Brazilian Samba folk dance or Samba music, or with Argentine Zamba folk dance).

The first *zambos* were initially the offspring of slaves who escaped from plantations (because of cruel treatment) and from shipwrecks (during slaves trafficking in ships, where slaves were packed like tins of sardine fish), and ventured into various Central American, South American, and Caribbean jungles seeking refuge. They joined remote Amerindian communities to hide and escape capture by colonial authorities.

An example is on the island of **Hispaniola** (the present day Haiti and the Dominican Republic), where some escaped slaves encountered the few remaining *Tainos*. Racial mixing occurred and today Afro-Amerindians make up a small percentage of the populations of both Haiti and the Dominican Republic. The Amerindians - sometimes under threat from encroaching European colonizers - were sympathetic to the plight of the fleeing slaves and welcomed them into their communities, offered them food and sanctuary and, in many cases, their daughters as wives. The African ancestry of the *Garifuna* is usually attributed to escaping shipwrecked slaves. The *zambos* of north-western South America, the *lobos* of Mexico, and most other *zambos* were generally believed to have been descendants of escaped plantation slaves.

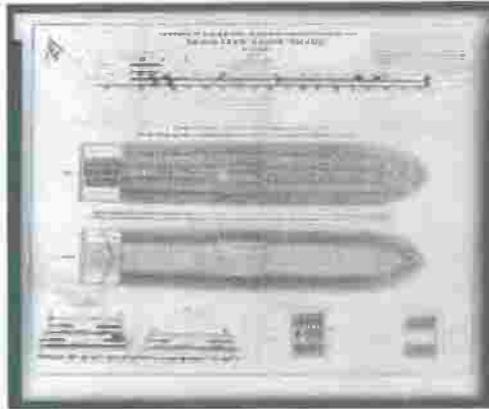
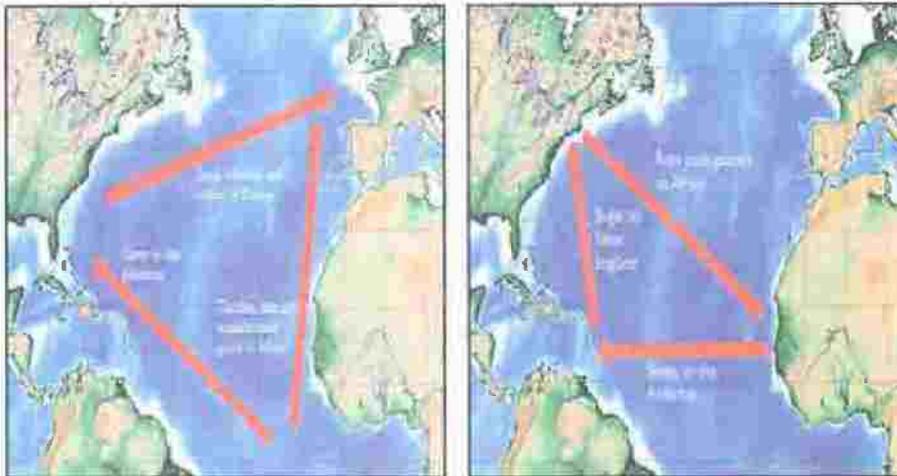


Diagram illustrating the stowage of African slaves on a British slave ship (like tins of sardine fish)



triangular Trade of slaves, sugar, and rum with Europe or New England as the third corner



As in the USA during slavery, Latin American history had instances of Africans and Amerindians' joining together and forming *free renegade* encampments to fight European colonizers and slaveholders. In Latin America, these primarily African settlements of runaways or maroons, were called *quilombos* (during the time of slave trafficking, natives in central Angola warriors and marauders (called Imbangala), created an institution called *kilombe* that united various tribes of diverse lineage into a community designed for military resistance during that time of upheaval, probably from Arabic *kilmah*, meaning one united motto). The most famous of all *quilombos* is the legendary Palmares in Brazil (Brazilian *quilombolas* women wear Muslim head covers). At its height, it was believed to have a population of over 30,000.

Officially, **zambos** represent small minorities in the north-western South American countries of Colombia, Venezuela, and Ecuador. The communities that exist in Brazil, mainly along the north-western region of the country, are known as *Cafuzos*.

In Honduras, they are known as *garifunas*. While zambos can also be found in other Caribbean and Central America countries, such as the Dominican Republic, Belize, and Nicaragua, their history and origins are not linked to that of the garifuna.

In Mexico, where they were known as *lobos* (literally meaning wolf), they formed a sizeable minority in the past. The great majority of lobos have now been absorbed into the much larger Mexican *Mestizo* population.



Jbaro are the mountain dwelling peasants or forest people, derived from the word *Jibaro* meaning "hill" (Arabic *Jibalo*, mountains) commonly used in Puerto Rico; it is related to the word *Jivaro*.

Jarocho is a person of music from Veracruz, Mexico. One explanation of the origin of the term jarocho is that it evolved from an old Spanish word meaning *brusque or disordered*. It represents a fusion of indigenous (primarily *Huastecan*), Spanish, and African musical elements, reflecting the population which evolved in the region from Spanish colonial times.

Genizaros and Pueblo:

Genizaros and their descendants were indigenous Indian people used as slaves and house servants, shepherders in Spanish, Mexican, and American households in the Southwest, well into the 1880s. By the late 1700s, Genizaros and their descendants, often referred to as "**Coyotes**" (literally, meaning North American *wolf*), comprised nearly one-third of the entire population of New Mexico.

The term "genizaro" derived from the word "Janissary", which was used to describe the slave; trained to be soldiers, treated well and then incorporated as citizens within the Ottoman Empire. However, in the case of **Genizaros**, many of them were captives who complained of mistreatment by their European masters and were thus freed and allowed to settle land grants on the periphery of the Spanish Settlements. In this way they served as a buffer communities for the protection of the Spanish towns from attack by enemy tribes.

Pueblo is a term used to describe modern (and ancient) communities of Native Americans in the South-western USA. The first Spanish Explorers of the Southwest used this term to describe communities that consisted of apartment-like structures made from stone, adobe mud, and other local material. Economic and social conditions under Mexico were so bad, that in 1837 Genizaros, along with Pueblo Indians and others revolted against the Mexican Government, cut off the head of Albino Perez (the Mexican Governor), and killed all of the Mexican troops in Santa Fe.



They formed a new government and elected José Angel **González**, a Genízaro of Taos Pueblo and Pawnee ancestry, as governor. The revolt was often referred to as the '**Chimayoso Revolt**' after the infamous community of **Chimayó**, in Northern New Mexico, which was home to **González**, and many other mixed-blood Indians.

This was one of many revolts against the Mexican government by indigenous peoples during this period, including the Mayan Revolt in the Yucatán

Rejection of Islam to Darwinism and Social Darwinism (Scientific Racism!):

It is the misrepresented Christianity that clashed with the true science through the Catholic Church Inquisition Tribunals that tortured and killed scientists (such as Galileo) and provoked scientists (as a result of a reaction) into rejection of Church's authority and violent practices, and to separate the Church from politics and life compartmentalising it to the personal affairs only (i.e. it was a wrong that led to another wrong; and the two wrongs doesn't make it right). Thus scientists started in fabricating false theories and dialectical philosophies for the sake of challenging Christianity as a religion and through it symbolising to any religion (mistakenly thinking that Islam – which is the only true religion and comprehensive code of life- does not principally differ from their deviated corrupted Christianity).

It is astounding that an evolutionist like Dr Richard Dawkins can describe the 'natural selection' as the omnipotent creator of all creatures in this universe (Dawkin's book: *The Blind Watchmaker*). According to him, Natural selection is the blind watchmaker, blind because it does not see ahead, does not plan consequences, has no purpose in view. Yet the living results of natural selection overwhelmingly impress us with the appearance of designs if by a master watchmaker. impress us with the illusion of design and planning. Dawkin defies God Intelligent Design, calling instead Good Design (replacing God with 'Good'). According to him, the nature can think, select, design, and create; all are the attributes of God (just but by name); his hypersensitivity to use the name of God, and replacing Him with that of 'nature' *can only* explained by his bitter experience with the Christian Church practices in History. Indeed, Dr Richard Dawkins' *The God Delusion* (by Bantam Press, London, 2007, page 37) says: **(For most of my purposes...unless otherwise stated, I shall have Christianity mostly in mind, but only because it is the version with which I happen to be most familiar).**

Conversely, it is the Roman Catholics and Catholicism (among all other religions) who felt the brunt of such an attack, as one can see in Scott Hahn and Benjamin Wiker's *Answering the new Atheism – Dismantling Dawkins' Case Against God* (published by Emmaus Road Publishing, Ohio, USA, 2008, page 8) who say: **(On his part, Dawkins states that his case against religion is mainly a case against Christianity, and we will assume this as well).**

As for Islam, which is beyond the reach of Dawkin and others, it is a code of modesty between the 2 extremes of Church practices and modern Science Fanaticism, because Islam is the only true religion of God that was protected from human manipulation (protected by God himself). It is the Islamic World which had adopted the full spectrum of scientists; many of the linguistics, Islamic scholars and judges were themselves physicians, architects, and scientists of sociology, zoology and botany (like Averroes, the Andalusian judge and physician; Ibn Khaldun, the judge, historian and

sociologist; and Al-Jahiz -or al-Jahidh-, the linguistic and zoologist), and all start their books by the name of Allah then praising Allah then asking Allah's pleasure with Prophet Muhammad, the Messenger of Allah, then they start quoting excerpts from Qur'an and Prophetic Sunnah (Tradition) to consolidate their scientific writings. The Islamic World never knew the dichotomy of religion and science, or that science conflicted with religion; this schism started originally in the West after Roman Catholic Inquisition Tribunals in medieval dark Europe, which Islam had enlightened, because Islam is the religion of faith and science. Islam had never ever conflicted with biological sciences, on the contrary, Qur'an itself was always the source of scientific inspirations (Read Qur'an Miracles in Chapter Three).

Islam put 5 broad principles in the lucid and beautiful Arabic language of Qur'an:

1. All mankind is from Adam (Independent Human monogenesis)

After the convoluted journey of Social Darwinism with its most dangerous path in the history of Mankind, Islam stands high and rejects Pseudo-Scientific racism in any shape or form. Man is the man wherever he is; all mankind is Allah's creation; He (Allah) created them from two parents who had procreated and populated the Earth and became different nations and tribes, after acclimatising to different environments, adapted to different life-styles, and accustomed to different languages; they became different, only to be re-introduced and know each other. They must be distinguished according to their character, ideology, and qualities of culture, (these are things that they can control themselves); they should not be classified according to their inborn characteristics, such as colour, shape, figure, look, and height (which are things that they cannot control themselves).

Allah Most High says:

"O mankind! We have created you from a male and a female, and made you into nations and tribes, that you may know one another; verily, the most honourable of you with God (Allah) is the believer who is most pious; verily, God (Allah) is All-Knowing, Well-Acquainted (with all things)".

Verse 49:13 of Surat Al-Hujurat (The Dwellings).

On the authority of Jabir that Prophet Muhammad said in the 'Final Sermon' [shortly before his death, addressing the 120,000 attendant followers]:

"O People, Your God is One, and Your Father is One; There is no superiority for an Arab over a non-Arab, or for a non-Arab over an Arab; also there is no superiority for a white (Red) over black, nor for a black over white, except by piety (and good action)".

Narrated by Imam Baihaqi (4/289), Imam Ahmad (23489), Albani's considered it Sahih (correct Hadith).

in another Hadith:

"All people are the children of Adam, and Adam is [originally] from dust".

Narrated by Imam, Abu Dawod and Tirmithi and Baihaqi.

in Muslim prayers, there is a practical application daily for the equality of all people standing before Allah, irrespective of their colour and race (black or white: Arab or non-

Arab). In the Pilgrimage too, there is a unique international application of equality between various races of Mankind, where millions of pilgrims came in their life-journey to gather in one place, wearing one white dress, in order to perform pilgrimage. Western Muslim converts who attended pilgrimage (e.g. Malcolm X, the black leader), returned home amazed by what they had witnessed of absolute equality between various races of Adam children; they then became passionate preachers for Islam, because Islam, among all religions, philosophies, and civilizations, is the only one to implement equality between the all members of Mankind in the World of Reality, and for the first time in History.

2. Undermining the basis of Racism

Also Islam undermines all the foundations and causes of the racial differences, based on Man's colour, look, shape, figure, and mood; life is colours, and variety is the spice of life as they say:

On the authority of Abu Musa, the Prophet peace upon him, said: "Allah has created Adam from a handful He got from all components of Earth, thus children of Adam came according to that Earth component, among them came the Red, the white, the black, and the intermediate; and the good and the bad and intermediate".

Narrated by Imam Ahmad, Abu Dawod, and Tirmithi Tirmithi said: it is Hasan Sahih (correct good Hadith).

This Hadith is closely related to the statement by Allah in the Qur'an about the role of water for life and about the relationship between the colours of mountains of the Earth, and the colours of humans, fruits, insects (and beasts), and animals:

(See you not that Allah sends down rainwater from the sky? and We produce therewith fruits of various colours, and among the mountains are tracts white and red, of varying colours and black intense in hue. And likewise of men and beasts [including moving living creatures and insects], and cattle, are of various colours. It is only those who have knowledge among His servants that truly fear Allah. Verily, Allah is Exalted in Might, Oft-Forgiving).

Verse 35:27-28 of Surat Fatir (The Originator of Creation).

Islam refers to the fact that Mankind with its various races and colours, is one Human race coming from one offspring: Adam and Eve; Allah repeatedly refers to human Mankind as "Adam's Children" (to confirm the unity of Mankind) and asked them to be the witnesses for his Lordship. Allah Most High says:

(And (remember) when your Lord brought forth from the Children of Adam, from their loins, their seeds (or descendants), and made them testify as to themselves, (saying): "Am I not your Lord (Who cherishes and sustains you)?" They said: "Yes. We testify!" (This), lest you should say on the Day of Judgement; "verily, we have been unaware of this").

Verse 7: 172 of Surat Al-A'raf (or The Heights).

Abu Huraira reported that Allah's Messenger (peace be upon him) had said: "Verily Allah does not look to your bodies nor to your faces (appearances), and to your wealth, but He looks to your hearts and to your deeds".

Narrated by Sahih Muslim Number 2564.

Furthermore, Islam considered a big sin to look down at the members of other different races of the human Mankind:

It is narrated on the authority of Abdullah bin Mas'ud that Allah's Messenger (Peace be upon him) said: "Whosoever has pride in his heart equal to the weight of an atom (or a small ant) shall not enter Paradise. A person (amongst the audience) said: 'Verily, a person loves that his dress should be beautiful, and his shoes should be beautiful'. He (the Holy Prophet) remarked: "Verily, Allah is the Most Beautiful and He loves Beauty. Pride is to completely disregard the truth (out of self-conceit) and contempt for (to scorn or look down upon) the people".

Narrated by Sahih Muslim Number 91.

Pride is the offspring of self-conceit, and this is the very negation of faith. Pride and faith cannot thus go together. It inoculates in man the spirit of humility and submission to Truth. Pride is the expression of vanity which is one of the greatest hurdles into the path of truth. The self-conceited man accepts nothing which does not satisfy his vanity and, therefore, he cannot be a true believer. He is a worshipper of his own self.

3. Honouring Children of Adam (whole Mankind) with its different races

Allah Most High said in respect of Mankind in its various spectra, races, colours, and shapes:

(We have honoured the sons of Adam; provided them with transport on land and sea; given them for sustenance things good and pure; and conferred on them special favours, above a great part of Our Creation).

Surat Al-Isra' (The Journey) 17:70.

Hence, among Prophet Muhammad's companions were: Abu Bakr, the white; Bilal, the black Abyssinian, who was a slave and became a master in Islam (he is also the Prophet's personal Muezzin); Suhail, the red Roman who was one of the great Muhajirs (the emigrants from Makkah to Medina); and Salman, the brunet Persian (For more, read Chapter Three).

Furthermore, the respect of Islam for the humanity of the Man, whoever he is, and irrespective of his creed, culture and religion, established a milestone in unique religious tolerance for the first in the whole history; It is quoted that:

The Prophet (peace be upon him) stood one day for a (passing) funeral,

He was told: *O' Messenger of Allah, it is Jewish funeral!*

He (the Prophet) replied: "Is it not a human?!"

Narrated by both Bukhari (1312) and Muslim under Funeral sections.

Also Islam prohibits its Muslim followers (within Islamic nation, formed of various colours and racial backgrounds) from derision and mockery of each others; Allah Most High says:

"O you who believe! Let not a group scoff (laugh) at another group, it may be that the latter are better than the former. Nor let some women scoff at other women, it may be that the latter are better than the former. Nor defame one another, nor insult one another by (offensive) nicknames. How bad is it to insult one's brother after having

Faith [i.e. to call your Muslim brother (a faithful believer) as: 'O sinner', or 'O wicked']. And whoever does not repent, then such are indeed Zalimun (wrong-doers)".

Verse 49:11 of Surat Al-Hujurat (The Dwellings).

Abu Huraira reported that Allah's Messenger (peace be upon him) had said:

"Don't nurse malice against each other, don't nurse aversion against one another, also don't be inquisitive about one another, and don't outbid one another (by praising the good) and be fellow-brothers and servants of Allah".

Narrated by Sahih Muslim Number 256 r.

On the authority of A'mash with the same chain of transmitters (and the words are)

"Don't sever relations of kinship, don't bear enmity against one another, also bear aversion against one another, and don't feel envy against the other. Live as fellow-brothers as Allah has commanded you".

Narrated by Sahih Muslim Number 256 r.

4. Facts of Creation and Evolution in Islam

It is so regrettable that it was the theories of western clergymen (such as Robert Malthus, Friedrich Hegel, Samuel Morton, and Louis Agassiz) that provided the background and inspiration for Charles Darwin and Ernest Haeckel to put their theories of evolution, which in turn provided the background on basis of which, both the scientific racism (propounded by Herbert Spencer, Francis Galton, Madison Grant, and Adolf Hitler), and Dialectical Materialism (propounded by Karl Marx, Stalin, and Mao Zedong) who proposed that 'the religion is the opium of people' and denied the presence of God and spread the atheism. On basis of these theories, came the Nazis and Communism to convert the whole Mankind into experimental laboratory animals, and to end in millions of victims; and all this was based on human assumptions (guess) and on future unknown conjectures.

In fact, Harun Yahya's 'The Evolution Deceit' (by Ta-Ha Publishers Ltd. London 3rd edition 2000, page 1) documented that Karl Marx made it clear that Darwin's theory provided a solid ground for materialism and thus also for communism. He also showed his sympathy to Darwin by dedicating *Das Kapital*, his greatest work, to him. In German edition of the book, he wrote: "From a devoted admirer to Charles Darwin".

Thereafter, the atheists, who supported evolution and dialectical materialism, started to hijack the terms of creation and creatures (nature), and to change the concept of evolution (emptying it from its original meaning) and finally to relate everything to themselves, and presenting them in their conjectural theories which made as False Science, with the most serious consequences on the Humanity. Allah The Most High says:

(And pursue not that of which you have no knowledge; for surely the hearing, the sight, and the heart, All of those shall be questioned of (by Allah)).

Verse 17: 36 of Surat Al-Isra' (The Journey).

(But they have no knowledge thereof, they follow but a guess, and verily, guess is no substitute for the truth).

Verse 53: 28 of Surat An-Najm (The Star).

(And of knowledge, you (mankind) have been given only a little).

Verse 17: 85 of Surat Al-Isra' (The Journey).

Allah states that true knowledge, particularly the science of the future and the unknown, is possessed by Allah alone:

(Say (O Muhammad): "The knowledge of the time, it is with Allah alone", and I am only a plain warner).

Verse 67: 26 of Surat Al-Mulk (Dominion).

Allah also reveals the grave error of those atheists, stating that their knowledge is nothing but conjecture and false science:

(And they say: "What is there but our life in this world? we shall die and we live and nothing but time (Ad-Dahr) can destroy us", but of that they have no knowledge: they merely conjecture)...

(Say: "It is Allah Who gives you life, then gives you death; then He will gather you together for the Day of Judgement about which there is no doubt": but most men do not know).

Verse 45:24-26 of Surat Al-Jathiyah (The kneeling).

Islam is the eternal religion of Allah, and Qur'an is the word of Allah, thus it is decisively Final in knowledge and indication; In Islam one finds comfort and safe shelter, and moderation of vision, but before or after that, it is the only and absolute truth with no falsehood can approach it from before or behind it (without any corruption). The repercussions of the evolution theory does not lie in the biological evolution only, but in the notion of evolution, expanding its meaning to involve other unrelated fields, e.g. Hegel's historical evolution, Spencer's social evolution, and Hitler's racial evolution, and evolution of population struggle for resources by Malthus and Marx, so much so that 'evolution' became a common academic motto: 'Truth is Change'.

Thus, everything is variable and nothing is constant; accordingly, there are no constant believes, values, nor morals, because everything evolve; and what was good yesterday may become bad today and vice versa. This what Islam rejects, because Islamic believes and principle values and morals are all constant major issues; only the non-essentials minor issues are variable, such as dress, architect, and technologies.

The concept of God and the Oneness of Allah is the chief principle of all principles in Islam:

(Such is Allah, your Lord in truth, So after the truth, what else can there be, save error? How then are you turned away?).

Verse 10: 32 of Surat Yunus (Jonah).

That is because Allah, He is the Truth, and that which they invoke besides Him is Al-Batil (Falsehood), and that Allah, He is the Most High, the Most Great).

Verse 31: 30 of Surat Luqman.

And that Qur'an is the true word of Allah, the true deity:

(it is an honourable well fortified respected book(because it is Allah's Speech, and He has protected it from corruption. Falsehood cannot come to it from before it or behind it: (it is) sent down by the All-Wise, Worthy of all praise (Allah)).

Verse 41:41-42 of Surat Fussilat (They are explained in detail).

Encouragement to Reflect on the Creation:

Allah says: (See they not how Allah originates the creation, then repeats it. Verily, that is easy for Allah. Say: "Travel in the land and see how (Allah) originated the creation, and then Allah will bring forth the creation of the Hereafter (i.e. resurrection after death). Verily, Allah is Able to do all things").

Verse 29: 19-20 of Surat Al-Ankabut (The Spider).

(And on the earth are signs for those who have Faith with certainty. And also in your own selves. Will you not then see?).

Verse 51:20-21 of Surat Adh-Dhariyat (The Winds that Scatters).

(We will show them Our Signs in the Universe, and in their own selves, until it become manifest to them that this is the truth. Is it not sufficient in regard to your Lord that He is a Witness over all things?).

Verse 41:53 of Surat Fussilat (They are explained in detail).

This is an order to us to look into the beginnings of creation, and into the earth, and into the construction of the human being; and that there is no objection whatsoever in Islam (or in Qur'an) for research and reflection on the creation. Therefore, Islam encourages the study of cosmology and astronomy, and the study of fossils, as well as the study of Earth and its strata.

But we did not witness the beginning of creation, because it is unknown to us, and we do not know how this universe was created? (I (Allah) made them not to witness the creation of heavens and the earth and not (even) their own creation, nor was I (Allah) to take the misleaders as helpers).

Verse 18:51 of Surat Al-Kahf (The Cave).

But we know it from Qur'an: the word of the Creator who witnessed it.

(Say (O Muhammad): "The knowledge of the time, it is with Allah alone", and I am only a plain warner).

Verse 67: 26 of Surat Al-Mulk (Dominion).

Creation and Evolution of Universe:

Allah says: (Allah it is He Who has created the heavens and the earth, and all that is between them in six days).

Verse 32:4 of Surat As-Sajdah (The Prostration).

But six days are not like our solar days with 24 hours per day, since our days are according to earth revolution around the sun (solar day). But in the beginning of creation, there was no sun and no moon (which were created afterwards). The day here means: the day when a major event occurs such as Arab Days in pre-Islamic Jahiliyah era, when they used to call Day of Basoos, meaning the war of Basoos which lasted 40 years, and yet Arabs called it

'Day'. Hence the six days during which this universe was created, are not solar days but universal days.

(and verily, a day with your Lord is as a thousand years of what you reckon).

Verse 22:47 of Surat Al-Hajj (The Pilgrimage).

These days are therefore phases or era which may reach millions of years, Allah knows best.

Allah talks about the **Evolution of this Universe**, stating that at the very beginning to of the creation, this universe was one mass, which was then split open by explosion, separating its components from each other. In cosmology, Lemaitre's **'Big Bang' theory of the origin of the Universe** has been accepted. The Belgian Georges Lemaitre published his theory in *Nature* (Lemaitre: *The Beginning of the World from the Point of View of Quantum Theory*, *Nature*" 127 (1931), n. 3210, pp. 706). Lemaitre also described his theory as *"the Cosmic Egg exploding at the moment of the creation"*; he proposed that the **Universe has expanded from a an initial point, namely from primordial hot and dense initial condition at some finite time in the past** (best available measurements in 2009 suggest that it occurred around **13.3 to 13.9 billion years ago**), and continues to expand to this day. Indeed, the distance between galaxy clusters is increasing today (everything must have been closer together in the past). This is a proof that the Universe is neither pre-eternal nor post-eternal.

However, Qur'an precedes this discovery by 14 centuries; Allah states that the universe was created then evolved by expansion, into its current status; it also states that water is the origin of all living creatures:

(With power did We construct the heaven. Verily, We are Able to expand the vastness of space (thereof)).

Verse 51:47 of Surat Adh-Dhariyat (The Winds that Scatter).

(Do not the unbelievers see that the heavens and the earth were joined together (as one unit of creation), before We clove them asunder? We made from water every living thing. Will they not then believe?).

Verse 21:30 of Surat Al-Anbiyaa (The Prophets).

Indeed, about 72% of the surface of our Globe is still covered with water, the constitution of protoplasm is about 80-85% water. The original basis of living matter is liquid or semi-liquid and in a state of constant flux and instability, it is the fact that land animals, high vertebrates, including man, show, that in their embryological stage swim like fishes in the watery liquid inside the uterus.

Creation of Man:

Allah then states that Man was created as such, from the very beginning:

(He Who created all things in the best way, and He began the creation of man from clay).

Verse 32:7 of Surat As-Sajdah (The Prostration).

(Among His Signs is this, that He created you from dust; and then, behold, ye are mer scattered (far and wide)!)

Verse 30:20 of Surat Ar-Rum (The Romans).

(Behold, thy Lord said to the angels: "I will create a vicegerent on earth."....And He taught Adam the names of all things....).

Verse 2:30-31 of Surat Al-Baqarah (The Cow).

(It is He Who had produced you from a single soul; then there is a resting place and a repository: We detail Our signs for people who understand).

Verse 6:98 of Surat Al-An'am (The Cattle).

(Behold, thy Lord said to the angels: "I am about to create man from clay". "When I have fashioned him and breathed into him of My spirit, fall ye down in prostration unto him").

Verse 38:71-72 of Surat Sad (being one of the Abbreviated letters).

Thus the clay or the dust represents the material physical element of Man, plus another element: the spirit that Allah says: "When I have fashioned him and breathed into him of My spirit".

Allah thereafter, affirms the fact of Creation in Pairs:

(O mankind! Fear your Guardian Lord, who created you from a single person, created out of it, his mate, and from them twain scattered (like seeds) countless men and women).

Verse 4:1 of Surat An-Nisaa (The Women).

It appears from such verses of Qur'an that Allah has created from clay and breathed into him His spirit; He then created Eve: there two schools of interpretation here. There are scholars who think Eve was created from Adam's rib and that is also present in the Genesis of Torah. However, there is another school who thinks that Eve was created from Adam's -like (i.e. same species and construction) indicating that the Arabic word 'out of it' does not mean: part of it, but means: of Adam's like (same species) as seen in Allah's sayings '*from among yourself*' and '*of your nature*':

(And among His Signs is this, that He created for you mates from among yourselves, that you may dwell in tranquillity with them, and He has put love and mercy between your (hearts); verily in that are signs for those who reflect).

Verse 30:21 of Surat Ar-Rum (The Romans).

(And Allah has made for you mates of your own nature, and made for you, out of them, sons and daughters and grandchildren, and provided for you sustenance of the best: will they then believe in vain things, and be ungrateful for Allah's favours?).

Verse 16:72 of Surat An-Nahl (The Bee).

Thus Eve was created from the same nature of Adam, in order that he will love her and she will love him, since both are of the same kind.

Furthermore, Allah confirms the creation of everything in pairs, from the start: male and female, whether they are animals or plants. And this is a fascinating Qur'anic scientific discovery that plants are sexually paired (into male and female), just like animals (Qur'an reference to plant sexual pairing came 14 centuries earlier): Allah Most High says:

(And has sent down water from the sky, with it We have produced diverse pairs of plants, each separate from the other).

Verse 20:53 of Surat Ta-Ha.

(Glory to Allah, Who created in pairs all things that the earth produces, as well as their own (human) kind and (other) things of which they have no knowledge).

Verse 36:36 of Surat Ya-sin (being Abbreviated Letters).

However, this paired principle of creation extends beyond humans, animals, and plants to include absolutely all creatures: from night and day, light and darkness, forces of gravity and repulsion, even the atom has positive and negative particles. In the spiritual and emotional world too we see the paired principle: good and bad, love and hate, rest and work, justice and mercy; thus Allah says:

(And of everything We have created pairs: that ye may reflect).

Verse 51:49 of Surat Adh-Dhariyat (The Winds that Scatters).

But Allah also states that He is The Absolute Creator of everything in this universe, and that He is the Only One Unique in characters and differs from all His creatures, He is thus excluded from this paired principle and from procreation and children; None look like Him and He does not look like any of His creatures. Hence, He is The Only One worthy of worship:

(He is the Wonderful Originator of the heavens and the earth. How can He have a son when He has no consort (wife)? He created all things and He is the All-Knower of everything. That is Allah, your Lord! There is no god but He, the Creator of all things. So worship Him (Alone), and He is the Trustee having power to dispose of all affairs).

Verse 6:101-102 of Surat Al-Anam (The Cattle).

Unique Creation of Man:

Man is unique and unparalleled by any animal in animal kingdom in the followings:

- 1 **Human genome is unique among all animals**, and does not support Darwin evolutionary theory of monogenesis of animals coming out of one organism; the genes are the preserving units of the species since its original creation and existence. In a 2009 review article entitled "Darwinian evolution in the light of genomics", published in Nucleic Acid Research, Eugene V Koonin concluded, "There is no consistent tendency of evolution towards increased genomic complexity" through mutation as expected with current evolutionary theories. **Mechanisms of evolution remain beyond any known natural law.** Furthermore, the claim of special similarity between the genome of Man and Chimpanzees is False, since chimp's genome has not been plotted yet, and such similarity is a minor matter not dissimilar from that of Man with other animals' genome.
- 2 **Man's erect position being tail-less with the freedom of upper limbs** (for movement).
- 3 **Thumb opposition to the rest of hand fingers** enables man to carry out fine movements with precision, such as writing, calligraphy, typing on the typing machine or on the computer key-board, drawing, musical rendition, and buttoning the shirt, etc. Hence, accidental loss of the thumb represents 50-60% of the total hand functional/physiological loss (for the purpose of medico-legal compensation), while loss of one finger of other 4 fingers represents 10% of the total hand functional loss.

- 4 **Geometric spatial shape of human larynx and vocal cords** enables man of pronunciation of letters and words, constructing a language that forms the basis of his social development. Add to this, Man's ability to read (see below).
- 5 **Brain weight and the unusual growth of cerebral cortex** enable man to control and inhibit his human behaviour according to the values and morals that man believes in. Human cerebral cortex is far more complicated than any animal; it performs many functions, such as reading, reflection, imagination, thinking and believing. These functions collectively attribute to the **human Mind**.
- 6 **Human Spirituality (consciousness, piety and worshipping) and emotions (Man cries and laughs)**. Spirituality was the decisive factor separating Wallace from Darwin.

Despite that Wallace believed in 'natural selection', he was a **spiritualist**. He maintained that 'natural selection' cannot account for **mathematical, artistic, or musical genius, as well as metaphysical musings, and wit and humour**. Furthermore, he believed that **natural selection was insufficient to explain the development of consciousness**. He eventually said that something in "the unseen universe of Spirit" had interceded at least three times in history.

1. The first was the creation of life from inorganic matter.
2. The second was the introduction of consciousness in the higher animals.
3. And the third was the generation of the higher mental faculties in mankind.

He also believed that the *raison d'être* (underlying principle/basis) of the universe was the development of the human spirit. These views greatly disturbed Darwin, who argued that spiritual appeals were not necessary and that 'sexual selection' could easily explain apparently non-adaptive mental phenomena. Wallace's public advocacy of spiritualism strained his relationships with previously friendly scientists who based their ideology purely on material basis, such as Henry Bates, Thomas Huxley, and even Darwin, who felt that Wallace was overly credulous!!!

Sustenance of Man and Subjection of Universe for Man:

Allah has guaranteed the sustenance of all creatures including the Mankind with all races and colours; thus Allah says:

(And in heaven is your Sustenance, and that which you are promised. Then by the Lord of heaven and earth, it is the very Truth, as much as the fact that you can speak intelligently to each other).

Verse 51:22-23 of Surat Adh-Dhariyat (The Winds that Scatter).

Allah Most High says: (It is He Who created for you all things that are on earth)

Verse 2:29 of Surat Al-Baqarah (The Cow).

Thus Allah has created Man as His vicegerent, and at the same time He created in earth everything that Man needs. Furthermore, Allah created Man, while everything in Heavens and Earth were created and subjected for Man's service, therefore, Man and subjected things were all the creation of God: (And has subjected to you, as (a kindness) from Him, all that is in the heavens and all that is in the earth; Behold in that are signs indeed for those who reflect).

Verse 45:13 of Surat Al-Jathiyah (The Kneeling).

Also Allah (God) secures the provisions and sustenance of all creatures, including Man in his various races and colours; Allah Most High says:

(Say "Who gives you provision from the heavens and the earth?" Say: Allah.).

Verse 34:24 of Surat Saba' (Sheba).

(And so many a moving (living) creature carries not its own provision! Allah provides for it and for you. And He is the All-Hearer, the All-Knower).

Verse 29:60 of Surat Al-Ankabut (The Spider).

(And kill not your children for fear of poverty. We shall provide for them as well as for you. Surely, the killing of them is a great sin).

Verse 17:31 of Surat Al-Isra' (The Journey)

This is the complete undermining of Malthus theory regarding the scarcity of natural (food) resources in relation to increasing human population.

The True Facts of Evolution

But Allah also states the true fact of evolution, in terms of '*Embryological Evolution*' in the wonderful Qur'anic description in beautiful plain Arabic language:

(And indeed We created man (Adam) out of quintessence of clay (water and earth). Then We made him (the offspring of Adam) as a *Nutfah* (mixed drops of the male sperms and female sexual ova discharge - placed) in a safe place of rest (firmly fixed to the womb of the woman). Then We made the *Nutfah* into *Alaqah* (a hanging leech-like clot), then We made *Alaqah* into a little lump of flesh (foetus), then We made out of the little lump of flesh, bones, then We clothed the bones with flesh, and then We developed out of it another creation. So blessed is Allah, the Best to create! After that, surely, you will die. Then (again) surely, on the Day of Judgment, you will be raised up).

Verse 23:12-16 of Surat Al-Muminun (The Believers).

The similarity between some embryological stages of the animals is not evidence (as Haeckel said) for the evolution of the adults of these animals from each others.

Furthermore, Islam confirms another true fact of '*Evolution of Human Age*' from birth to death, passing through the stages of intra-uterine foetus, to newly-born baby, to child, to adult, to elderly:

(O mankind! If you are in doubt about the resurrection, then verily, We have created you (Adam) from dust, then from a *Nutfah* (mixed drops of the male sperms and female sexual ova discharge i.e. the offspring of Adam), then from *Alaqah* (leech-like clot) then from *Mudghah* (morsel or a little morsel lump of flesh) – some formed and some unformed (as in the case of miscarriage) – in order that We may manifest (Our Power and Ability to do what We will) to you. And We cause whom We will to remain in the wombs for an appointed term, then We bring you out as babes, then (foster you) that you may reach your age of full strength. And some of you are called to die, and some are sent back to the feeblest old age, so that they know nothing after having known (much). And (further) you see the earth barren (lifeless), but when We pour down water (rain) on it, it is stirred (to life), and it swells and put forth every kind of beautiful growth (in pairs)).

Verse 22:5 of Surat Al-Hajj (The Pilgrimage).

Islam also, states the '*Transition of Human Life between Four Places*': from foetal stage in the uterus, to his life in this world, to the life in the grave (*barzakh*, from the time of his death till the Day of Judgement), and finally to the eternal life hereafter (either in Paradise or in Hell). And in this, there is a proof the *spirit* or *soul*, once created, it will never perish; thus Allah says:

(It is Allah Who has created you, then provided you with sustenance (in this worldly life), then He will cause you to die; then (again) He will give you life (on the Day of Resurrection). Is there any of your (false) partners (of Allah) who can do any single one of these things? Glory to Him! And High is He above all the partners they associate (with Him)).

Verse 30:40 of Surat Ar-Rum (The Romans).

Moreover, Islam refers to '*Reversed Evolution*', opposite to Darwin's theory of evolution from the small to the large; it states that Adam was very tall in stature and height when he was created. Thereafter the stature and height of children of Adam (Mankind) continued to reduce gradually until they reached our current stature and height (without change in shape or figure); On the authority of Ubai bin Ka'ab, that the Prophet (Peace be upon him) said:

"Allah had created Adam a tall man, with thick hair in the head, as if he is a *sahooq* date-palm (*sahooq*, meaning tall date-palm); when he tested the (forbidden fruit of) tree, his dress fell down, and his Awra (genital area) was shown first, and when he looked down at his exposed Awra, he was moving in agony, and a tree trapped his hair, but he pulled through, then Most Gracious (God) calls him: O Adam, are you running away from Me? When he heard the voice of Most Gracious (God), he said: O Lord, No but out of shyness".

Narrated by Ibn Abi Hatam 1/129, and Ibn Kathir in his interpretation of Qur'an.

This means that with every following century, the stature and height of the human beings were shorter than the century before (the preceding century), until the stature reached the current height and stabilised at that level. Perhaps, the giant stature of earlier mankind (children of Adam) has a wisdom at that time: in order to proportionate with the height of the giant dinosaur animals of that time (which are now extinct together with the extinction of earliest giant generations of Adam).

It is narrated by Abu Huraira that the Prophet (peace be upon him):

"Allah created Adam, making him 60 cubits tall. When he created him, He said to him: 'Go and greet that group of angels, and listen to their reply, for it will be your greeting (salutation) and the greeting of your offspring. So Adam said (to the angels): 'As-Salamu Alaikum' (i.e. Peace be upon you). The angels said: 'As-Salamu Alaikum wa Rahmatu-l-lahi'. Any person who will enter Paradise will resemble Adam (in appearance and figure). People have been decreasing in stature, since Adam's creation".

Sahih Al-Bukhari, Hadith no. 543 under the Book of The Prophets.

Squaring the Circle: Adapting Evolution to comply with Islam!

Islam is the eternal Truth in the purest form. Attempts of the apologetics to make evolution theory compliant with Islam and vice versa are futile. When a theory becomes an established scientific fact, then Islam accommodate such facts without contradiction. But the Neo-Darwinists had manipulated evidence to support their biased conclusion, and had converted a theory (already in crisis) into a pseudo-science.

Those who attempted to make Islam compliant with Darwin's Theory of Evolution relied on the misinterpretation of the following Qur'anic verses:

(Seeing that He has created you in diverse stages?).

Verse 71:14 of Surat Nuh (Noah).

According to Ibn Kathir interpretation of this verse of Qur'an, he said: (it is stated: It means from Nutfah, then Alaqah and then Mudghah, as stated by Scholars: Ibn Abbas, Ikrimah, Qitadah, Yahya bin Rafi', al-Saddi, and Ibn Zaid). See also *Verses 23:12-14 and Verse 22:5.*

As for Allah's saying:

(Allah has created every moving (living) creature from water. Of them there are some that creep on their bellies, and some that walk on two legs, and some that walk on four. Allah creates what He wills. Verily, Allah is Able to do all things).

Verse 24:45 of Surat An-Nur (The Light).

There is nothing in this Verse to suggest that the animals were evolving from one primordial primitive organism, far from it: it appears that animals were created directly from water, independently from each other. Furthermore, this wonderful Qur'anic verse reveals that water is the origin of life, with a beautiful simplified classification of animals. Verses like this, were always a source of inspiration for Muslim Scientists of Biology (See Below).

As for the Verse of metamorphosis as a punishment for some of the children of Israel and witnessed by others among the Children of Israel:

(And well you knew those amongst you who transgressed in the matter of the Sabbath (i.e. Saturday). We said to them: "Be you apes, despised and rejected").

Verse 2:65 of Surat Al-Baqarah (The Cow).

Say: "Shall I point out to you something much worse than this, (as judged) By the treatment it received from Allah? Those who incurred the curse of Allah and His wrath, those of whom (some) He transformed into apes, and swine. Those who worshipped Evil (Taghut): These are (many times) worse in rank, far more astray from the even Path!).

Verse 5:60 of Surat AlMa'idah (The Table Spread with Food).

These Verses don't help evolutionists either, because Man was already present before and after the metamorphosis: in addition to the fact that there was No offspring from the metamorphosed subjects. Indeed, we were told what the Prophet (Peace be upon him) said in response to someone asking him whether the Monkeys and the swine, were the offspring of those who had suffered the metamorphosis.

Thereupon he (the Holy Prophet) said: **Verily, Allah did not cause the race of those who suffered metamorphosis, to grow or to be succeeded. Monkeys and swine had been in existence even before (the metamorphosis of the human beings).**

This is a true 'Sahih' Hadith, narrated by Abdullah bin Mas'oud, in Sahih Muslim under 'Book of Fate' section; it is also mentioned by Ibn Kathir in his interpretation of Qur'an.

Pioneering work of Muslim Scientists in Biology:

Muslim Scientists were among the first to seriously study Zoology and Botany, through the extrapolation derived from the Holy Qur'an and Prophet sayings (Hadith), then quoting the expert opinions specialised in the field, that is in addition to their personal observations and practical applications and experiments.

1. the concept of '*struggle for existence*' was mentioned by Al-Jahiz in his 'Book of Animals' (before Darwin's 'survival for the fittest').
2. Al-Jahiz developed his theory of '*Evolution by Adaptation to Environment*'.
3. Also, '*evolution of new species by continuing hybridization*' was mentioned by Al-Jahiz, and elaborated by Ibn Qutaibah al-Dainouri.
4. Avenpace considered '*man as the talking and the perfect animal*' in his book of animals.
5. **Ibn Khaldun** propounded the concept of '*upgraded construction of creatures*' in his Introduction (long before Wallace/Darwin's '*Natural Selection*').
6. Al-Rumi mentioned '*Spiritual Evolution*'.
7. Ibn Tufail described '*Evolution of Human Knowledge*'.

Abu Othman bin Bahr known as Al-Jahidh or Al-Jahiz (because of his goggled eyes) born in Basrah (today Iraq) in 780 AD. His father died when al-Jahiz was a few months old. Despite the family's poverty, al-Jahiz's mother was able to send her son through the local Qur'anic school. His mastery of the Arabic language and unusual intelligence made him famous before he moved to Baghdad, where he continued to work as one of the advisors to the Caliph. Al-Jahiz' *Kitab al-Hayawan (The Book of Animals)* is a wonderful encyclopaedia of 7 volumes written in plain and beautiful Arabic language with huge number of vocabulary, containing anecdotes, poetic descriptions and proverbs, and **describing over 350 varieties of animals**. Thus Al-Jahiz deserved to be considered the first Muslim/Arab Zoologist. Al-Jahiz returned to Basra after spending more than 50 years in Baghdad. He died in Basra in 868 AD, as a result of an accident in which he was crushed to death by a collapsing pile of books in his private library. A fitting death for a great writer!

In the footsteps of al-Jahiz, came **Abdullah bin Muslim bin Qutaibah al-Dainouri** (died 276 Hijri) who devoted part of his book '*Eyes of News*' to the animals according to his own observations and original views.

Abu Bakr bin Bajah, the great Andalusian philosopher, known in the West by his Latinized name, **Avenpace** or **Avempace** has a book entitled '*Kitab al-Haywan*' (The Book of Animals). He was born in Zaragoza in what is today Spain and died in Fes, Morocco in 1138 AD (529 Hijri). He worked, for some 20 years, as the vizier of Yahya ibn Yusu' Ibn Tashufin, another brother of the Almoravid Sultan Yusuf Ibn Tashufin (died 1145) in Morocco.

Then came Zakariya Al Qazwini who wrote his book (*wonders of things created and marvels of existing things*) circa 1270. Then came Kamal-uddin Al-Dumairi (1341-1405) who wrote his major book (*Great Life of Animals*).

On the other hand, Ibn Khaldun (1332 – 1408 AD) is the first to refer in his Introduction to the phenomenon of “**Graduated Construction**” among the creatures; he linked it to the design of The Creator God, The Fashioner, and The Originator.

Furthermore, Muslim scholars and scientists pioneered the correct concepts of evolution (in its true meaning) long before Lamarck, Darwin and Haeckel (preceding them by 12-13 centuries), through their personal observations and experiments, and guided by their extrapolations from Qur’an and Prophetic Hadith and Arabic sayings; yet this had never led to atheism or to deny the presence of God.

To be more precise, It was Al-Jahiz who developed an early *theory of evolution by adaptation* and pioneered the concept of ‘*struggle for existence*’ (the precursor or antecedent of Darwin’s ‘survival for the fittest’) by animals fighting for resources, to avoid being eaten, and to breed. Also it was Ibn Khaldun who propounded the concept of ‘upgraded construction of creatures’ in his Introduction (long before Wallace/Darwin’s ‘*Natural Selection*’).

Al-Jahiz was the first to develop an early theory of evolution; he is the first to describe the ‘**struggle for existence**’: for resources, to avoid being eaten and to breed.

Perhaps, it was Al-Jahiz who pioneered the concept of ‘**symbiosis**’ or cooperation in the animal world, extrapolating his concept from interpretation of Qur’an (i.e. Allah’s subjection of nature for Man’s use). In ‘Book of Animals’, first volume, page 36, Al-Jahiz says: (God Allah had never created anyone (creature) capable of surviving independently by itself without the help of some of those subjected to it (musakh’ar by God). Thus the nearest is subjected to the farthest, and the greatest is subjected the finest).

Current application of ‘**symbiosis**’ principle in Man can be seen in the terms of: ‘**inter-dependency between people**’ or ‘**No man is an island**’.

Al-Jahiz also stated the superiority and the advantage of Man over all animals. Perhaps, Al-Jahiz was the first to speculate on the influence of the environment on animals, and he was an early adherent of ‘*environmental determinism*’ and explained how the environment can determine the physical characteristics of the inhabitants of a certain community. He used his theories on struggle for survival and environmental determinism to explain the origins of different human skin colours, particularly black skin, which he believed to be the result of the environment (i.e. heat and humidity). Also Al-Jahiz considered the effects of the environment on the likelihood of an animal to survive, and developed an early theory of ‘*Evolution by Adaptation*’. Environmental factors influence organisms to develop new characteristics to ensure survival, thus transforming into new species. Animals that survive to breed can pass on their successful characteristics to offspring.



Also Al-Jahiz, detailed his priceless ideas about *hybridisation* of animals to produce new species; he then stated that some of the hybrid animals can procreate. Al-Jahiz spoke in detail

about *animal psychology* and described the effect of *domestication of wild animals*, such as wolf which can sometimes retain its inborn wildness over-riding characters gained by its domestication. Inspired by Qur'an, he attempted to *classify the animals* in a linear series, arranging them in groups (with marked similarity) and subgroups. He thus sowed the seed of scientific classification of animals.

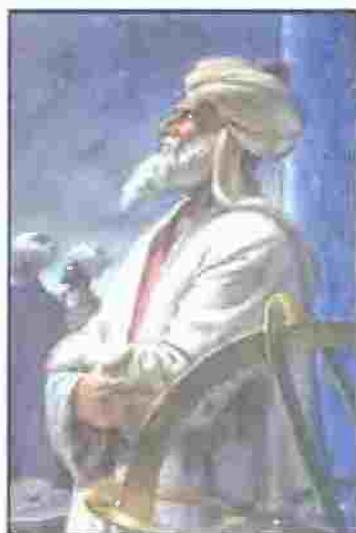
Furthermore, Al-Jahiz was the first to discuss 'food chain', connecting it with the 'struggle for survival' which he argued keeps a balance in the nature and maintains a proper ratio between the animals; thus in a beautiful paragraph (volume 6 page 495/496), he said:

(The mosquitoes go out to look for their food as they know instinctively that blood is the thing which makes them live. As soon as they see the elephant, hippopotamus or any other animal, they know that the skin has been fashioned to serve them as food; and falling on it, they pierce it with their proboscises, certain that their thrusts are piercing deep enough and are capable of reaching down to draw the blood. Flies in their turn, although they feed on many and various things, principally hunt the mosquito ... All animals, in short, cannot exist without food, neither can the hunting animal escape being hunted in his turn. Every animal even if is weak, would eat its weaker animal, and every strong animal must be eaten by its stronger animal. And some people are like that in their relationship with each others, despite the difference in the magnitude; and therefore, Allah has made in the death of some (creatures), a life for others).

Thus, Al-Jahiz draws balanced portraits of the nature between the positive 'symbiosis' phenomenon, and the negative 'struggle for survival'.

Ibn Qutaibah al-Dainouri propounds in his book 'Eyes of News' his views about development of new species of animals through continuous hybridization; he says:

(the hyenas in Abyssinia mate with camels giving birth to offspring similar to both: the camel and the hyena. If it happens that that offspring is a male, which mate with the addax, their breed would be a giraffe (Arabic *zarrafah*). That is why giraffe name entails a group of animals, despite being singular, because it is the offspring of camel, addax, and hyena; hence *zarrafah* in Arabic speech means a group)



Ibn Bajjah

Ibn Qutaibah has sharp observations of animals; for instance, he says: (animals with illuminating bright eyes at night include the eyes of lions, tigers, cats, and snakes).

For the qualities of a [military] leader, Ibn Qutaibah quotes the Turkish greats' saying:

(The great leader must have some of qualities of animals: the audacity of a cock, the motherly passion of a hen, the heart (courage) of a lion, the launching attack of a pig, the cunning of a fox, and the manoeuvrability of a wolf).

In Ibn Bajjah's or Avenpace's '*Kitab al-Haywan*' (The Book of Animals), is retrieved from the manuscripts of Oxford and Berlin, and presented by Jawad al-amarati, printed by al-markaz al-Thaqafi al-Arabi, 2002. Ibn Bajjah or Avenpace says, page 148:

(Among animals are those without [distinct] male and female, and among them are those with males without females...and as for the animal without male or female, we should not call as a complete animal, but closely related to plants....but the complete animal as a whole had male and females).

Isc Avenpace says, page 186:

(Some of these appendages do not contain body structure, because they are placed externally. All such appendages act like a tool, for instance horns, feathers, tails and canine teeth. Some of these are for protection only and some are for survival like canine teeth. Some of the fishes parts constitute saws or claws, yet some other appendages are for beauty as in the tails of peacocks and fowls, and the cocks' comb and tail, and some [upper dages] like eyebrows are for both protection and beauty).

Furthermore, Avenpace says in page 189:

(and the most complete is the one provided with all best organs. Thus, the bones are far superior in its function than the thorny spine. And so are other organ powers, and thus Man is the best of all animals).

As for Ibn Khaldun, he used the term "*Graduated Construction*" which precedes Darwin's term of Evolution by 5 centuries. Ibn Khaldun's '*Graduated Construction*' is classification ladder of the construction of creatures according to their order of complexity, without entering into dialectical philosophy of evolution, because mere similarity between creatures does not mean an evolution in terms of actual transformation from the simple to the complex. In *Ibn Khaldun's Introduction* (The First volume of *Ibn Khaldun's History*, published by Dar Ihya' al-Turath al-Arabi, Beirut (undated), page 95), he said:



(Let us now mention the interpretation of the fact of Prophethood, according to what had been explained by most Scholars, and then we mention the facts of divination and dreams, and then the issue of foretellers with other issues of knowing the unknown, so we say: Know, May Allah guide you and guide us with you, that we see this world with all the created things in it has a certain order and solid construction. It shows nexuses between the causes and things they caused, combinations of some parts of creation with others, and transformations of some existent things into others, in a pattern that is both remarkable and endless.

And let us start from this physically recognised world. First the World of Elements seen how they transformed from earth to water to air to fire, and yet connected to each other. And each one of them is prepared to transform upwards and downwards to the following one, and it transforms occasionally, and the one that transformed upwards becomes more pleasant than the one before, until it reaches the cosmic world, where it becomes the most pleasant of all and arranged in layers connected with each others in an order that is not recognised except by their movement; and through which some are guided to the knowledge of their measures and positions, and much more about the presence of the subjects which had such effects on them.

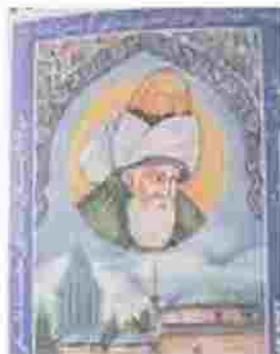
Then take a look at the world of creation, how it started out from the minerals and progressed, in an ingenious, gradual manner, to plants, and then to animals. The last horizon of minerals is connected with the first horizon of plants, such as herbs and

seedless plants. The last horizon of plants, such as date-palms and grape-vines, is connected with the first horizon of animals, such as snails and shellfish which have only the power of touch. The word 'connection' with regard to these created things means that the last horizon of each group is strangely prepared to become the first horizon of the following group.

The animal world then widens, its species become numerous, and, in a gradual process of creation, it finally leads to man, who is able to think and reflect, to whom ascends from the world of capability, in which both sagacity and perception are found, but which has not reached the stage of actual reflection and thinking. At this point we come to the first horizon of man. This is as far as our (physical) observation extends).

Ibn Khaldun later goes on to talk about the spirit or the soul which is connected to the physical world and sensed through the effects of growth and perception; he explained that the spirit lifts the man from the world of Man upwards towards the world of angels.

Ibn Khaldun views on the '*gradual construction*' among the creatures: from the simplest to the most complex provides the correct understanding of evolution, better than that of Darwin.



Sufi Mawlana Jalaluddin Rumi (1207 –1273), a 13th-century Persian Turkish poet and jurist, and founder of "Whirling Dervishes": he was known as Rumi "the Roman" since he lived most of his life in what was once ruled by the Roman Byzantine Empire.

Spiritual Evolution: Rumi was an evolutionary thinker in the sense that he believed that the spirit goes in a circle, so after devolution from the divine Ego, undergoes an evolutionary process by which it comes nearer and nearer to the same divine Ego. All matter in the universe obeys this law and this movement is due to an inbuilt urge (which Rumi calls "love") to evolve and seek enjoinder with the divinity from which it has emerged. Evolution into a human being from an animal is only one stage in this process (see below). Rumi believes that there is a specific goal to the process: the attainment of God. For Rumi, God is the ground as well as the goal of all existence.

Rumi need not be considered a biological evolutionary creationist. Rumi lived 6 centuries before Darwin, and was least interested in scientific theories. It is probable to conclude that he does not deal with biological evolution at all. Rather he is concerned with the spiritual evolution of a human being: Man not conscious of God is akin to an animal and true consciousness makes him divine.

Nicholson has seen this as a Neo-Platonic doctrine: the universal soul working through the various spheres of being, a doctrine introduced into Islam by Muslim philosophers like Al-Farabi and Ibn Sina's idea of love as the magnetically working power, through which, life is driven upwards.

(I died as a mineral and became a plant, I died as plant and rose to animal, I died as animal and I was Man. Why should I fear? When was I less by dying? Yet once more I shall die as Man, to soar With angels blessed; but even from angelhood I must pass on: all except God doth perish.

When I have sacrificed my angel-soul, I shall become what no mind ever conceived. Oh, let me not exist! for Non-existence Proclaims in organ tones, To Him we shall return).

Rumi insisted on the importance of religious observance, the primacy of the Qur'an and what he believed to be superiority of Islam:

(Flee to God's Koran, take refuge in it there with the spirits of the prophets merge. The Book conveys the prophets' circumstances those fish of the pure sea of Majesty).

Al-Jahiz, Ibn Khaldun, and Sufi Mawlana Rumi while referring to changes in the nature, they always maintained their belief in certain constant concepts, such as the concept of The Creator God, The Designer of this Universe, and The Fashioner of different worlds of plants, animals, and humans. More importantly, none of the natural concepts adopted by Al-Jahiz or by Ibn Khaldun had ever led to atheism, or to the denial of God. On the contrary, their concepts reinforced and consolidated the belief in God, The Maker and The Inventor of nature.

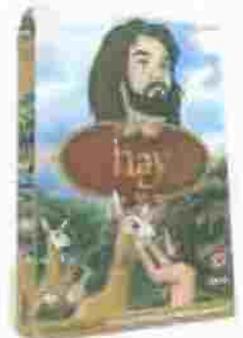
Indeed, it became customary for famous Arabic linguists, such as al-Fairuzabadi's Dictionary: *Al-bahr Al-Muheet*. (*The Surrounding Sea*) to define the word: **nature** (*Tabi'ah*) as the creation (*khaleeqah*). Thus the "nature" in the Arabic Islamic philosophy is a synonym with 'Allah's creations'.

Al-Jahiz's theory of evolution was something very new in the history of science, and there was nothing written previous to it. Although Greek philosophers, such as Empedocles and Aristotle spoke of the change in Nature, in plants and animals, they never made the first steps on the field of the future theory of evolution as Muslims did. Their concept of change was only simple and never designed explicitly or implicitly a concept of evolution.

Thus, approximately 1,000 years before the British naturalist (Darwin) published his theory of evolution in the Christian West (many concepts of his theory were erroneous), a scientist working in Muslim Baghdad (Al-Jahiz) was thinking along similar lines, but he got right.

The pioneering work of Al-Jahiz has been confirmed by many evidences:

- ❖ Eighty-seven folios (87) of the *Book of Animals* (about one-tenth of the original text by al-Jahiz) are preserved in the Ambrosiana Library in Milan. This collection (a copy of the original) dates from the 14th century and bears the name of the last owner, 'Abd al-Rahman al-Maghribi, and the year 1615. These folios of the *Book of Animals* contain more than 30 illustrations in miniature.
- ❖ Al-Damiri's book 'Hayat al-Hayawan' was partially translated into Latin by a Jewish translator, called Abraham Echellensis (d. Italy 1664) and published in Paris in 1617. This book contains many passages taken from al-Jahiz's Kitab al-Hayawan.
- ❖ Ibn Tufayl's 'Hayy Ibn yaqzan', which contains the philosophy of proper evolution of human knowledge, was first published by Edward Pocockes, Sr. (1604-1690), together with a Latin translation published by Edward Pococke, Jr. (1648-1727) in Oxford in 1671 (2nd edition, Oxford, 1700). Ibn Tufayl (or Tufayl) or Abu Bakr Muhammad ibn Tufayl al-Andalusi (1105-1185); (Latinised: Abubacer Aben Tofail; Anglicised: Abubekar Ebn Tophail).

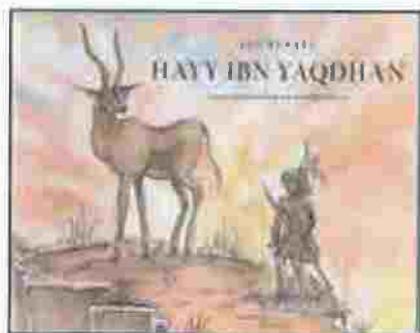


He was in his sixties when he met Ibn Rushd in 564 Hijri/ 1169 AD. Born in Wadi Ash (Guadix), a small town in Spain northeast of Granada, he died 87 years of age in Morocco in 581 Hijri/ 1185 AD. Ibn Tufail was the second most important Muslim philosopher in the West, the first being Ibn Bajjah (Avenpace or Avempace). He served as a secretary for the ruler of Granada, and later as vizier and physician for Abu Yaqub Yusuf, the Almohad ruler of Al-Andalus (Andalusia), to whom he recommended Ibn Rushd (Averroes) as his own future successor in 1169 (see below).

Ibn Tufail was the author of *Hayy ibn Yuqzān* or *Hayy ibn Yuqdhān* (*Alive, son of Awake, or The Living Son of the Vigilant*), also known as *Philosophus Autodidactus* in the West, a philosophical allegorical novel inspired by Avicenna and Sufism and as a response to al-Ghazali's 'The Incoherence of the Philosophers'. Ibn Tufail tells the story of an **autodidactic feral child**, raised by a gazelle and living alone on a desert island in the Indian Ocean. After his gazelle mother passes away when he is still a child, he dissected her body and performs an autopsy in order to find out what happened to her. The discovery that her death was due to a loss of innate heat (its soul) sets him 'on a road of scientific inquiry' and **self-discovery**, and without contact with other human beings, he discovers ultimate truth through a systematic process of *reasoned inquiry*. Hayy ultimately comes into contact with civilization and religion when he meets a castaway named *Absal*. He determines that certain trappings of religion, namely imagery and dependence on material goods, are necessary for the multitude in order that they might have decent lives. However, imagery and material goods are distractions from the truth and ought to be abandoned by those whose reason recognizes that they are distractions. Ibn Tufail drew the name of the tale and most of its characters from an earlier work by Ibn Sina (Avicenna). Ibn Tufail's book was neither a commentary on, nor a mere retelling of Ibn Sina's work, but a new and innovative work in its own right.

It reflects one of the main concerns of Muslim philosophers (later also of Christian thinkers), that of **reconciling philosophy with divine revelation**.

The narrative anticipates in some ways both: Daniel Defoe's "Robinson Crusoe" and Rousseau's "Emile or On Education". It tells of a child who is nurtured by a gazelle and grows up in total isolation from humans. **In 7 phases of seven years each, solely by the exercise of his faculties, Hayy goes through all the gradations of knowledge.** The story of *Hayy Ibn Yuqzan* was also copied by Edgar Rice Burroughs' "Tarzan", a baby abandoned in a deserted tropical island where he was taken care of and fed by a mother 'wolf', and later became a man of great strength and agility, brought up in the jungle and lives with apes (notice the name 'Tarzan' is corrupted from 'Yaqzan'). It was also corrupted and modified by the later story of Mowgli in Rudyard Kipling's "The Jungle Book" in that a baby is abandoned on a tropical island where he is taken care of and fed by a mother wolf.



Latin translation of the work, entitled *Philosophus Autodidactus*, first appeared by Mirandola (1494 A.D.) and later translation appeared in 1671, prepared by Edward Pococke, the Younger.

The first English translation of the novel was published by George Ashwell in 1686, based on Pococke's Latin translation. The first English translation of the Arabic original text, entitled *The Improvement of Human Reason: Exhibited*

in the Life of Hai Ebn Yokdhan, was published shortly after by Simon Ockley in 1708, followed by two more English translations. It later, appeared in many other languages. *Philosophus Amadactus* also inspired Robert Boyle, another acquaintance of Pococke, to write his own philosophical novel set on an island, *The Aspiring Naturalist*. In Paris, Pococke's agent also wrote to him stating that he "delivered a copy to the Sorbonne, for which they were very thankful, being much delighted with it." An accurate French translation was also published that same year by Prof. L. Gauthier at Algiers.

Baruch Spinoza also read the work and soon encouraged a Dutch translation, which was published by his friend Johannes Bouwmeester in 1672. Another Dutch translation, *De natuurlijke wijsgeer*, was published by Adriaan Reland in 1701. There were also two German translations of the novel, the first based on the Latin translation and the second based on the Arabic original. One of these translations was read by Gottfried Leibniz, who praised it as an excellent example of classical Arabic philosophy.

In 1761, an anonymous Crusoe story was printed in London, entitled *The Life and Surprising Adventures of Don Antonio de Trezannio*, much of which was conveyed or paraphrased from Ockley's translation of *Hayy ibn Yaqdhan*. The Ockley's translation was re-published in 1804 by Paul Bronnie in London. Despite *Hayy ibn Yaqdhan* originally being written in Islamic Spain, the first Spanish translation of the novel was not published until 1900, by F. Pons Boigues in Zaragoza. The novel also inspired the concept of "tabula rasa" developed in 'An Essay Concerning Human Understanding' (1690) by John Locke, who was a student of Pococke. *Tabula rasa* (Latin: *blank slate*) refers to the 'epistemological thesis' that individuals are born without built-in mental content and that their knowledge comes from experience and perception. Generally proponents of the *tabula rasa* thesis favour the "nurture" side of the nature versus nurture debate, when it comes to aspects of one's personality, social and emotional behaviour and intelligence. His *Essay* went on to become one of the principal sources of Empiricism in modern Western philosophy, and influenced many enlightenment philosophers, such as David Hume and George Berkeley. Hayy's ideas on materialism in the novel were also copied and modified by Karl Marx's historical materialism. *Tabula Rasa* is also featured in Sigmund Freud's psychoanalysis. Freud depicted personality traits as being formed by family dynamics (e.g. Oedipus complex, etc.). Freud's theories show that one can downplay genetic and congenital influences on human personality without advocating free will. In psychoanalysis, one is largely determined by one's upbringing.

It also foreshadowed 'Molyneux's Problem', proposed by William Molyneux to Locke, who included it in the second book of *An Essay Concerning Human Understanding*. This problem as described by Ibn Tufail lies in the difference of perception of a blind man aware of his surrounding environment by heart and senses (with exception of colours, which he knew only by names), and between the perception of the same man when he opened his eyes and see things as he had imagined with 2 new important things for him, one the consequence of the other: a clarity, i.e. a greater brightness, and a great voluptuousness."

Hayy ibn Yaqzan had a significant influence on both Arabic and European literature, and it went on to become an influential best-seller throughout Western Europe in the 17th and 18th centuries. The work also had a "profound influence" on both classical Islamic philosophy and modern Western philosophy. It became one of the most important books that heralded the "Scientific Revolution" and European Enlightenment, and the thoughts expressed in the

novel can be found "in different variations and to different degrees in the books of Thomas Hobbes, John Locke, Isaac Newton, and Immanuel Kant". George Sarton considered the novel "one of the most original books of the Middle Ages." Other European writers influenced by *Philosophus Autodidactus* included John Wallis, Christiaan Huygens, George Keith, Robert Barclay, the Quakers, Samuel Hartlib, Karl Marx, and Voltaire.

In North America, Cotton Mather's *The Christian Philosopher* was published in 1721, he cited *Hayy ibn Yaqdhan* as an influence. Despite condemning 'Mahometans' as infidels, Mather viewed the protagonist of the novel, Hayy, as a model for his ideal 'Christian Philosopher' and 'monotheist scientist'. Mather also viewed Hayy as a 'noble savage' and applied this in the context of attempting to understand the *Native American Indians* in order to convert them to Puritan Christianity.

It is clear, that the European renaissance and the modern Western philosophy had in fact, emerged and thrived in the shadow of the Islamic philosophy, despite the fact that most of translated Arabic works were plagiarised, paraphrased, and had never been acknowledged. Unlike Arabic philosophy, the borrowing Western philosophy was unfortunately 'unbalanced' and lame standing on the ground with one leg, and viewing life with one eye only, owing to the fact it was disjointed and disconnected from the Islamic moral/spiritual component (this is due to the development of an anti-Church atheist trend evident in the rising Science and Secularism; it is also due to the long past history of Crusades against the Islamic World). (Also see below).

- ❖ Zakariyya' al-Qazwini's cosmography, *'Aja'ib al-Makhtuqat* was published by F. Wustenfeld in 2 volumes in Göttingen in 1848-49; and *Kitab Talkhis al-Athar of Bakawi*, a summary of al-Qazwini's book was translated into French and published by De Guignes in Paris, in 1789. (the book contains many ideas from al-Jahiz). And A. L. de Chezy translated al-Qazwini's *Aja'ib*, and his translation was published in 1806 (first publication) by S. de Sacy, in his *Chresiomathie Arabe*.
- ❖ The spiritual evolutionist sufi Mawlana Rumi, had already influenced Goethe, who called him "a Darwinian before Darwin", his spiritual evolution was occasionally misunderstood as a theory of metamorphosis and claimed by some to have profoundly affected the development of biological theories.
- ❖ In any case, Islamic zoology penetrated the West as early as the 17th century. Some Europeans knew Arabic and they could read directly from the Muslim scientists' books; for example, Darwin was himself initiated into Islamic culture in Cambridge under a Jewish Orientalist called Samuel Lee. This illustrates Muslim influence upon Europeans, and the transmission of their ideas to the West.

(The pioneering work of Al-Jahiz has also been confirmed by many studies, including:

1. Conway Zirkle (1941). *Natural Selection before the "Origin of Species"*, *Proceedings of the American Philosophical Society* 84 (1), p. 71-123
2. Mehmet Bayrakdar (Third Quarter, 1983). "Al-Jahiz And the Rise of Biological Evolutionism", *The Islamic Quarterly*, London)

5. Dislike of Islam to Dialectical Polemics Guesses in the face of Qur'anic Decisive Facts: (Useless and Harmful knowledge)

This is the 5th principle. Despite that Islam encourages on the necessity of reflecting and thinking about the creation of universe, creation (in Arabic: nature), and man (as we have seen), but it orders Muslims to invite others to Islam with wisdom, beautiful preaching, and kind argument: Allah, Most High says:

(Invite (all) to the Way of your Lord with wisdom and beautiful preaching; and argue with them in the ways that are best and most gracious, truly, your Lord knows best who have strayed from His Path and who are guided).

Verse 16:125 of Surat An-Nahl (The Bees).

But in view of extensive Islamic explanation of the fine details of facts of creation and evolution, thus, Islam (being the only true uncorrupted religion of Allah) is **decisive in its evidence** regarding the matters of creation and the unity of Mankind (see above); and it disapproves human philosophers argumentation which is no more than a **theoretical guess**. Islam detests the incoherence of schools of Kalam or polemics, their Byzantine argumentation, and theorization opposite to the facts mentioned in Qur'an and Hadith (Prophet's sayings), making Mankind a fertile field for ominous laboratory experimentation. The philosophers of scientific racism and those of European anthropology have already downgraded Man to the lowest level; they founded false theories and laid harmful sciences, converting Man into an experimental animal; and when such theories were implemented and translated into practical terms, they led to human genocides under various titles both in the past and in modern times, from Nazism, to Communism, to Materialism, to modern Ethnic cleaning.

Allah, Most High says:

(None dispute in the Evidences of Allah but those who disbelieve; let not, then their strutting about through the land deceive you!).

Verse 40:4 of Surat Ghafir or Al-Mu'min (The Forgiver or The Believer).

And also says:

(Verily, those who dispute about the Evidences of Allah without authority bestowed on them –there is nothing in their breasts except pride, which they shall never attain to: Seek refuge then, in Allah: it is He Who is the All-Hearer, the All-Seer. The creation of the Heavens and earth is indeed greater than the creation of mankind; yet most of mankind know not).

Verse 40:56-57 of Surat Ghafir or Al-Mu'min (The Forgiver or The Believer).

Allah Most High says:

(and among mankind is he who disputes concerning Allah, without knowledge, and follows every rebellious (disobedient to Allah) Shaitan (devil) (devoid of every kind of good). For him, it is decreed that whosoever follows him, he will mislead him, and will drive him to the torment of the Fire).

Verse 22:3-4 of Surat Al-Hajj (The Pilgrimage).

He also says:

(and among men is he who disputes about Allah, without knowledge or guidance or a Book of enlightenment. (Disdainfully) Bending his side, in order to lead (others) astray

from the Path of Allah. For him there is disgrace in this worldly life, and on the Day of Judgment We shall make him taste the torment of burning (Fire)).

Verse 22:8-9 of Surat Al-Hujj (The Pilgrimage).

On the authority of Abu Umamah, that Allah's Messenger (peace be upon him) said:

"No people can go astray after being provided with guidance, without becoming argumentative (as punishment); he then recited "They quoted not the above example except for argument. Nay! But they are a quarrelsome people).

Verse 43:58 of Surat Az-Zukhruf (The Gold Adornments)".

Narrated by al-Ajurri and Imam Ahmad and Tirmithi, and al-Albani said True Hadith.

This indicates: that people who become misguided are punished by becoming argumentative.

Imam al-Ajurri said: (when the scholars amongst *Tabi'een* (those who saw and met with companions of Prophet Muhammad) and amongst those who followed them, hear this Hadith, they did not argue in religion, and never squabbled; and they warned Muslims not to argue nor to squabble; they ordered them to follow the traditions of the Prophet and his *Sahabah* (Prophet's companions). Verily, this is the path of truth-loving people, amongst those who are guided by Allah, The Most High).

Anas bin Malik transmitted it from the Messenger of Allah (peace be upon him) that **the Great and Glorious Allah said: (Verily your people would constantly question about this and that till they would say: Well, it is Allah Who created the creation, but who created Allah?).**

Narrated by Sahih Muslim Number 136.

The very words of this Hadith and the style of expression indicate the fact that persistent questioning is not desirable because sometimes such illogical argumentation leads to mental confusion.

When Allah stated Man's origin, He detested the argumentative guesses in the face of decisive Qur'anic facts; Allah Most High say: **(He has created man from a sperm-drop, and behold this same (man) becomes an open disputer!).**

Surat An-Nahl (The Bee) 16:4.

On many occasions, Prophet Muhammad (peace be upon him) asks for Allah's protection from useless and harmful knowledge, by saying:

"O' Allah, I take refuge by you from useless knowledge".

Arabic language had a major role in correcting human thinking when the great Muslim Scholar/Imam of his time stood up and delivered a fatal blow to the philosophers' faulty thinking and unsound reasoning. Although Abu Hamid Muhammad al-Ghazali lived a relatively short life (1058-1111), he established himself as one of the most important thinkers in the history of Islam. In his book: '*The Incoherence of the Philosophers*', written after more than a decade of travel and ascetic contemplation, al-Ghazali contends that Greek predecessors and contemporary Arab philosophers, such as Avicenna and al-Farabi (and their followers among *Ikhwan al-Safa* – or Brethren of Purity) have erred in 17 matters when they

worked their mind and logic boasting of unassailable arguments on matters of the unknown metaphysics; he considered many of their assertions to represent disguised heresy and unbelief. Each matter, he addressed in detail in a chapter, for a total of 17 chapters. Al-Ghazali thought that such an undertaking was of an inherently contradictory nature, and that the work of his peers was ultimately fruitless. But in 3 other chapters, he accuses them of being utterly irreligious clashing with the messages of Prophets. Among the charges, he levelled against the philosophers:

- Refuting the doctrine of the world's pre-eternity.
- Refuting the doctrine of the world's post-eternity.
- Showing their equivocation of the following two statements: God is the creator of the world versus the world is God's creation.
- The inability of philosophers to prove the existence of the Creator.
- Their inability to prove the impossibility of existence of two gods
- Their inability to prove the Day of resurrection.
- Refuting their denial of bodily resurrection and the accompanying pleasures of Paradise or the pains of Hellfire.

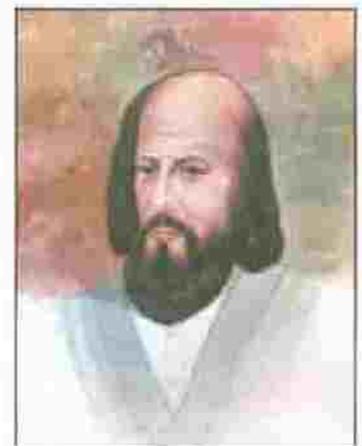
Al-Ghazali did not find other branches of philosophy including physics, medicine, astronomy or mathematics problematic. His only axe to grind was with metaphysics, in which he stated that the philosophers cannot use the same tools, namely logic, which they used for other sciences.

He sets an example on the causal relationship of fire and burning, citing philosophers' view that the former is the necessary cause of the latter. Al-Ghazali, however, posits that fire is not the agent by which burning occurs, but it is God, through direct action of himself or his agents (i.e. Angels), that causes the burning to occur. Interestingly, his approach is wholly logical (though using convoluted logic), reflecting his desire to offer his refutation by means of the very system his opponents would purport to use, in order that they might prove their point:

"The connection between what is customarily believed to be a cause and what is believed to be an effect is not necessary...but each of the two is independent of the other."

Al-Ghazali also criticised Galen who claimed that the sun is eternal and can never wither or reduce in size, based on the observatory evidence for thousands of years; al-Ghazali refuted observatory evidence as a relative one, because such reduction is invisible in view of the massive size of the sun (he thought sun size equal 1700 times that of the Earth at that time), to such extent that even if mountains disappear from the surface of the sun, this will not be sensed from Earth observatory.

Al-Ghazali's view stems from his belief in Islam and Qur'an:

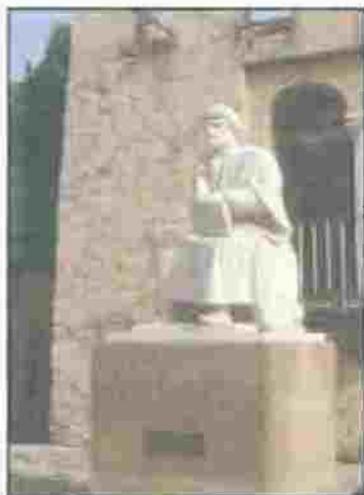


Al-Ghazali

“Everything will perish except His Face. His is the Decision, and to Him you (all) shall be returned.”

Verse 28:88 of Surat Al-Qusas (The Narration).

Averroes in his book: ‘**The Incoherence of the Incoherence**’ (*Tahāfut al-Tahāfut*) (2 centuries later – see below) sided by Galen against al-Ghazali regarding the constant size of the sun. However, the modern science came to support al-Ghazali’s view, confirming it at the sun is a massive globular body (one million, three hundred thousand times larger than the Earth); and that the sun had daily huge explosions (equivalent to thousands of hydrogen bombs explosions every second), during which the sun loses 3600 tons of its mass every second. Astrologist estimated that the age of the sun is 5 billion years so far, and will continue to emit light and heat for another 5 billion years when it comes to an end (God willing).



Ibn Rushd (Averroes) (1126-1198) Abu al-Waleed Muhammad Ibn Rushd Al-Andalusi wrote a refutation of Al-Ghazali’s work entitled ‘**The Incoherence of the Incoherence**’ (*Tahāfut al-Tahāfut*) in which he defends the doctrines of ‘philosophers’; it is written as a sort of dialogue: Averroes quotes passages by al-Ghazali and then responds to them. This text was not as well received by the wider Islamic audience. Ibn Rushd (Averroes) began his career with the help of his teacher “**Ibn Tufail**”, (author of *Hayy bin Yaqzan*), who introduced him to the court and to **Ibn Zuhr** (Avenzoar), the great Muslim physician who became Ibn Rushd’s teacher and friend. Ibn Rushd was also a student of **Ibn Bajjah** (Avenpace or **Avenpace**), another famous Islamic philosopher, who greatly influenced Averroes.

In 1160, Ibn Rushd was made *Qadhi* (judge) of Seville and he served in many court appointments in Seville, Cordoba, and Morocco during his career. At the end of the 12th century, following the **Almohads conquest of Al-Andalus**, his political career was ended. Ibn Rushd’s strictly rationalist views which collided with the more orthodox views of Caliph **Abu Yusuf Ya’qub al-Mansur** led to him banishing Averroes, though he had previously appointed him as his personal physician. Averroes was not reinstated until shortly before his death and before the death of the Caliph too. He devoted the rest of his life to his philosophical writings.

The Incoherence of the Incoherence was subsequently translated into many other languages. The book is considered Averroes’ landmark; in it, he tries to create harmony between Islamic faith and philosophy (being an epitome of human wisdom that should not clash with religion). **Jacob Anatoli** translated several of the works of Averroes from Arabic into Hebrew in the 1200s. Many of them were later translated from Hebrew into Latin by **Jacob Mantino** and **Abraham de Balnes**. Al-Ghazali’s ‘Incoherence of the Philosophers’ was translated along with translation of Averroes work. However, Al-Ghazali’s ‘Incoherence of the Philosophers’ was translated into English by **Michael E. Marmura**. Despite its attempted refutation by the 12th-century philosopher Ibn Rushd, al-Ghazali’s work remains widely read and more influential.

Another less critical response to al-Ghazali's *The Incoherence of the Philosophers* was first written by Ibn Rushd's predecessor and teacher: Ibn Tufail (**Abubacer**) as part of his Arabic philosophical novel *Hayy Ibn Yaqzan* (translated into Latin and English as *Philosophus Autodidactus*). Ibn Tufail cites al-Ghazali as an influence on his novel, especially his views on Sufism, but was critical of his views against Avicennism.

In the 13th century, Ibn al-Nafis later wrote the *Al-Risalah al-Kamiliyah fil Siera al-Naba'iyyah* (translated in the West, into Latin and English as *Theologus Autodidactus*) as a response to Ibn Tufail's *Philosophus Autodidactus*, defending some of al-Ghazali's views.

The *Tahāfut* and Averroes' refutation *Tahāfut al-Tahāfut* continued to be studied in the Muslim world. Indeed, in the 15th century, the Ottoman sultan Mehmed II (a.k.a. *el-Fatih*) commissioned 2 of the realm's scholars to write a book summarizing the ideas of the two great philosophers as to who won the debate across the time. A refutation of Ibn Rushd's arguments in *Tahāfut al-Tahāfut* was written by a Turkish scholar *Mustafā Ibn Yūsuf al-Bursawī*, also known as *Khwājah Zādā* (died 1487), who defended al-Ghazali's views. This once again indicated to the Islamic scholars, the weakness of human philosophy, when compared with the strength of divine faith of Islam.

Nevertheless, '*Tahāfut of Philosophers*' had provided Muslims with immunity against the grave errors of the philosophers. Far from stifling philosophy in the Muslim world, the *tahāfut* has piqued Muslim interest in philosophy, (while taking the necessary precautions against the philosophical errors): jurists are no longer afraid to study the works of Avicenna and al-Farabi, as is clearly evident in the works of Ibn Tufail and Averroes.

