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The English Sundew—*Drosera anglica*

The sundew is a carnivorous perennial herb, widely distributed and living in wet, boggy places with low pH, often associated with Sphagnum moss. Its laminae are covered with stalked ‘tentacles’ bearing mucilaginous glands that exude a sugary scent. Insects attracted to touch the sticky material are trapped. The tentacles make a thigmotropic response by bending inwards to increase contact with the prey. The leaf may also curl inwards. The mucus coats the insect tracheae and prevents breathing. The glands secrete enzymes which digest the insect, and nutrients are absorbed to supplement the plant’s nitrogenous requirements; the leaf unfurls to release the husk.

Can you help the Darwinian to invent a plausible sequence of steps by which this plant evolved this feeding mechanism?

Picture: www.stockphotosecrets.com



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St Thomas Aquinas**

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AIMS

To inform Catholics and others of the scientific evidence supporting Special Creation as opposed to Evolution, and to show that the true discoveries of Science are in conformity with Catholic doctrines on Origins.

ACTIVITIES

Daylight Origins Society is a non-profit educational organisation funded from subscriptions, donations and sales of publications.

- ❖ Publishes the periodical *Daylight* for subscribers in 20 countries.
- ❖ Operates a website at www.daylightorigins.com
- ❖ Publishes and distributes pamphlets on Origins issues.
- ❖ Provides mail-order service for literature and audio-visual material.
- ❖ Promotes links with other Catholic Origins groups worldwide

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Editor & Secretary: Anthony Nevard
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EDITORIAL

In planning each number of *Daylight*, I try to select items that look at interesting aspects of origins from a scientific or philosophical position, and also include something from the perspective of the Bible or Catholic Theology. There are other esteemed publications that review recent published research, such as *Creation*, from the *Creation Science Movement*, or perhaps comment on current controversies in the Catholic Church, such as *Christian Order*.¹ Although we have often included newly-composed articles on various subjects, there is much valuable material also to be discovered in publications from the past. This clearly applies to earlier doctrinal and secular works composed without any modern pro-evolutionary prejudice. It can also be revealing and refreshing to read scientific writings of pre-Darwinian times that presume the truths of Divine Creation, the existence of our first two human parents, and the reality of the Flood. Of course, we still need to make allowances for the state of the writer’s contemporary knowledge, as well as their own presuppositions, for example believing in the ‘Day-Age’ theory. Nevertheless, such extracts are valuable in demonstrating that the false ideas of neo-Darwinism *depart* both from sound scientific views of the past, and from traditional Catholic doctrines.

¹ **Creation Science Movement**, PO Box 888, Portsmouth PO6 2YD www.csm.org.uk
Christian Order, Office 208, 56 Tavistock Place, London WC1H 9RG www.christianorder.com

Spontaneous Generation contradicts Biological Science

Our first article in this issue was written by a surgeon about 80 years ago and confirms ideas on the origin of life covered in my article in *Daylight No 65*.² References are made to the works of Jenner, Pasteur, Lister and Mendel, illustrating three foundational principles of modern medicine and surgery. All of these are verified in practical ways by science and experience, but contradict the theory of evolution regarding the origin of life, health and disease, and heredity. Wilson writes elsewhere in the same book:

“The God revealed by Christ is the same as that mysterious power which Science has seen at work in the lives of all living things...Christianity and Science speak the same truth and discover the same mystery.” [pp. 100-101].

The Dark Mystery of Coal

The existence of coal deposits unevenly distributed across all continents provides good evidence of the burial of vast floating mats of vegetation by mineral material of marine origin. This article outlines contrasting ideas of the origin of coal seams, leading to the notion that coal did not need millions of years to form, and could have been laid down by a global deluge.

This is not meant to imply that there are no unsolved problems or difficulties with reconciling facts with theory, but rather that the weight of evidence is greatly in favour of a cataclysmic interpretation rather than the alternative. Obviously such ideas have implications regarding the origin and relationships of fossils, the geologic column and the ages of sedimentary strata.

Other sources not cited in the article that explore these ideas include:

Bowden, M., *True Science Agrees with the Bible*, Sovereign Press (1998), pp. 371-375

Brown, W., *In the Beginning: Compelling Evidence for Creation and the Flood* ; read online at <https://www.creationscience.com/onlinebook/IntheBeginningTOC.html>

Daly, R., *Earth's Most Challenging Mysteries*, The Craig Press (1972), pp. 129-141

Oard, M., *Flood By Design*, Master Books (2008)

Pimenta, L.R., *Fountains of the Great Deep*, New Wine Press (1984), pp. 186-203

Waite, Albert A.C. (Ed.), *Let the Earth Speak*, Mandra Publishing (2001), pp. 78-88

Population, Climate Change and a Catholic Biblical Perspective

In the Judeo-Christian tradition, the growth of human population is seen as the consequence of God's providence: “Increase and multiply, and fill the earth

² ‘Viruses and the Mystery of Life’, *Daylight* No 65 (April 2020), pp. 27-34.

and subdue it,” [Gen. 1: 28]. To this end He gave mankind dominion over the created animals, and provided plants as food for all. This Divine commission was repeated after the Deluge for Noah and his family [Gen. 8:17; 9:1, 2, 7], allowing the eating of meat, and sealing the ‘everlasting covenant’ with the sign of the rainbow. God also promised: “All the days of the earth, seed-time and harvest, cold and heat, summer and winter, night and day, shall not cease,” [8:22] and “there shall no more be waters of a flood to destroy all flesh.” [9:15]

Religious faith offers an explanation of ultimate origins, promises of good in a future world, and a moral code of life leading towards that good end. It is accepted that ‘climate change’ has occurred in the past and still continues. But wrong assumptions about origins, ignoring significant events in the past, could easily lead to bad decisions in society affecting all our futures.

According to Scripture, the world was created perfect, as the environment for the first pair of humans, created as highly intelligent rational beings. As a consequence of their rebellion, all of creation was firstly affected by the Curse. Secondly we had the formation of continents and mountain ranges during and after the Flood, with their dramatic associated climate changes, including the cooling for hundred of years through the Ice Age. Further changes occurred as the earth warmed again, leading to relatively smaller fluctuations in historical times, such as the ‘Medieval Warm Period’ [about 950-1250 AD] and the ‘Little Ice Age’ [about 1300 – 1850 AD]. The Bible warns us of drastic events in the ‘last days’ [e.g. Mt. 24; Mk.13; Lk.21] but also promises “a new heaven and a new earth” [Apoc. 21].

For an evolutionist, current data on the environment and climate change are viewed from a very different perspective. Nevertheless there are many highly-qualified experts who contend, from no religious position but entirely on scientific grounds, that fossil-fuel CO₂ emissions are not causing damaging temperature rise and that measures to totally replace such fuels with ‘renewables’ such as solar and wind are harming economic growth and development, and having adverse effects on poorer countries and peoples.

This has become a highly contentious issue and the mass media and education generally provide very biased material (just like they do on evolution). For a Christian view on this subject I recommend:

Foster, P., *While the Earth Endures – Creation, Cosmology and Climate Change*, St Matthew Publishing, 2009 (237pp). [Foreword by Prof. David Bellamy OBE]

Ham, K. (Ed.), *A Pocket Guide to Climate Change – A biblical perspective on the controversy*, Answers in Genesis, 2018 (93pp).

Bases of Biology

R. McNair Wilson, M.B., Ch.B.

From: *The Witness of Science* [1942]¹

MODERN Medicine and Surgery are founded on the truth, enunciated by Pasteur, that life proceeds only from life and only from life of the same kind and type. This truth found an early expression in the work of the great English physician, Sydenham, who showed that certain kinds of “fever” were characterized by symptoms which made it possible to recognize them and to differentiate them from one another. An example is scarlet fever; another example is typhoid fever. Sydenham did not in fact draw the conclusion from his work that an illness of a special kind is probably the effect of a special cause, but he did remove the emphasis from the so-called “humours”² of the body to hypothetical agents, acting from outside—little as he knew about such agents. At a later period Jenner, a Gloucestershire practitioner, observed the fact that persons who had suffered from cowpox—the number included most dairymen and dairymaids—did not, as a rule, suffer from smallpox. Jenner carried Sydenham’s study a step forward by establishing between two diseases a relationship of so specific a kind that recovery from one gave effective protection against the other. Thus in addition to discovering vaccination, Jenner laid the foundation upon which Pasteur was to build.



The Jenner Museum, Berkeley,
Gloucestershire [Editor’s photos, 1971]



‘Temple of Vaccinia’ in the garden,
where Jenner conducted vaccinations.

¹ Subtitled *Being Letters to my Sons about the Christian Faith* ; John Murray, 1st Edn. Pp. 3-8. Robert McNair Wilson (1882-1963) was a surgeon, writer and politician. Graphics and footnotes added to this article [Ed.].

² The Humoural Theory was enunciated by Hippocrates of Cos and found a supporter in Galen.

These foundations were the rigid character of disease-types (the fact that disease transmitted artificially retained its characteristic symptoms) and the specific character of acquired immunity to disease. Only diseases closely resembling smallpox were able to protect against smallpox. Persons who had acquired immunity to smallpox had not acquired immunity to other diseases having a different symptom-complex, for example scarlet fever or typhoid. Obviously, therefore, specific causes were at work. Pasteur began his work at

this point, and when he found small microscopic “bodies” in the dying silkworms submitted to him at Lyons, was bold enough to relate the presence of the “bodies” to the fact of disease—thereby saving the silk industry of France from the ruin which threatened it. Work upon anthrax, by which disease flocks and herds were being decimated, followed soon afterwards. Pasteur showed that if the bacilli,

which were an invariable concomitant of anthrax, were first killed and then injected into the bodies of sheep, these sheep became immune and could not be infected with anthrax. He declared that the bacilli were the true cause of the disease and that, in their absence, anthrax could not occur. He declared further that the bacilli were definite and clearly differentiated living organisms which retained their characters in different circumstances and which reproduced bacilli exactly like themselves both in respect of form and in respect of the power to produce anthrax in animals. The bacilli bred true, as did the higher creatures; their poisonous properties were transmitted from generation to generation, and these poisonous properties produced at all times the same symptoms in the animals subjected to their influence.

Pasteur seems to have been unaware at first that his discoveries ran counter to the accepted doctrine of spontaneous generation; he was not left long in doubt about the matter. A storm of protest broke about his head and he was told that since “ferments”—as his microbes were called—arose of themselves in all decaying bodies it was ridiculous to suggest that there could be any transmission of qualities from parent to offspring. Pasteur’s reply to his critics was the work he had accomplished. Stung by their vehemence he prepared still more convincing demonstrations which he offered at a lecture in the Sorbonne in Paris to an audience that included Napoleon III. He showed his audience two flasks each containing beef soup. The soup in one of the flasks retained its clearness: the soup in the other flask was turbid. He stated that the clear flask had been filled and sealed six months before whereas the turbid



Silkworm, imago and cocoon

flask had been filled only the day before and had not been sealed at all. Why, he asked, had the soup in the sealed flask remained unaffected during six months whereas the soup in the open flask was already, after twenty-four hours, in a state of decomposition?

He answered his own question: *Life had been excluded from the sealed flask.*

Spontaneous generation, in other words, had not taken place during six months; but in the course of a few hours living bodies had entered the open flask from the air and had begun to corrupt its contents. These living bodies, therefore, were not generated spontaneously, but were the offspring of other living bodies of the same type and kind as themselves. *Life came only from life.*

It was this demonstration which, when he read of it, fired the imagination of the young British surgeon Joseph Lister, then practising his profession in the wards of the Royal Infirmary in Glasgow. Lister was a Quaker, Pasteur a Catholic; both men possessed in a high degree the spirit of service and the passion to help their fellows. Lister had felt a profound depression since he came to Glasgow; his work as a surgeon was defeated in almost every case by the terrible “wound fever” which attended it and which, so often, led to the loss of the patient’s life. Patients were afraid to submit themselves to surgery; surgeons hesitated to operate except in desperate cases where, in any event, the risk was so great as to justify the use of a dangerous remedy.



Joseph Lister (1902)
[public domain]

Nobody knew how wound fever arose; but, it was supposed, in accordance with accepted doctrine, that poisonous ferments were generated spontaneously in every wound and that such generation was unavoidable. Lister had rejected an idea so subversive of effort and of hope and had set himself to re-examine the matter, but had made small progress at the time when he became acquainted with Pasteur’s work.

That work opened a new avenue of thought. Lister determined to proceed upon the assumption—it was only an assumption at that period—that living organisms fell into wounds from the air. He sealed his wounds as Pasteur had sealed his flasks, bathing them in a solution in which micro-organisms were unlikely to survive and dressing them with substances through which micro-organisms were unlikely to penetrate. In addition the patient’s skin was carefully cleansed and the surgeon dressed himself in clean overalls and washed his hands before instead of, as formerly, after the operation.

So great a success attended these measures that Lister accepted immediately Pasteur's teaching that life is not generated spontaneously but proceeds only from pre-existing life, and further that types of life breed true in the sense that each kind of micro-organism produces offspring identical with itself. Upon this basis surgery and also the science of the preservation of foodstuffs, have been securely built. The surgeon and the packer of foods exclude life from their operation or commodity and remain in the full and comfortable assurance that life will not arise spontaneously to upset that calculation. Thus the power to heal and help has been immeasurably increased and it has been made possible to carry the products of all countries to the ends of the earth.

Not only so. From Pasteur's work and Lister's work has come also the power to protect men and animals against diseases of many different kinds. The discovery of Pasteur himself that inoculations of killed anthrax bacilli protected sheep against that fatal disease and his later discovery of the means of preventing hydrophobia were in the direct line of descent from Jenner's discovery of vaccination. All were based on the assumption that "like begets like" and that, consequently, protection can be obtained against generations of germs by the simple process of using vaccines made from the type against which protection is desired. If like did not beget like, if there was a kind of spontaneous change of type whereby, for example, anthrax bacilli were transmitted into the agents of some other disease, inoculation, instead of being a method of precision, would become a mere shot in the dark.

Inoculation has proved its merits and has become one of the most potent of the weapons of preventive medicine. Thanks to the work of Almroth Wright and Leishman it is now possible to give protection against typhoid fever and various diseases of the tropics which formerly claimed many thousands of victims. Wright's work has been tested not only in conditions of peace but also in those of war and has driven typhoid fever from the battlefields of Europe. So precise is its effect that when the campaign in Gallipoli began in the Four Years' War, and troops were exposed to infection by the fevers paratyphoid A. and B., it was found that these troops had not been protected, although they were fully protected against typhoid itself. Complete protection is now given by making vaccines which cover the whole typhoid group.



Typhoid inoculation – Canadian Expeditionary Force, Quebec, 1914.
[public domain]

Thus the abandonment of the untrue doctrine of spontaneous generation and the discovery of the truth that life proceeds only from life and only from life of the same kind and type as itself, has transformed the face of the world. Wound fever is a thing of the past; there is the achievement of modern surgery; food preservation has made it possible to heap our tables with the products of the whole world; by means of new methods of vaccination we are getting rid of typhoid fever and diphtheria and many other diseases.



Gregor Mendel
[public domain]

The researches of the Abbé Mendel afford another line of approach to this subject. Mendel showed that traits of form are handed on from parent to offspring according to definite laws, the nature of which he was at pains to elucidate. These traits have come down, often, from remote ancestors; they keep reappearing with astonishing faithfulness. On the other hand traits not found in the family tree, so to speak, never appear in any member of the family. The trait in Nature is as persistent as the type. Mendel was able, however, by careful cultivation to

develop one set of traits at the expense of other sets, for example by mating tall plants with tall plants of

the same species until every seed could be relied upon to produce a tall plant. He could thus “breed out” a trait—in this case smallness—from the stock. Having done so, he knew that the trait—smallness—would never reappear so long as mating was confined to the seeds of the tall stock. There is no spontaneous generation of traits: they can be excluded, just as life can be excluded: they cannot create themselves.

Upon this foundation of knowledge great and most valuable discoveries have been based. One of these is the so-called Canadian winter-wheat, by means of which vast areas of the prairie have been brought under cultivation. Winter-wheat is a product of Mendelian Selection. It continues to reproduce wheat of the same character as itself—that is to say wheat suitable for planting on the prairie. It does not generate spontaneously those traits which, once upon a time, its ancestors possessed but which were deliberately bred out of the stock. Were it otherwise, the Canadian crop would change its character and so, in course of time, would fail altogether.



Inspecting wheat crop.

[www.stockphotosecrets.com]

The stock-breeder has profited no less than the agriculturalist by Mendel's work and has been able to supply himself with beasts adapted to his special requirements. Once the desired strain has been achieved it carries on from generation to generation.³

I want you to fix your minds on these great truths of science and to remember, at all times, that they are the bedrock of our present achievement. Let me repeat them.

1. *Life proceeds only from pre-existing life and there is no such thing as spontaneous generation of life.*

To the establishment of this truth by Pasteur and Lister we owe modern surgery, the hygiene of cities, and the whole science of food preservation.

2. *Types breed true in all circumstances and there is no such thing as the spontaneous generation of a type, whether directly or by the mutation of some other type.*

To the establishment of this truth we owe vaccination, such remedies as anti-diphtheria serum and anti-tetanus serum and such preventive measures as inoculation against typhoid and toxin-antitoxin protection against diphtheria.

3. *Traits are transmitted from ancestors and there is no such thing as the spontaneous generation of a trait.*

To the establishment of this truth we owe the Canadian winter-wheat and numberless other important discoveries.

The doctrine of spontaneous generation was sterile. It was a tree which bore no fruit. The doctrine that life proceeds from pre-existing life of the same type and possessed of the same traits is the most fecund of which science holds record. It must be accounted matter of astonishment, then, that, side by side with the renaissance of science in the nineteenth century, there appeared a body of teaching wholly subversive of the principles underlying that renaissance. The doctrine of Evolution assumes the spontaneous generation of life and asserts the spontaneous generation by mutation both of types and of traits.

³ "Winter wheat has major environmental benefits. It helps reduce wind and water based soil erosion, out competes many weeds, and generally conserves energy because of the fewer field operations." In western Canada, its yield is about 25% higher than spring wheat, but flour from the latter has slightly better baking qualities and so is more popular. Selective breeding continues to improve winter wheat and raise its market value.



The Origin of Coal



Anthony Nevard

The story of the formation of what was once a familiar household fuel has been imparted to schoolchildren for centuries. Here is a typical version of the tale:

There was formerly a time when the carbonic acid of the air was in much greater abundance, and favoured the growth of those plants which thrive where there is plenty of water, as in swamps and marshes. They grew and decayed for a vast period of time, till a thick stratum of carbonaceous matter was deposited, which, after being buried (by some convulsion of nature) at a great depth, and pressed by the enormous weight of the superincumbent earth into a hard solid substance, is now being dug up by man, and forms that most valuable of all products of the mine, coal. ¹

Microscopic examination of much of this material shows a texture similar to modern coniferous wood and confirms that coal originated as once-living vegetation; some of the fossilized plant remains that it contains can be identified as belonging to known genera of ferns, tree-ferns, club mosses, horsetails, sedges etc. In addition, marine fossils are not uncommonly found. The alternate depositions of sedimentary rocks such as clay, shale, sandstone and limestone also provide clues to theories of coal formation. In this brief article we shall consider some of the issues raised on this matter when evaluating the evidence in relation to conflicting scenarios of the past.

Where, how and when?

The basic questions that arise are: where were the plants growing before they turned into coal? How did this process happen? And over what time period? These questions are connected with whichever hypothesis is being considered. There are two broad alternatives:

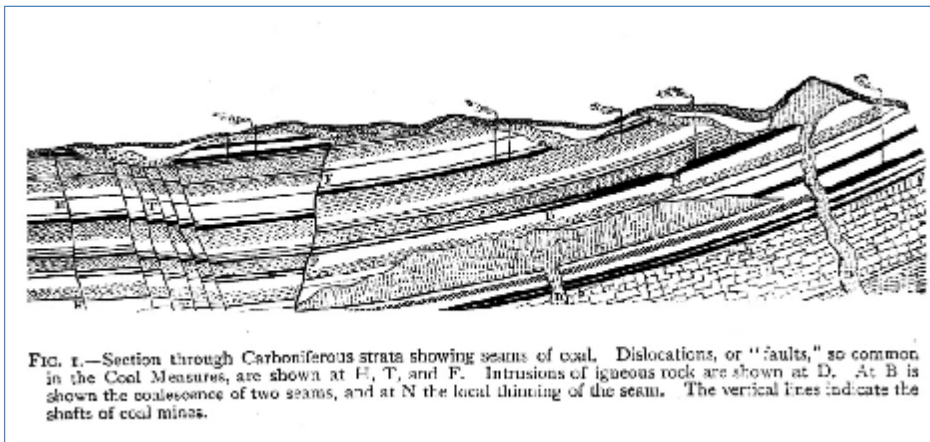
The *autochthonous* theory ²: the plants grew successively in large freshwater swamps or bogs over thousands (or millions) of years. This is the theory adopted by those favouring a long-age uniformitarian philosophy.

The *allochthonous* theory: the plants grew in a different place and were transported (e.g. by flood waters) as vegetable debris before accumulating in layers to eventually form coal.

¹ *The Marvels of Nature in Earth, in Sky, and Sea*, Ward Lock and Co (1880), in ‘The Youth’s Library of Wonder and Adventure.’ (No author named.) p.41.

² From Greek: *αὐτός* (autós, “self”) + *χθών* (khthōn, “earth, soil”).

It is, of course, arguable that different coal deposits might have arisen through either of the above processes. However, there are major difficulties with the first theory. We shall consider here the coal measures found in many countries around the world and supposedly formed during some 45 million years of the Carboniferous period, beginning 325 million years ago.³



Stages of conversion of wood to coal (percentages) ⁴				
		Carbon	Hydrogen	Oxygen
I	Woody fibre (cellulose)	50.0	6.0	44.0
II	Peat from Dartmoor	54.0	5.2	28.2
III	Lignite, or brown coal (& jet)	66.3	5.6	22.8
IV	Average bituminous coal	77.0	5.0	11.2
V	Cannel coal from Wigan	81.2	5.6	7.9
VI	Anthracite from Wales	90.1	3.2	2.5
VII	Graphite	94-99.5	The remainder is ash	

As can be seen from the table above, in the fossilization of wood into coal there is a relative loss of oxygen, which may be in the form of water or carbon dioxide, and to an extent also of hydrogen. The latter may be in the form of 'marsh gas,' including methane (a compound of carbon and hydrogen). Mixed with air, this can form a highly explosive mixture ("fire damp") in coal mines. According to the conventional theory, the sequence of changes results from a combination of (a) organic decomposition (b) exclusion of air (c) high

³ 'Fig.1', Meldola, R., *Coal and what we get from it*, SPCK (1913), p.14

⁴ *Ibid.*, p. 31; data tabulated by Editor.

[Figures given are indicative of averages rather than exact predictions for every sample.]

temperature (d) high pressure (e) millions of years. Here is a standard statement from a geological article related to the black gemstone jet:

Most coal seams form when a swamp containing abundant woody material is buried; that woody material is then compacted, undergoes organic degradation, and is heated. The result is a coal seam.⁵

The sequence of vegetable decomposition by bacterial and fungal action can form compost in the garden and peat in bogs of mosses and sedges. Pressure from overlying rocks over time can turn peat into lignite, with the loss of water and volatile matter and increase of carbon content. Lignite is mostly mined from open cast sites across the world and burned in power stations, especially in Germany, China, the US and Australia. It is considered to be younger than coal and extracted from rock formations adjudged to be of the Tertiary period.⁶

Criticisms of the uniformitarian theory

The journalist Richard Milton is a notable critic of the ‘received scientific wisdom’ on evolution. He recognizes the circular reasoning and ‘conjectural’ elements in geological dating, claimed to be validated by radioactive dating, which are rarely exposed to debate and in fact lead to illogical inferences.

Curiously, too, no geologist seems to have checked out the geological column dates with an electronic calculator on a common-sense basis. Let us go back to the illustration [...] and look again at the thickness of the rocks in each period compared with the length of time assigned to those periods. Note that there is a remarkable consistency between assigned age and thickness of deposit. For instance the Cretaceous period is said to have lasted 65 million years and is 15,000 meters thick—an average annual rate of deposition of 0.2 millimetres. Now look at the Silurian period: this, too, yields an average rate of deposition of about 0.2 millimetres per year—as does the Ordovician, the Devonian, the Carboniferous, and the rest.[...]

This is a very remarkable finding [...] Throughout widely changing climatic conditions, advancing and retreating oceans, droughts, and Ice Ages, the rate of sedimentation appears to remain amazingly constant regardless—throughout the thousands of millions of years that are said to have elapsed. The presumed rate of deposition itself—about the thickness of a human hair in a year—is a matter looked at in more detail later. But it is worth pausing in passing to note that such a slow rate would be quite incapable of burying and fossilizing entire forests, dinosaurs, or even a medium-sized tadpole.⁷

⁵ <https://geology.com/gemstones/jet/>

⁶ <https://en.wikipedia.org/wiki/Lignite>

⁷ Milton, R., *Shattering the Myths of Darwinism*, Park Street Press (1997), p.23.

Unlike with lignite deposits, mining for coal is more likely to require deep shafts to be dug, providing access to the seams which lie between rock layers.

The coal measures are immensely thick sedimentary deposits containing a variety of rock types, occurring in sequences which are often repeated. Typically, these sequences include beds of shale containing freshwater fossils; overlain by strata of coal; overlain in turn by thick beds of limestone containing fossils of marine animals. These repeated sequences, called cyclothems, are a key feature of the Carboniferous rocks and are always associated with coal deposits.⁸

China is currently the biggest coal producer, followed by India, USA, Indonesia, Australia and Russia. Only about 15% is exported from its origin.⁹ Interestingly, the 'World Coal' website tells us that "the quality of a coal deposit is determined by:

- Types of vegetation from which the coal originated;
- Depths of burial;
- Temperatures and pressures at those depths;
- Length of time the coal has been forming in the deposit.

This is what might be expected from our understanding of coal formation already described.

According to the theory, coal-forming forests were found on low-lying plains near the coast and subject to periodic marine invasion. To summarise the idea:

A forest grows up in a basin or plain beside the sea. The forest becomes swampy, but with fresh water. A vast peat bog forms. The Earth's crust shifts, the basin or plain sinks and the sea covers the peat bog. Over millions of years, limestone sediments are laid down on the bottom of the sea, compressing the peat bog and increasing the rank of coal thus formed. At the end of this period, the land rises and the basin or plain is exposed once more. Again, a forest springs up on the reclaimed land; the forest becomes swampy with fresh water; a vast peat bog forms. The Earth's crust shifts and the plain or basin sinks once again beneath the sea. More marine limestones are deposited, and so on.¹⁰

This might seem a fairly plausible scenario if it were to happen two or three times in the same place – but to produce the coal measures we actually find around the world, this sequence would have to be repeated up to *sixty* times! Even geologists saturated with evolutionary convictions had to admit their incredulity of the uniformitarian narrative. To quote from a popular book from the 1920s *The World in the Past*:

⁸ Milton, *op.cit.*, p. 81.

⁹ <https://www.worldcoal.org/coal/coal-mining>

¹⁰ Milton, *op.cit.*, p.82.

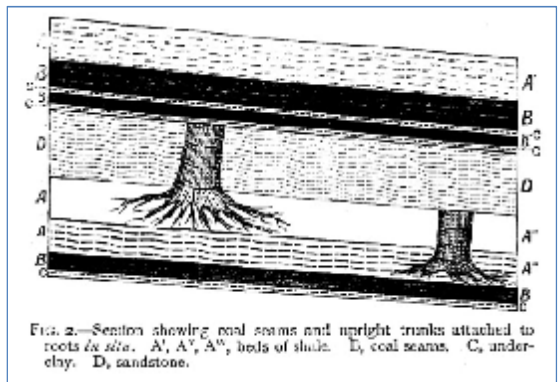
Here in Britain, as in many other parts of the world, this creation and destruction of shoreline marshes was repeated, not once or twice, but *many dozens* of times [...] In this manner, trees 40 feet or more in height were buried upright... [Italics in text].¹¹

Evidence for rapid deposition of sediments

The descriptions given by Charles Lyell of the coal measures include those in South Wales estimated to be between 11,000 and 12,000 feet deep, with about 80 coal seams that aggregate to about 120 feet. His outline of the sequence of strata formation is similar to that we recounted earlier. He reports instances of the burial of trees such as were found near Wolverhampton in 1844:

In the space of about a quarter of an acre the stumps of no less than seventy-three trees with their roots attached appeared ... some of them more than 8 feet in circumference. The trunks, broken off close to the root, were lying prostrate in every direction, often crossing each other. One of them measured 15, another 30 feet in length, and others less. They were invariably flattened to the thickness of one or two inches, and converted into coal. Their roots formed part of a stratum of coal 10 inches thick, which rested on a layer of clay 2 inches thick, below which was a second forest, resting on a 2-foot seam of coal. Five feet below this again was a third forest with large stumps of *Lepidodendra*, *Calamites*, and other trees.¹²

The disorder of the positions of the large trees could suggest the action of powerful lateral water flow, and the crushing of the trees results from the rapid accumulation of mineral deposits over them. Fossils found in coal include fish, molluscs and brachiopods, suggesting the mixing of marine animals and non-marine plants during transport rather than them living together. Most remarkably, tree trunks have been found upright and passing through horizontal strata (polystrate trees) in a manner that could not have occurred through slow burial over thousands of years while the tree was dead and rotting away.¹³



Large masses of mineral (boulders) including igneous or metamorphic rocks have also turned up in coal

¹¹ Smith, B. Webster, *The World in the Past*, Frederick Warne, 2nd edn.(1931), p.143

¹² Lyell, C., *Student's Elements of Geology*, John Murray, 2nd edn. (1874) p.391

¹³ Fig.2, Meldola, op.cit., p.15.

beds, alien in material to their surroundings – this is also suggestive of transport from elsewhere. A notable find in 1878 in a coal mine at Bernissart, Southwest Belgium, was a collection of dinosaur skeletons, representing 33 individuals of the large plant-eater *Iguanodon*. They could hardly have been preserved under a sedimentation rate of 0.2 mm per year! It has been claimed that ‘underclays’ below the coal seams were the rooting medium for the plants, but their composition does not match that of a true soil and they appear to be transported materials. Research by Rupke (1969) has shown evidence that the stigmata, previously supposed to be the roots of coal-seam trees, are unattached fragments transported into place by water currents.¹⁴

According to coal seam studies by geologist Dr H.G. Coffin, on average it could require a thickness of ten feet of peat to form one foot of coal.

On this basis, a coal seam thirty feet thick would require the compression of 300 feet of peat. A 400-foot seam of coal would be the result of a fantastic 4,000 feet of peat [...] There are few peat bogs, marshes, or swamps anywhere in the world today that reach 100 feet. Most of them are less than 50 feet. A much more reasonable alternative theory is that the vegetable matter has been concentrated and collected into an area by some force, undoubtedly water [...] The concept of a global deluge that eroded out the forests and plant cover of the pre-Flood world, collected it in great mats of drifting debris, and eventually dropped it on the emerging land or on the sea bottom is the most reasonable answer to this problem of the great extent and uniform thickness of the coal beds.¹⁵

Back in the 1920s, evolutionist geologist Webster Smith shared Dr Coffin’s incredulity at the theory of the origin of coal:

Looked at merely as a matter of time, the conclusions to be drawn from these black lines in the rocks are perfectly astounding [...] Both on the land and in the water, the accumulations of decaying matter reached amazing proportions. They gathered there, generation above generation, until thicknesses of 100 feet or more had accumulated; and it is difficult to understand how such plants as came last could have obtained a foothold; so that we are driven to the conclusion that the later masses did not grow where they were found at all, but were drifted by water on top of the earlier plants. On any other hypothesis, it seems impossible to account for beds of coal which not only cover a very great area, but are 30 feet thick, even though now much compressed.

It has been estimated that the product of a heavily-timbered woodland, when compressed to the specific gravity of coal, would only amount to about ¼ inch per

¹⁴ Morris, H., *Scientific Creationism*, Creation-Life publishers (1974), p. 109.

¹⁵ Coffin, H.G., *Creation—Accident or Design?* Washington, D.C.: Review and Herald Publishing Association (1969), p.76.

century. On this basis, the 30-foot bed would take 144,000 years to accumulate. Some geologists deny that the rate of accumulation was so slow; and yet it must be obvious that the enormous mass of plants that collected in the Derby seam took an equally enormous time to *grow*, representing, as they do, countless generations of ferns, weeds and trees. A single one of the trees might possibly live for many centuries ere it fell.¹⁶

In the same book we read of the “extraordinary fossil forests” where trees “were buried vertically, just as they grew, although attaining a height of 40 feet—a sure indication of the rapidity with which the sandstone and mud accumulated about their stripped and blackened trunks.” References are made to coalfields in Kent, Derbyshire, Lancashire, Scotland, Wales, Canada, Nova Scotia, North America, India, China, Australia and continental Europe. The immense German coalfields include the 145 beds of coal at Essen, having a total thickness of 364 feet. The writer also stresses that very important deposits of the world’s coal in many countries is considered to be ‘of much later age’ than the Carboniferous Period. This includes the ‘Cretaceous’ lignite beds of North America, which often lie just beneath the surface:

It is almost unnecessary to remark that lignite is coal in the making. It is, of course, not nearly so compressed as coal, and it frequently has a woody texture, the wood sometimes being so well preserved as to retain its elasticity: thus, after being bent, it will whip back like a branch newly cut from a tree, and the fact that it has lain for thousands of centuries in the ground seems hardly credible.¹⁷



Brown coal pit, Germany
www.stockphotosecrets.com

So this implies that lignite, at least, is in reality much younger material than was once imagined. If it required high pressures from overlying rock strata to form it, those layers are now absent so must have been eroded away. If this happened slowly, taking a long time, then why is the material apparently young? This is a contradiction! So are there other lines of evidence that can help here?

Temperature, pressure or time?

While it is obviously not possible to experimentally test the effect of burial of plant matter over thousands of years, research has been carried out on how temperature and pressure could influence coalification. According to research

¹⁶ Smith, op.cit., pp.144-146. Italics in text.

¹⁷ *Ibid.*, pp.228-9. We also now know there is coal in Antarctica, even near the South Pole.

by Dr Melvin Cook, appointed explosives expert for the US Navy in 1945, wood under compaction and pressure results in a dehydration process that is exothermic and sufficient to convert the wood into a coal-like material. Milton reports that:

The best evidence that pressure, rather than time, is the cause of coalification comes from examining the rank of coal in relation to the depth of its deposit. In the United States, the Pittsburgh coal seam runs between Ohio and Pittsburgh and the strata in which the seam is contained dip downwards into the Earth at the rate of 20 to 40 feet per mile, with the coal at the easternmost end of the seam several thousand feet deeper than at the western end. As the seam goes deeper, the grade of coal increases: the deeper the burial and the greater the compression of overlying beds, the further the process of coalification has proceeded. In this case, the reaction would be started without any microbiological attack and could be achieved by pressure alone.

If coal was formed relatively quickly by rapid burial under marine sediments, then swamps, peat bogs, microbiological attack and millions of years of gradual deposition and slow pressure are no longer needed. Once again, as with the other sediments of the geological column, the key question is not so much how they were formed, but how quickly they were formed.¹⁸

According to an article written in the 1970s by geologist Prof. Stuart Nevins, the theory that *time* is a major factor in coalification:

...has become unpopular because it has been recognized that there is no systematic increase in the metamorphic rank of coal with increasing age. There are some blatant contradictions, for lignites representing low metamorphic rank occur in some of the oldest coal-bearing strata while anthracites representing the highest metamorphic rank occur in some of the youngest strata.

Nevins points out that the *pressure* theory:

...is refuted by numerous geological examples where metamorphic rank does not increase in highly deformed and folded strata. Furthermore, laboratory experiments demonstrate that increase in pressure can actually *retard* the chemical alteration of peat into coal.

He directs us to the most popular theory suggesting that *temperature* is the most important factor in coal metamorphosis:

Geological examples (igneous intrusions into coal seams and underground mine fires) demonstrate that elevated temperature can cause coalification. Laboratory experiments have also been quite successful. One experiment produced a substance like anthracite in a few minutes by using a rapid heating process with much of the heat being generated by the cellulosic material being altered. Thus the

¹⁸ Milton, *op. cit.*, p. 83

metamorphosis of coal does not require millions of years of applied pressure and heat, but can be produced by quick heating.¹⁹

Such arguments about coal formation were taking place back in the nineteenth century. In a book published a century before the above, we read:

It is to these two causes—that is to say, to pressure and to the central heat [from the globe’s interior]—that we may attribute the differences which exist in the mineral characters of various types of coal. The inferior beds are *drier* and more compact than the upper ones; or less bituminous, because their mineralization has been completed under the influence of a higher temperature, and at the same time under a greater pressure.

An experiment, attempted for the first time in 1833, at Sain-Bel, afterwards repeated by M. Cagniard de la Tour, and completed at Saint-Etienne by M. Baroulier in 1858, fully demonstrates the process by which coal was formed. These gentlemen succeeded in producing a very compact coal artificially, by subjecting wood and other vegetable substances to the double influence of heat and pressure combined.

The apparatus employed for this experiment by M. Baroulier, at Saint Etienne, allowed the exposure of the strongly compressed vegetable matter enveloped in moist clay, to the influence of a long-continued temperature of from 200° to 300° Centigrade. This apparatus, without being absolutely closed, offered obstacles to the escape of gases or vapours in such a manner that the decomposition of the organic matters took place in the medium saturated with moisture, and under a pressure which prevented the escape of the elements of which it was composed. By placing in these conditions the sawdust of various kinds of wood, products were obtained which resembled in many respects, sometimes brilliant shining coal, and at others a dull coal. These differences, moreover, varied with the conditions of the experiment and the nature of the wood employed; thus explaining the striped appearance of coal when composed alternately of shining and dull veins.

When the stems and leaves of ferns are compressed between beds of clay or pozzuolana, they are decomposed by the pressure only, and form on these blocks a carbonaceous layer, and impressions bearing a close resemblance to those which blocks of coal frequently exhibit. These last-mentioned experiments, which were first made by Dr Tyndall, leave no room for doubt that coal has been formed from the plants of the ancient world.²⁰

¹⁹ Cited from G.R. Hill, “Some aspects of coal research”, *Chemical Technology*, May 1972, p. 296. Article by Stuart Nevins, “The Origin of Coal”, in *ICR Impact* (Nov. 1976), also published by *Evolution Protest Movement*, Pamphlet No. 215, October 1977.

²⁰ Figuier, L., *The World Before the Deluge*, Cassell, Petter and Galpin (1872), p.164. Baroulier’s experiments are also mentioned in the work *Underground Life, or Mines and Miners*, by Louis Simonin, (1869), Cambridge University Press, p. 29 [see Google Books online]. For some reason (!) I have not been able to track down Dr Tyndall’s work on coal in any of the biographies I have consulted, nor any references to this work in on-line articles.

This lengthy quotation is important in establishing that empirical evidence has actually existed for some 150 years supporting the argument that coalification of wood and vegetable matter can result from the effects of pressure and heat synthesis under laboratory conditions, and definitely does not demand thousands or millions of years. However, these experiments do not seem to merit a mention in modern geological sources, so the evolutionary myth can continue undisturbed by relevant facts.²¹

According to an article in *Encyclopaedia Britannica* (2007) on the origin of coal, some deposits are believed to be over 400MY old. Yet here it is admitted that coal can be made in a far shorter time:

In laboratory experiments artificially prepared coals are influenced by the duration of the experiment, but in nature the length of time is substantially longer and the overall effect of time remains undetermined.

In the 1911 edition of the same reference source, we read:

The subsequent change of peaty substance into coal is probably due to geological causes, *i.e.* chemical and physical processes similar to those that have converted ordinary sediments into rock masses. Such changes seem, however, to have been very rapidly accomplished, as pebbles of completely formed coal are commonly found in the sandstones and coarser sedimentary strata alternating with the coal seams in many coalfields.

So again we see that the chemical changes of coalification from vegetable material, increasing the carbon content, are certainly not dependent on a multi-million-year evolutionary scenario. This makes it reasonable to consider a global deluge as a causative agent in the formation of coal beds.

Further evidence for a world-wide flood in forming coal beds

- The discovery of great numbers of animal and plant fossils concentrated in extensive ‘fossil graveyards,’ including coal and oil beds that defy a uniformitarian explanation.
- The mixing of organisms from different habitats and climatic regions, for example in the Cumberland Bone Cave in Maryland, the volcanic shale rocks of Florissant, Colorado, the Baltic amber beds containing modern-type insects, and the lignite beds of Geisltal, Germany, that include plants and insects with preserved leaves and

²¹ The current *Wikipedia* entry for ‘Coal’ states that:

Coal is formed when dead plant matter decays into peat and is converted into coal by the heat and pressure of deep burial *over millions of years*. [my italics]

soft body parts. Such deposits indicate unusual transportation and rapid burial mechanisms.²²

- The evidence of rapid burial and preservation by freezing, such as millions of mammoths and other large mammals in the permafrost of Siberia and Alaska.
- The autochronous theory of coal bed formation is not reflected by any modern day observations of peat grading into a coal bed. There is hardly sufficient peat in any area to form a single typical seam of coal. The principle that ‘the present is the key to the past’ completely fails to explain the origin of coal.
- The eruption of Mount St Helens in 1980 resulted in millions of trees being uprooted and ending up as a floating mat of logs in Spirit Lake. The scorching of one end of a log was found to have turned the wood into a coal-like material.²³
- The strata of coal beds are found in vertical sequences with a great variety of other strata between them. Their form and regularity are typical of sedimentary rocks laid down by water. Any intrusions, faults, folding or other disturbances generally affect all the strata [see diagram on p.9] suggesting the same event caused their formation.²⁴
- Coal samples taken from different depths and locations were subjected to Carbon 14 tests in the RATE [*Radioisotopes and the Age of the Earth*] project and revealed significant and similar C^{14}/C^{12} ratios. This should not be detected (a) if all the coal is really more than 90,000 years old, and (b) if the seams were laid down many millions of years apart.²⁵

While there are still many puzzling aspects to coal formation, there is strong support from modern research for restoring the pre-Darwinian model of Flood Geology, and rejecting the prejudice against the historical Biblical account.²⁶

²² See Morris, H., *The Genesis Flood*, Baker Book House (1961), pp. 154-169.

²³ See article by Dr John Morris, *On the Origin of Coal*, <https://www.icr.org/article/6093>

²⁴ See Byron C. Nelson, *The Deluge Story in Stone*, Bethany Fellowship Inc. (1968).

First published in 1931, this work demonstrates that “this cataclysmic interpretation of the geologic strata was held by almost the entire scientific and religious world during the 17th and 18th centuries, as well as by the earliest Christian scholars.” (Foreword by H. Morris.)

²⁵ See article by J. Mason, ‘Radiocarbon in coal: is uranium the answer?’ from *Journal of Creation* 32 (1), 2018, pp. 59-67 https://creation.com/images/pdfs/tj/j32_1/j32_1_59-67.pdf

²⁶ Recommended further reading: books by H. Morris & B. Nelson (cited above) ;

Don DeYoung, *Thousands... Not Billions* [the RATE project], Master Books (2005), p. 51 et seq

J. Woodmorappe, *The Mythology of Modern Dating Methods*, ICR (1999);

J. Reed & M. Oard (Eds.) *The Geologic Column*, Creation Research Society (2006).

The Veneration of the Saints

Introduction by the Editor



St Albans Abbey displays several medieval wall paintings, including the Crucifixion shown here. They had been whitewashed over after the Dissolution in 1539, but were rediscovered in 1835.

In 1551, the Lady Chapel was sold to become a school. Evidence of the orgy of destruction is seen in the many statues in niches on the columns smashed or beheaded; some of the ones higher up are still intact (see photo).



In 2015, in celebration of the Abbey's 900th anniversary, seven new statues were placed in the nave screen, including some 'ecumenical martyrs'. Presumably the Cathedral's Anglican 'worshippers' do not intend us to infer that they now worship the statues, which was the reason behind the avid destruction of scores of statues and the covering of holy images by their antecedents after the Dissolution of the Monasteries.

It is tragic that this error has for so long created a barrier for many Christians from coming to the fullness of the Faith. Since *Daylight* is read by some non-Catholics, and we draw spiritual support for each issue from our saintly Patrons, I thought it appropriate to include here the following extracts explaining the rational, traditional and Biblical basis of our veneration of saints and their images. I hope these points will also be useful for readers in dealing with one of the most commonly quoted and misunderstood slurs that may be encountered in our conversations with non-Catholics.

[Photos by Anthony Nevard]

The Veneration of the Saints

From: *Handbook of the Christian Religion*

Rev W. Wilmers, S.J.¹

Indirect Acts of Religion, or the Veneration of the Saints.

248. The honor paid to the saints is in accordance with Scripture, tradition, and human reason.

Honor may be either *religious* or *civil*, according as it is founded on religious (supernatural) or on civil (natural) excellence. Supernatural excellence may be of two kinds, infinite and finite; and therefore the honor based upon supernatural excellence is likewise of two kinds—supreme honor due to God alone and an inferior species of honor due to His creatures, the saints. The former is commonly called *adoration*, although this word, as St. Augustine repeatedly remarks (cf. de civ. Dei, xx. c. 1, n. 2; cont, Faust. xx. c. 21), is by no means appropriate, being employed also to express the honor due to God's creatures. Hence the saint proposes to substitute the word *latria*, which is not subject to misunderstanding. And, in fact, theologians, accordingly, designate the worship due to God as *cultus latriæ* ; while they employ the words *adorare* and *adoratio* also to express veneration in a wider sense. That worship which is based on finite excellence is generally called by the common name, honor or veneration.

As Eunomius and Vigilantius in the fourth century, so in later times Wickliffe, Luther, Calvin, Zwingli, and their followers maintained that the veneration of the saints was unlawful.

1. That religious veneration may be paid to holy persons on account of the extraordinary supernatural gifts accorded to them we may conclude from certain facts of *Holy Scripture*. The sons of the prophets, for instance, on perceiving that the supernatural power of Elias had passed on *Elisens*, came to meet him, and *worshipped him*, falling to the ground (4 Kings ii, 15; cf. Jos. v.).

When the Apostle (Col. ii. 18) speaks against the "religion of angels" he does so in reference to an error of the Gnostics, who, as appears from the context, by certain acts of self-abasement trusted to gain admittance to the conversation of the angels. When Cornelius fell down at the feet of St. Peter and adored him, the latter justly exclaimed: "Arise, I myself also am a man" (Acts x. 25, 26); for modesty is becoming also in an apostle; and every wayfarer in this life has sufficient reason to decline marks of honor which might be suitably shown to the blessed, who are already triumphant with Christ; for the veneration paid to the saints forms an accidental part of that reward which is due to them, not in this life, but in the life to come. In like manner, the angel in the

¹ Ed. by Rev. James Conway, S.J. Benziger Bros, New York, 2nd Edition (1892), pp. 447-455.

Apocalypse refused to accept marks of honor from the apostle St. John: “and I fell down before his feet to adore him. And he saith to me: See thou do it not; I am thy fellow-servant, and of thy brethren who have the testimony of Jesus. Adore God; for the testimony of Jesus is a spirit of prophecy” (Apoc. xix. 10). The same vision is renewed on a later occasion: “And after I had heard and seen, I fell down to adore before the feet of the angel, who showed me these things; and he said to me: See thou do it not; . . . adore God” (Apoc. xxii. 8, 9). From the very fact that the adoration *is repeated* we cannot admit that St. John acted in ignorance and did something unlawful. By refusing to accept lawful honor the angel would teach us humility and show us the dignity which the apostle and prophet, and, in short, every Christian obtains by his union with Christ. If an earthly dignitary under certain circumstances for special reasons declines certain marks of veneration on earth, it does not thence follow that he considers such acts unlawful.

2. From the *first centuries* the angels and saints were honored in the Church. St. Justin (Apol. I. n. 6) writes: “We honor Him [God the Father], and the Son, and the host of the *blessed spirits*.” Even before the time of St. Justin the Church of Smyrna, in a letter on the martyrdom of St. Polycarp (n. 17), declares: “We adore the Son of God; but we honor *His martyrs* as the disciples and followers of Our Lord, for their exquisite love of their king and master.”

3. The veneration of the saints is, on the one hand, the *natural outcome* of the worship of God; and, on the other hand, it contributes to the increase of divine worship. For, if we honor God we also honor His distinguished friends and servants: just as we love our neighbor if we love God Himself (238); and, contrariwise, if we honor the saints on account of their supernatural *gifts* we honor also God Himself, the giver of those divine gifts. Nay, God Himself gives us the example: “If any man minister to Me, him will My Father honor” (John xii. 26). The veneration of the saints is also *salutary* for us, inasmuch as it incites us to the imitation of their example (S. Aug. de civ, Dei, III. c.27). Therefore the Church rightly professes that “the saints, who reign with Christ, are to be honored” (Sym. Trid.).

As Holy Scripture itself proclaimed the sanctity of St. Stephen, the first martyr (Acts vi. 8), so the Church, from time immemorial, pointed out individuals who, owing to their extraordinary sanctity, were deserving of our veneration. In the beginning the judgment concerning the sanctity of the servants of God belonged to the bishops individually. To prevent abuses, however, it was subsequently reserved to the sovereign pontiff. St. Ulrich, bishop of Augsburg, was the first saint solemnly canonized by Pope John XV, (A.D.993). The Church makes use of the power granted to it only when it determines for the faithful the object of their veneration, not only in general but also in particular—when it teaches not only in general that the saints deserve our veneration, but also declares in particular that this or that servant of God is really a saint, and, consequently, a suitable object of our veneration. The *canonization*

of the saints according to the present discipline of the Church is preceded by the act of *beatification*, which permits, not a universal, but a *limited* public veneration of a servant of God—restricted to a certain country or district, or to a certain religious order. Two things must be proved in order to obtain the beatification or canonization of a saint: heroic virtue and miracles wrought by the saint's intercession after death.

249. The invocation of the saints, in accordance with the teaching of the Church, is useful and salutary.

1. From the dogma of the *communion of saints* it follows that the blessed in heaven can, and actually do, pray for us, and obtain for us the grace of God by their intercession (213). This is still more emphatically true of the *saints*; for, owing to their more intimate union with God, as His special friends, they have a stricter title (as far as we can speak of right in this matter) to be heard; and, owing to their greater love for us, they are more inclined to use their intercession in our behalf. But they are more certain to intercede for us if we invoke their intercession; for, what is true of God Himself, who is the pattern of the saints, holds also of the saints themselves; as God, though of Himself inclined to bestow His favors, confers His gifts with more certainty and in greater abundance in answer to our prayers (244), so also the saints will more certainly and more ardently intercede for us if we invoke them. That the saints are conscious of our prayers may be easily understood from what we have said concerning our relation to the good angels (116).

2. *From time immemorial* it was customary in the Church to invoke the saints. In the catacombs of Rome, particularly on the graves of the martyrs, may be found inscriptions like the following: “Pray for me;” “Pray for thy brethren;” etc. St. Augustine (in Joan. tract. 8-1) says that, while in the holy sacrifice of the Mass we commemorate other departed souls in order to *pray for them*, we invoke the martyrs that they may *pray for us*.”

In the most ancient *liturgies* we find instances of the invocation of the saints. In the Alexandrine Missal, bearing the name of St. Basil, the priest prays that God may, in view of the prayers and intercessions of the saints, have mercy upon us. In the liturgy called after St. Mark we read: “Protect this city [Alexandria] on account of St. Mark, martyr and evangelist.” St. Jerome (cont. Vigil. n. 6) accounts Vigilantius a heretic because he taught that, while here on earth we can pray for one another, after death the prayer of one cannot profit another. The holy father, on the contrary, makes the inference that if we can pray for one another here on earth we can do so all the more in heaven. The invocation of the saints formed part of the *ordinary preaching* of the Church. St. Ambrose (de vid. c. IX. n. 56) exhorts the faithful “to invoke the angels who have been given to us for our protection, as also the holy martyrs.” St. Cyril of Jerusalem (cat. XXIII. n. 9) teaches the catechumens that in the Holy Sacrifice we should “commemorate the patriarchs, prophets, martyrs, in order that God may by their

intercession and mediation receive our prayers.”

If any one should assert that by the invocation of the saints the mediation of Christ is disparaged, or that our confidence in God is lessened, he would thereby reproach the Apostle, who writes: “I beseech you, therefore, brethren, through Our Lord Jesus Christ, and by the charity of the Holy Ghost, that you help me in your prayers for me to God” (Rom. xv. 30). The mediation of Christ, on the contrary, is acknowledged and commended in that the saints through His merits have become the friends of God. Without reason, therefore, have been advanced against the invocation of the saints the words: “There is one God, and one mediator of God and men, the man Jesus Christ, who gave Himself a redemption for all” (1 Tim. ii. 5, 6). In what sense Christ is our *mediator* is expressed in the words: “who gave Himself a redemption for all.” In this sense the saints are not mediators; nor are we wont to call the saints *mediators*, but *intercessors*. The *mediation* of Christ is widely different from the intercession of the saints, or of the faithful for one another. Christ’s mediation rests upon His own infinite merits, in virtue of which He intercedes with His Father in our behalf. The intercession of the saints and their merits rest upon the merits of Christ, from which they derive their entire value.

250. In view of her superior dignity special honor is due to the Blessed Virgin Mary, Mother of God.

1. A *higher degree of veneration*, above all the angels and saints, is due to the Mother of God from the fact that in dignity, sanctity and glory she excels all God’s creatures.

The Blessed Virgin excels all God’s angels and saints (*a*) in *dignity*; for, while these are only servants of God she is at the same time, in the strict sense of the word, the Mother of God (126). She excels all God’s creatures (*b*) in *sanctity*; for, as was befitting her incomparable dignity, she was not only conceived without original sin, but also adorned with supernatural graces and gifts above all angels and men (133). She excels all creatures (*c*) in *glory*; for glory is in proportion to holiness; and, therefore, since the Mother of God excelled all in holiness she must also surpass all in glory. Hence she is justly called by the Church the *Queen* of angels, apostles, martyrs, etc.

2. The Blessed Virgin *deserves to be invoked* above all God’s angels and saints, because her intercession is more powerful than theirs.

(*a*) The greater *glory* of the Blessed Virgin implies a higher degree of power, since power is an



Shrine to Our Lady in
an Italian church.

[image added to article]

effect and a manifestation of glory, and forms a part of the accidental, or accessory, glory of the blessed (211). (b) The intimate relation between the Mother of God and her *divine Son* requires that, in addition to her personal prerogatives—immaculate conception, perpetual virginity, etc. ,—she should possess a higher degree of intercessory power; for the glory of the Mother redounds to the glory of the Son. (c) The relation of the Blessed Virgin *to us* entitles her likewise to a greater power of intercession; for, since the privilege was granted her to contribute to our redemption by her consent to become the Mother of God, the further grace to co-operate towards the completion of our salvation will certainly not be denied her.

3. That the Mother of God is to be honored and invoked in a *more especial way* than the other saints and angels is testified by constant tradition from the remotest ages of Christianity.

St. Ambrose (de virgin. II. c. 2, n. 7) exclaims: “What is more sublime than the Mother of God? What is more resplendent than she whom the splendor [of the Father, the Son of God,] chose for His Mother?” To show the matchless dignity of the Mother of God the fathers point to the conspicuous part which she took in the work of the redemption. As Eve co-operated to the fall of man, say the fathers, so Mary, the second Eve, to his salvation. This thought is to be found in the writings of St. Irenaeus and Tertullian, in the second century. The former says: “As all mankind was delivered up to ruin by a virgin [Eve], so it was likewise saved by a virgin [Mary] (adv. haeres. v. 19). In like manner Tertullian (de carne Christi, c. 17): “Eve believed the serpent, Mary believed Gabriel; what the former sinned by credulity the latter blotted out by faith.”

Also in the most ancient *liturgies* the Blessed Virgin occupies a higher place than the angels and saints. In the Alexandrine missal, which bears the name of St. Basil, the priest, after commemorating the patriarchs, prophets, apostles, and other saints in general, invokes “particularly the most holy, the most glorious, the immaculate Mother of God, blessed above all others, Our Lady, Mary ever Virgin.” It is manifest, therefore, that the Church in paying special honor to the Mother of God is in full accord with Christian antiquity.

While the honor due to the saints, in contradistinction to the supreme adoration due to God alone (*latria*), is called *dulia* (service, honor), the veneration paid to the Blessed Virgin is commonly called by divines *hyperdulia* (a higher species of veneration).

251. The honor paid to the images of Christ and the saints is altogether in keeping with the spirit of the Christian religion.

According to the teaching of the Council of Trent (Sess. xxv.), the images of Christ, of the Blessed Virgin, and of the other saints are to be duly venerated, because the honor paid to them is reflected upon the persons whom they represent. The *cross* is a figure of Christ Himself—first, of the crucifixion, and then of Him who was crucified and died for us on the cross. For the image of a person is that which represents him by imitation. This applies to the cross in its relation to Our Saviour, particularly since crucifixion as a death penalty, from veneration for Christ crucified, was abolished. Wherever in Christian countries a cross is erected it naturally awakens the thought of

Christ crucified.

1. If, according to the admonition of Scripture, the name of God is to be held in honor, the same is true also of the image of God, and of the figures of the saints; for the name of God is not God Himself, but an audible representation of God, as the figure of God in bronze or stone is a visible representation of Him. God Himself commanded that two golden cherubim should be put on the two sides of the oracle (Exod, xxv. 18).

When we read (Exod. xx. 4, 5): “Thou shalt not make to thyself a graven thing, nor the likeness of anything; . . . thou shalt not *adore* them, nor *serve* them,” the restriction added sufficiently shows in what sense the making or possessing of images was forbidden —i.e., to adore and serve them. For the rest, it may be granted that a restriction was imposed upon the Israelites, who were prone to idolatry and lived among idolaters, in order to prevent the danger of *worshipping idols*.

2. From the *earliest times* the Christians possessed religious images; as, for instance, the image of the Saviour under the form of the good shepherd engraven on chalices (Tertull. de pud. c. 10), the images of the Blessed Virgin carved over the altars of the catacombs. St. Jerome (ep, 108, de obitu Paulae] writes of St. Paula: “Prostrate before the *crucifix* she used to adore, as if she beheld Our Lord hanging upon it.” Hence it is manifest that the veneration of the cross was a religious one. Pope Adrian I. and the Second Council of Nice defended the veneration of images against the *iconoclastic* emperors of the East. Herein Pope Adrian, however, only followed in the footsteps of Gregory the Great.

3. Whatever is *holy* deserves a religious veneration. But the images of Christ and the saints are certainly holy as representing holy objects and serving a holy purpose—as memorials of Christ and of the saints, as representations of religious truths, as the means of fostering holy thoughts and desires. And, in fact, if, as everyone must concede, the house of God is holy and claims our reverence, because it is dedicated to God and has a holy purpose, certainly the images of Christ and of the saints are for similar reasons holy and venerable, particularly when they are publicly exposed for the express purpose of drawing our thoughts to Christ and the saints. The dishonoring of an image has always been looked upon as an insult to the person whom it represented—a fact which rests upon the presumption that images are honored or dishonored as the representations of the persons in whose memory they are erected.

The *object* of images—to remind us of Christ and the saints—is of the highest importance. Not every image has this purpose, and, consequently, not every image is an object of religious veneration. Man is the image of God; but his first and chief object is not to represent God, and, consequently, he is not the object of religious worship. Two

beams may be joined crosswise for some suitable purpose; they are not for that reason an image of Christ crucified.

As the images of the saints are only *representative*, and are to be considered holy only inasmuch as they have a holy purpose, the honor paid to them is only *relative*, i.e., based solely on, and directed to, the object which they represent. On the other hand, the honor paid to the saints themselves may be an *absolute* one, i.e., based upon, and directed to, their personal excellence. For a saint, being adorned with supernatural gifts and a high degree of sanctifying grace, is in himself an object of veneration. We honor the saints, it is true, as the distinguished friends and servants of God; but they have attained to this excellence by the supernatural gifts accorded to them.



The Shroud of Turin [copy]
This is widely believed to be the burial cloth of Christ. Intensive scientific research has proved this image has no natural explanation. Our reverence for the object is dependent on the Divine Person represented on it, and by Whose power it came to exist. *Ed.*

The *relative character* of the veneration of images is clearly expressed by the *Council of Trent* (Sess. xxv.), when it teaches that “suitable honor is to be paid to the images of Christ, of the Mother of God, and of the other saints; not as though we believed that a certain divine virtue resided in them, on account of which they deserved to be honored, or that anything was to be obtained from them, or that we put our trust in the images themselves as did the heathens of old, who trusted to their idols, but because the honor paid to them redounds to the prototypes which they represent; so that we, through the images which we kiss, before which we uncover the head or bend the knee, adore Christ, and venerate the saints, whom they represent.” Thus the council clearly teaches that the honor paid to the images is directed to Christ and the saints, and that by honoring the images we honor Christ and the saints themselves. In a similar manner the *Second Council of Nice* (Sess. VII.) taught that the images of Christ, of the Mother of God, and of the angels and saints, should be exposed, because by their contemplation “we are reminded of their prototypes, and venerate the images themselves, not, however, by adoration, which is due only to the divine nature. . . . For the honor paid to the image redounds to the person whom the image represents.” When we speak of the *adoration of the cross*, we understand not absolute adoration, which is due to the divine nature, but only relative adoration, which is directed to Christ—we adore Christ Himself as represented in His image.

[Shroud picture from www.stockphotoscrets.com]

252. The veneration of the relics of the saints is no less in keeping with the teaching of the Christian religion.

1. The bodies of the saints *are justly venerated*, since they are in various respects deserving of honor. (a) Considered *in relation to God*, they were once the members of Christ and the living temples of the Holy Ghost (1 Cor. vi. 15, 19). (b) Considered *in themselves*, they were once the instruments of heroic acts of virtue, in view of which they shall once be glorified by God. And if God in many instances preserved them from corruption after death, it was only to signify the honor and glory which is due to them. (c) Considered *in relation to us*, the relics of the saints are memorials of our friends, and trophies of our glorious brethren, and at the same time instruments by which God, according to the testimony of Holy Scripture and of history, has bestowed numberless favors upon those who venerated them (cf. 4 Kings xiii. 20, 21; Acts xix. 11, 12). St. Augustine (de civ. Dei, XXII. c. 8) records numerous miracles which in his time were wrought at the tombs of the martyrs and by the application of their relics. The teaching of the Church, therefore—that the bodies of the saints are to be honored (Trid. Sess. xxv.)—rests on the solid foundation of Scripture and tradition.

2. From the *earliest times* the Church actually venerated the relics of the martyrs. The relics of St. Ignatius, martyr, as we learn from the relation of a contemporary (Mart. S. Ign. VI.), “were brought to Antioch, and preserved in a shrine as a priceless treasure.” When St. Polycarp was burned on the funeral pyre the Christians secured his remains as a “treasure more valuable than gold and precious stones, and deposited them in a suitable place” (Mart. S. Polyc. n. 18). Such was the veneration which the Christians paid to the bodies of the martyrs that the heathens, in order to deprive the sacred relics of due honors, cast them into rivers or sunk them in the sea.

3. The early Christian writers, the apologists of Christianity, and the *fathers*, defended the veneration of the holy relics against pagans, Jews, and heretics.

When St. Polycarp was being martyred by fire and the Christians were trying to secure his body, the Jews and pagans endeavored to prevent them, as they pretended, “lest the Christians should abandon the crucified and adore him [Polycarp]. For they did not know that we [the Christians] cannot abandon Christ, who died for the salvation of all, and adore another in His place.” Thus the charge that the Christians paid divine honors to the martyrs and relics was refuted by the Christians of Smyrna (Ep. Eccl. Smyr. n. 17). St. Jerome writes a tract against Vigilantius (ep. 109, ad Ripar. presb.), in which he defends *ex professo* the veneration of sacred relics. The fathers generally advert to the numberless miracles which God worked at the tombs of the martyrs, and use this fact as an argument in favor of the veneration of their remains. The custom of venerating the relics of the saints is universal in the Eastern as well as the Western Church. ■

As this article discusses the uses of many idiomatic expressions related to living things, I thought it would provide an interesting digression for the reader from the usually more technical and philosophical material of our magazine. The writer was Professor of Natural History at the University of Aberdeen from 1899-1931. His other writings on very varied subjects clearly show Thomson to have been a Christian theistic evolutionist, but well aware of some of the contradictions between Darwin's theory and known scientific facts. [Ed.]

Natural History involved in Everyday Conversation¹

Sir J. Arthur Thomson, MA, LL.D.

It has often been pointed out that the Bible has taken (who can wonder?) a very firm grip of the current English language. Many people continually use Biblical phrases without being aware that they are quoting scripture. To some extent this unconscious quotation holds also in regard to the English Prayer Book; but among the engaging young people of present-day Scotland, born in the first decade of the century, we cannot, we regret to say, detect almost any phrases reminiscent of the Shorter Catechism! In everyday speech one often hears quotations from the poets, but we are thinking at present of tags and phrases that have been unconsciously incorporated into conversation, and our impression is that the authors to whom the majority of these are due are Shakespeare and Dickens.

What we wish to do, however, is to illustrate the extent to which Natural History has interpenetrated ordinary conversation. In the first place there are some animals with a feature so pronounced that we hit the nail on the head conversationally when we apply that animal's name appositely to a man or woman. What an ass, the big donkey, what a cat, you giddy goat, what a shrew, the skunk, what a sponge he was! This is to be distinguished from the old custom of giving an animal's name to a child (thus Deborah means "bee"), or from the still persistent custom of giving an animal's name colloquially to a man. Thus we have heard of men who went by the name of "crab," "spider," and "weasel." A common name like Todd probably means "fox" in Scotland.

In the second place, we often make an effective adjective of an animal's name—a very fishy business, a waspish disposition, what elephantine humour,

¹ From *Scientific Riddles*, Williams & Norgate (1932), pp. 241-245.

Clearly, this was written by a Scotsman for a Scottish readership. A few of these expressions would rarely be heard now, certainly not south of Hadrian's Wall! *Ed.*

quite kittenish she was, mulish was the only word for him, badly hen-pecked poor man.

Sometimes, thirdly, the reference is not to the man or woman as a whole, but to some particular quality. Thus we speak of his eagle eye, his horse-sense, his power of working like a horse, or of holding on to his victim like a horse-leech, the way he kept as close as an oyster, his quickness to make a “bee-line” for home.

Some of the comparisons, in the fourth place, where the animal is named, are so apt that our language would lose no small part of its picturesqueness if they disappeared—as slippery as an eel, a mere fleabite, as proud as a peacock, as busy as a bee, going at a snail’s pace, a fish out of water, he never turned a hair, she lived a butterfly existence, he was as greedy as a cormorant, they lived a cat and dog life together. Sometimes the point has become blunt. Thus, while we understand as merry as a cricket, we are not so clear in regard to as merry as a grig—a grig being a lamprey. Sometimes the quality referred to in the animal expresses a quite conventional estimate; thus a badger is neither surly nor foul; neither goose nor donkey can be called a stupid creature. As blind as a bat could only apply to the diurnal life; as blind as a mole is much better from the Natural History point of view, for there is no likelihood that the mole’s minute arrested eye can form a clear-cut image. The common contemptuous reference to “the brains of a hen” requires a saving clause.

In the fifth place, there are a few very effective verbs—he “wolfed” down his food; he is the man to “ferret” it out for you; he “jackalled”² for his lion; there is no doubt that he “ratted.” Sixthly, the comparison tells because it calls up a vivid, often a pleasant picture. A bird in the hand is worth two in the bush; first catch your hare; if you chase two hares you will catch neither; the hare starts when man least expects it; it’s a sairy mouse that hath but ae hole³; it is better to be the head of a lizard than the tail of a lion; a beetle in dung thinks himself a king⁴; the owl thinks all her young ones beauties; the wolf is at the door; there’s a fly in the ointment and another on the wheel; put not all your eggs in one basket nor all your bells on one horse; burn not your house to frighten away the mice; take not a musket to kill a butterfly; do not make a mountain of a mole-hill; give a dog a bad name and his work is done; many a lame dog did that man help over a stile.

² A helper or henchman: somebody who carries out menial, unpleasant, or questionable tasks for somebody. *Ed.*

³ “It’s a sorry [unhappy] mouse that has only one hole.” *Ed.*

⁴ A coarse modern version being: “Happy as a pig in s---” *Ed.*

Seventhly, there may be a biological generalization couched in simple reference to particular living creatures. You do not gather grapes off thistles. You cannot make a silk purse out of a sow's ear. Of a pig's tail you cannot make a horn. An emmet⁵ may work its heart out, but can never make honey (unless it happens to be a honey ant!). A wild goose never laid a tame egg. He that sows thistles shall reap prickles. There were tares amongst the wheat. Birds of a feather flock together. He took to evil ways as a duckling takes to water.

An eighth group includes sayings in which the Natural History is surprisingly good. The cat's automatic power of righting itself during a tumble from a height has been much studied by physiologists, and is referred to in the phrase, "falling on his feet," as also in the cat's "nine lives." As cute as a 'possum refers to the well-known death-feigning. Even a worm will turn—for instance, on a centipede. The early bird gets the belated worm—that stayed out too long. It's an ill bird that files⁶ its own nest—for the instinct of cleanliness is highly developed in most. Bees that have honey in their mouths have stings in their tails—thus drones have neither. Truths and roses usually have thorns. Don't count your chickens before they are hatched.⁷

We must keep a ninth division for those references which imply out-of-date Natural History, or something superstitious, or some puzzle. To take the last first, why do people speak of it "raining cats and dogs"? We can understand it raining tadpoles and minnows, blood-worms and sulphur, but a shower of cats and dogs is puzzling. Sometimes the background zoology is a little out of date, yet how sorry we should be to part with the eagle that renews its youth; the phoenix that rises from its own ashes; the crocodile shedding piteous tears to beguile the tender-hearted; the lions roaring after their prey (the uproariousness being normally post-prandial in Wild Nature); the deaf adder that stoppeth her ear, though there is no opening to stop; the ostrich that sticks its head into a bush⁸ to avoid being seen.

One of the hawkmoths has been watched paying a hundred visits in five minutes to the blossoms of *Viola calcarata*; what a beautiful picture of "flying visits," but we require some explanation of Shakespeare's statement that the owl was the baker's daughter. The familiar statement that the robin and the wren are God's cock and hen expresses the widespread error that these two

⁵ Archaic word for an ant. *Ed.*

⁶ Presumably from 'defiles,' or 'fouls'. *Ed.*

⁷ And "poking a stick in a hornet's nest" is hardly advisable. *Ed.*

⁸ 'Head in the sand' is surely more commonly heard nowadays. *Ed.*

birds are male and female of the same species, yet it is a pleasant superstition. In all these cases we must take the fat with the lean. Pigeon's milk is a reality; a mare's nest is a fiction—peculiarly apposite because the new-born foal staggers along so quickly after its mother.

Our tenth group is for adages of the proverb type, where the Natural History references are simply aids to vividness. The last straw breaks the camel's back; one scabbed sheep is enough to spoil a flock; kill not the goose that lays the golden eggs; the raven said to the rook, "Stand away, Black Cat"; nightingale and cuckoo sing both in one month; one swallow does not make a summer; all his geese were swans; he nourished a snake in his bosom; a lion's skin is never cheap; as well be hung for a sheep as for a lamb; one man may bring his horse to water, but ten cannot make him drink; habits are at first cobwebs, then cables; once bitten, twice shy; even an ass will not fall twice into the same quicksand; kill the cockatrice while still in the egg; curses, like chickens, come home to roost; give him a hair of the dog that bit him, and let the coward eat of a lion's heart (see *Modern Medicine, Triumphs of*); great cry, but little wool; do not let the cat out of the bag, for no one can tell how it will jump; what is sauce for the goose is sauce for the gander (see *Justice, Sense of*).⁹

These few instances of the interpenetration of Natural History into ordinary speech must suffice. Yet we are reminded of one more, that a man with a hobby is like a dog with a bone; even if it is buried he will be at it again. We feel sure that we shall have to return to this subject. ■

It is beyond the remit of *Daylight* to extend this subject further here, but just to add that there are many other interesting expressions in the language that employ the names of plants and animals. There are all the group terms, or 'nouns of assemblage': *Usage and Abusage* has a section on 'Sports Technicalities' and lists about 100 group names, along with terms for animals' footmarks, retirement to rest, cries, and tails.¹⁰ The *Dictionary of Phrase and Fable* gives about 60 terms for animal cries, with short lists of 'Animals in Heaven [in Mohammedan legend], 'Animals in Art,' 'Animals sacred to special [pagan] Deities,' and about 80 examples of 'Animals in Symbolism'—including many of those cited in the article above.¹¹ [Ed.]

⁹ I have not been able to trace any reference to the phrases in italics either in this book or in other works by Thomson. [Ed.]

¹⁰ Partridge, E., *Usage and Abusage*, Penguin Books (1963), pp.297-299.

¹¹ Brewer, E.C., *The Wordsworth Dictionary of Phrase and Fable*, Wordsworth Editions Ltd. (2001), pp. 48-49.

Resources Countering Environmental Pessimism

The ideological battleground over the creation vs evolution question, which surfaced notably in the mid nineteenth century with Darwinism and continues today, has had massive repercussions in society and the Catholic Church. The 'scientific' principles of population growth, deriving from the ideas of Thomas Malthus, suggested that (1) population is necessarily limited by the means of subsistence, and (2) population always increases when the means of subsistence increases. According to Darwin:

With civilised nations this primary check acts chiefly by restraining marriages. The greater death rate of infants in the poorest classes is also very important; as well as the greater mortality, from various diseases, of the inhabitants of crowded and miserable homes, at all ages. The effects of severe epidemics and wars are soon counterbalanced, and more than counterbalanced, in nations placed under favourable conditions. Emigration also comes in aid as a temporary check, but, with the extremely poor classes, not to any great extent.¹

The tone of this extract, following the alarmist calculations of Malthus, appears to be *approving* of checks to population, though no doubt motivated by the hope that the operation of 'natural selection' would improve the general lot of mankind in the future. Darwin points to the evidence from "savages" in India, where: "they have increased at an extraordinary rate since vaccination has been introduced, other pestilences mitigated, and war sternly suppressed."²

As we know, the application of Social Darwinism supported the 19th century era of laissez-faire capitalism, at great human expense; the rise of both Marxism-Leninism and Nazism; and forms the bedrock philosophy of Secular Humanism. Modern ideas of human selective breeding led to the founding of the British Eugenics Society in 1907, whose President from 1911 to 1928 was Charles's son Major Leonard Darwin. Meanwhile, Marie Stopes, originally a paleobotanist who worked on plant fossils in coal, supported by Margaret Sanger, had turned her attention to birth control, publishing 'Married Love' in 1918. Marie Stopes clinics continue to provide such services in Britain. Sanger promoted birth control in the USA, founding the American Birth Control League in 1921, which changed its name to 'Planned Parenthood' in 1942.

¹ Darwin, C. *The Descent of Man*, John Murray (2nd Edn. 1874), p. 66.

² *Ibid.*, p. 68. There are numerous passages in the book contrasting 'civilised' and 'savage' races that, by modern standards, would be considered blatantly 'racist,' though Darwin elsewhere says that he cannot understand how "Mr Wallace maintains, that 'natural selection could only have endowed the savage with a brain a little superior to that of an ape.'" (p.73)

Following the advances in productivity arising from the Agricultural and Industrial Revolutions in the 18th century, and the improvements in sanitation, diet, housing, medicine and surgery over the next century and a half, life expectancy has greatly increased across the world. However, by the 1960s, concerns had intensified over population increase outstripping resources and food supply, as well as over unbidden environmental consequences of industrial expansion, such as air and water pollution, toxic wastes, destruction of natural habitats and risks to wildlife. The *World Wildlife Fund* was founded in 1961 and *Friends of the Earth* in 1969; influential books appeared like Rachel Carson's *Silent Spring* (1962) and Paul Ehrlich's *The Population Bomb* (1968). The grim reality of such concerns was brought home by events like the Aberfan coal waste tip disaster (1966) and the Torrey Canyon oil tanker crash (1967). Numerous groups were set up in the 60s to study, advise and campaign about environmental issues, one of which was the reported rise in the level of atmospheric carbon dioxide and its association with 'climate change.'³ In recent years this subject has become heavily politicised as legislation to manage carbon emissions has profound negative implications for the coal, oil, gas, motor and aviation industries, and hence employment, investments and international economies. Others already see massive profits to be made from 'green energy' schemes exploiting wind and solar energy, but also in using the pretext of 'climate change' to promote immoral population control measures.

In my view, much has been gained from the work of environmental and conservation groups since the 60s, with cleaner rivers and air, much more recycling of waste materials, and increased protection for wildlife. But there are still many serious areas of concern, such as rain forest destruction, plastic pollution in the oceans, conservation of water supplies, excess food waste, over-intensive farming and use of pesticides, etc. Some environmentalists now consider that the emphasis on radical schemes for reducing carbon dioxide emissions is overshadowing more important issues, will severely restrict world energy supplies, damage economic progress, especially in poorer countries, and is actually misinterpreting the scientific facts and making unreliable predictions. Given that such policies are also being linked with promoting population control, I have examined these arguments against the current 'received wisdom' of socialist climate politics⁴, and share the following titles to provide you with a rational counterbalance in the interests of adopting a sound Christian position on this subject.

³ See <https://environmentalhistory.org/20th-century/sixties-1960-1969/> for a timeline.

⁴ <https://www.the-trouble.com/content/2018/8/16/five-principals-of-a-socialist-climate-politics>
A Marxist geographer shares his ideas of how climate change should shape socialist thinking.

Simon, Julian, *The Ultimate Resource*, Martin Robertson (Oxford), 1981 (415pp).

Professor of Economics, University of Illinois; *“challenges the principles of popular environmentalism, against the alarms against population growth and resource use.”*

Simon, J.L & Kahn, H. (Eds), *The Resourceful Earth – A Response to Global 2000*, Basil Blackwell, 1984 (585pp)

“An independent team of world experts demonstrate that on the basis of present trends the world in 2000 will be less crowded, less polluted, more ecologically stable, and less vulnerable to resource-supply disruption than the world we live in now.”

Bailey, Ronald (Ed.), *The True State of the Planet*, Competitive Enterprise Institute, 1995 (470pp).

“Ten premier scholars shatter the myths of overpopulation, food, global warming, and pesticides, while redirecting environmentalists’ concerns to the far more urgent problems of fisheries, fresh water, and third-world pollution...”

Lomborg, Bjørn, *Cool It – The Skeptical Environmentalist’s Guide to Global Warming*, Marshall Cavendish, 2007, (353pp) <https://www.lomborg.com/>
Supported by over 100 pages of references and bibliography.

Murray, I. *The Really Inconvenient Truths – Seven Environmental Catastrophes Liberals Don’t Want You To Know About – Because They Helped Cause Them*, Regnery Publications, 2008, (354pp).

Whitestone, G., *Inconvenient Facts – the science that Al Gore doesn’t want you to know*, Silver Crown Productions, 2017 (143pp)

“On every key point examined, the evidence, supported by voluminous peer-reviewed studies, reveals that the “consensus” opinion promoted by climate-apocalypse proponents is consistently at odds with reality. [...] We are thriving because of increasing CO2 and rising temperatures not in spite of it.”

Bunker, Dr Bruce C., *The Mythology of Global Warming: Climate Change Fiction vs Scientific Facts*, Moonshine Cove, 2018 (259pp)

“Facts are drawn from disciplines including: geology, chemistry, biology, astronomy, meteorology, history, and government records. This book clearly shows that contrary to the ‘fake news’ that people are barraged with every day, hard facts indicate that human-induced global warming does not pose a significant threat to the Earth or its inhabitants.”

Shellenberger. M., *Apocalypse Never – Why Environmental Alarmism Hurts Us All*, Harper Collins, 2020, (413pp)

“Much of what people are being told about the environment, including the climate, is wrong, and we desperately need to get it right.”

“Equable, balanced and wholly reliant on evidence-based science.” A Daylight reader.

The Miraculous Image of Our Lady of Guadalupe

Pope Gregory the Great in 580 presented the Bishop of Seville with a statue of Our Lady, which was treasured by the people until being hidden during the years of Moorish persecution from 711. It was rediscovered in perfect condition in 1326 after its location was revealed to a cowherd by a 'radiant lady,' and a shrine was built near the

village of Guadalupe. This popular site of pilgrimage was visited by Christopher Columbus prior to his voyage to America in 1492.

It was in 1531 on Tepeyac Hill in Mexico that a 55-year-old Indian, Juan Diego, was greeted by a lady's voice who told him to visit his bishop and request that a shrine be built in her honour. After Juan had three more visions, the bishop demanded he must ask for proof of the identity of the vision. On this final occasion, the lady asked Juan to pick nearby roses (never normally found there), which she arranged and folded in his cloak (tilma), only to be opened for the bishop. This revealed an astonishing image still intact and revered today.

The shrine of the Virgin of Guadalupe in Mexico City is the most visited Catholic pilgrimage site in the world. She is titled

the Patroness of Mexico and the American Continent, with her feast day December 12th, and invoked as Patroness of the Unborn [pro-life causes]. She has been explicitly honoured by many popes since the 18th century.

There are many remarkable aspects of the image, which defy natural explanation, as well as the extraordinary preservation of the material itself.

For more details, see: https://en.wikipedia.org/wiki/Our_Lady_of_Guadalupe

Francis Johnson, *The Wonder of Guadalupe*, TAN Books (1981)

Joan Carroll Cruz, *Miraculous Images of Our Lady*, TAN Books (1993)



Copy of the image at the National Shrine of Our Lady of Guadalupe, Bedford, England.

A Coal's Account of Itself

“I cannot exactly remember how I was formed, except from tradition; but as the members of our family (and it is a very large one, for I have relations in Staffordshire, Lancashire, South Wales, Newcastle, Scotland, and indeed in most parts of the country) are pretty well agreed on the point, I may take it for granted that the account is tolerably correct. You will scarcely believe me when I tell you that the ancestors of myself, and all my kith and kin, were trees



—nothing more nor less than stems and leaves, which the rays of the sun had ripened and made green; and it almost makes me believe in the doctrine of metempsychosis, to find myself giving out that heat which the rays of the sun stored up in the leaves of my forefathers—so much so, that a celebrated engineer, George Stephenson by name, actually called us ‘bottled sunshine.’ If you don’t believe it, examine me closely through a microscope when

I have finished giving out my heat and become a cinder, and you will find, by treating me with nitric acid in a particular way, not only the structure of the tree, but will also be able to tell from what particular class of tree I descend.”

Taken from *Once a Week* in **Hardwicke’s Science-Gossip**, [April 1 1865], p.91

Picture: www.stockphotossecrets.com

*See within this issue for a more detailed discussion
of the origins of coal.*

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