

# HALACHIC AND HASHKAFIC ISSUES IN CONTEMPORARY SOCIETY

## 188 - TORAH, EVOLUTION AND 'CREATIONISM' - PART 1 OU ISRAEL CENTER - FALL 2020

1. There are three major challenges to religion. The first and deepest .... arises from the very heart of monotheism itself and was first uttered by Abraham: 'Shall the judge of all the earth not do justice?' (Genesis 18:25). How can the goodness of God coexist with the presence of evil and the suffering of the innocent? The second is a kind of mirror image of the first. It is, as it were, not our question of God but God's question of us: how can religious people commit evil in the name of God? The third challenge - call it the clash between religion and science - varies from age to age, but it usually has the same form, first set out in the Bible in the story of the Tower of Babel.

Human beings discover a new science or technology: in the case of Babel, the art of making bricks. Breaking free of from the limitations of the past, they feel as if they gave become gods and they set about storming the heavens. Every new accession of knowledge or power has tempted humans into hubris. 'Must we ourselves not become gods? asked Nietzsche.

The Great Partnership p 209 ff

2. וַיְהִי כִּלְהַאֲרֹץ שָׁפָה אֶחָת וּדְבָרִים אֶחָדִים:

בראשית י"א:

3. ודברים אחדים - זאו צענא אחת ואמרנו לא כל הימנו שיצור לו את העליונים, נעלה לרקיע ונעשה עמו מלחמה. דבר אחר - על יחידוד של עולם. דבר אחר - ודברים אחדים: אמרו לאלף ושש מאות חמשים ושש שנים הרקיע מתמוטע כשם שעשה צימי המצול. זואו ונעשה לו סמוכות.

רש"י שם

*The story of the Tower of Babel is read by Rashi and other mefarshim as a direct assault on God - an attempt by Man to become gods through the use of technology!*

- Evolution is not simply a scientific theory. It has been used by some of its strongest proponents as a way to directly attack God.

4. The God of the Old Testament is arguably the most unpleasant character in all fiction: jealous and proud of it; a petty, unjust, unforgiving control-freak; a vindictive, bloodthirsty ethnic cleanser; a misogynistic, homophobic, racist, infanticidal, genocidal, filicidal, pestilential, megalomaniacal, sadomasochistic, capriciously malevolent bully.<sup>1</sup>

Richard Dawkins<sup>2</sup>, *The God Delusion* p51

## A] EVOLUTION

- Darwin in the mid-19th Century proposed two new ideas: (i) that all species descended from a common ancestor - possibly a single microscopic life form; and (ii) that this evolution has been effected through gradual natural selection - survival of the fittest<sup>3</sup>. Darwin did not, however, know how such changes could occur. Later the understanding of genes led to the theory that genetic mutations had occurred randomly, causing the species to change. This is now known as Neo-Darwinian Evolution (NDE).

- The accepted scientific position on the age of the Earth - around 4 billion years - is an essential backdrop to evolution<sup>4</sup>. Until it was understood that the world was this old, there was no way that the proposed mechanisms of evolution could work.

1. In a now famous debate between Rabbi Jonathan Sacks and Richard Dawkins, Rabbi Sacks uses this quote to accuse Dawkins of being anti-Semitic. Dawkins retorts that he is only anti-God, but R. Sacks makes the point that this kind of attack on the God of the 'Old Testament' is a classic restatement of Christian antisemitism. In that sense, R. Sacks accuses Dawkins of being a 'Christian atheist' and not a Jewish one! See [https://www.youtube.com/watch?v=roFdPHdHgKQ&ab\\_channel=BrianSacks](https://www.youtube.com/watch?v=roFdPHdHgKQ&ab_channel=BrianSacks) from minute 22:45-24:33.

2. Dawkins is perhaps the most vocal proponent of evolution in the public eye. He is an eminent evolutionary biologist with the highest scientific credentials. He is also vehemently anti-religion and campaigns wherever possible against God and religion. See [https://en.wikipedia.org/wiki/Richard\\_Dawkins](https://en.wikipedia.org/wiki/Richard_Dawkins)

3. Fittest in this sense does not mean the most healthy, but the individuals who were most suited to survive in their environment, at least long enough to produce the next generation. For instance brown field mice living in grassland may be better camouflaged than the white mice and thus less likely to be picked off by predators.

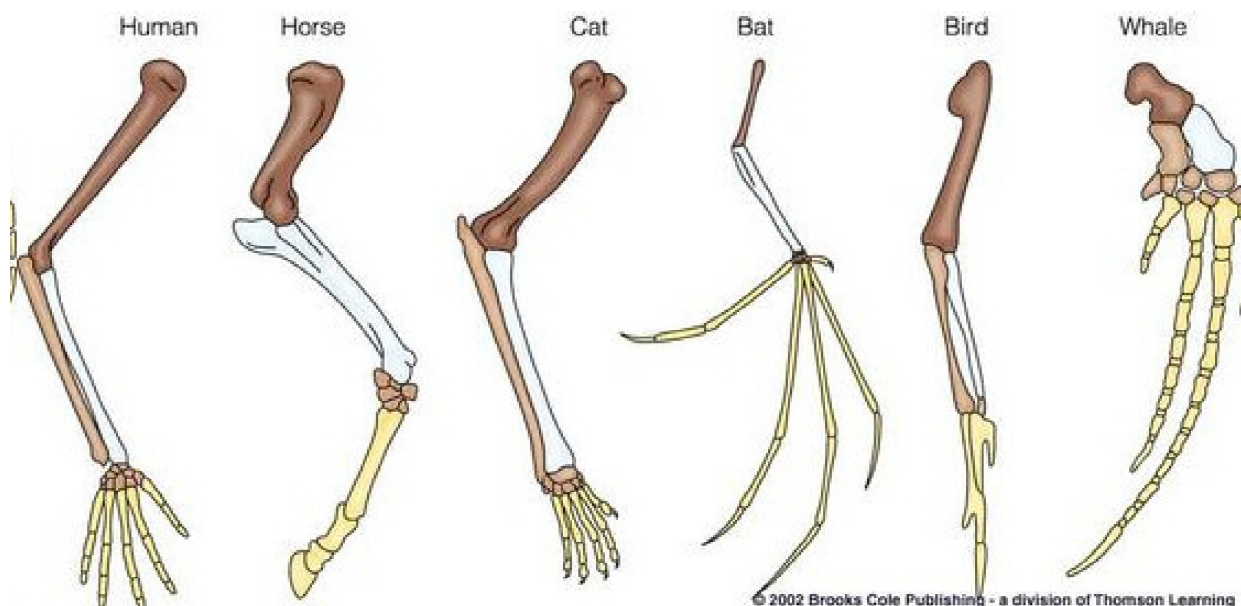
4. For more on the Torah perspective on this see <https://rabbimanning.com/wp-content/uploads/2019/12/Torah-and-the-Age-of-the-Universe.mp3> and <https://rabbimanning.com/wp-content/uploads/2019/12/Torah-and-Age-of-the-Universe.pdf>

• NDE does not (and is not required to) propose any theory for how inorganic matter changed into the first organic life. It assumes the first life form and works forwards from there. 'Evolution' is often however incorrectly presented as a theory of how all life began. This pits it entirely against 'Creation'.

## B] EVIDENCE FOR EVOLUTION

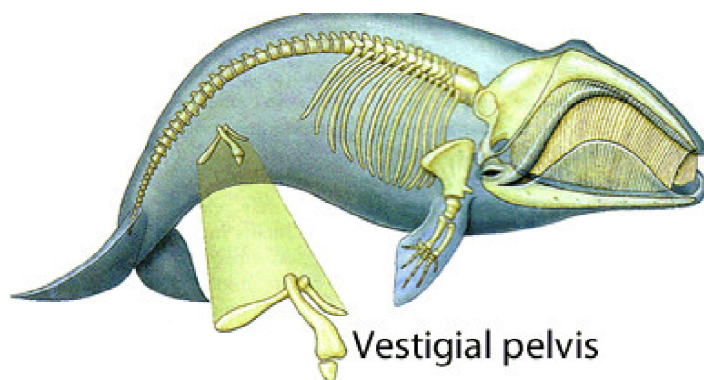
• Everyone accepts that all breeds of modern dog came from one original breed. This development has been engineered by man over the last few thousand years. Similarly, there is no doubt that a micro-evolutionary process can cause a species to better adapt to its environment and pass on those adaptations to future generations. Evolutionists argue a significant further step - that there is evidence for common ancestry between species. Evolution therefore asserts that inter-species macro-evolution is the best way to explain life on earth. Evidence that they often bring includes:

(i) Homologous Similarity eg. the bone structures of various animals are structurally identical even though they are from as diverse animals as bats, whales, men and alligators.



(ii) Vestigial Structures ie. parts of an organism that seem to perform no current function but which may have been functional at an earlier stage of evolution eg. the tail bone, wisdom teeth and the appendix in humans, extra toes of cows and sheep, tiny useless wings of flightless beetles, vestigial hind limbs in whales.

On the other hand, many organs and structures which were previously understood to be vestigial - such as the thymus gland and appendix in humans - have subsequently been identified as having real anatomical function. Labelling something as vestigial may simply be a product of our own ignorance.



(iii) Embryology - many evolutionary biologists claim that embryos pass through apparently different forms of species - eg. whales and birds develop teeth and re-absorb them. This is based on famous 19th Century research by Ernst Haeckel leading to the phrase - 'ontogeny recapitulates phylogeny'. Others claim that this is overstated at best and potentially fanciful or fraudulent.<sup>5</sup>



5. There are hundreds of websites where evolutionists and creationists throw scientific claims and counter-claims at each other. It is often difficult for the layperson to gain clarity. See <https://answersingenesis.org/theory-of-evolution/recapitulation-does-embryology-prove-evolution/>

(iv) bio-chemistry - many different species have almost identical bio-chemical genetic coding.

(v) fossil record - millions of fossils have been found of creatures that no longer exist. Most of these are marine invertebrates in the form of shells and range in size from microscopic to larger than a human head. Vertebrate fossils are far less common. Fossils of land dwelling organisms are comparatively rare and dinosaur fossils are infrequent, but get most of the attention. The conditions under which fossils form make it very unlikely that any particular species would leave any fossil record. It's estimated that of all species that ever lived, we have a fossil record of less than 1 in 100.



## C] SCIENTIFIC QUESTIONS RAISED AGAINST EVOLUTION

(i) Evolution does not seek to answer where the Universe came from - what caused the Big Bang etc.

(ii) The connection often made between inorganic matter and the formation of the first life forms is NOT in any sense scientifically proven. As such, a person could accept NDE and yet could still believe in the original Creation of life. They must always beware however of falling in to the trap of being left with a 'God-of-the-gaps'. Crick and Watson won the Nobel Prize in 1962 for their discovery of DNA. Their discovery of the complexity of life led them to doubt that it could evolve randomly. The chances of a random conversion of non-life to life is in the region of  $10^{270}$ ! Watson believed in God. Crick did not, but subscribed to the theory of panspermia - that life was seeded on earth by aliens!

(iii) The fossil record was expected by Darwin to reveal the gradual evolution of the species. It did not. New species appear suddenly in the fossil record in great number, and in fully complex form. This led to the modern evolutionary theory<sup>6</sup> of Punctuated Equilibrium - ie. that evolution happens in sudden bursts of a few 100,000 years and then nothing happens for millions of years. This lack of fossil record is seen by some as a serious flaw in the NDE.

5. The British Natural History Museum in London had an entire wing devoted to the evolution of species. And what evolution do they demonstrate? Pink daisies evolving into blue daisies; small dogs evolving into big dogs; a few species of cichlid fish evolving in a mere few thousand years into a dozen species of cichlid fish. Very impressive. Until you realize that the daisies remained daisies, the dogs remained dogs and the cichlid fish remained cichlid. It is called micro-evolution. This magnificent museum, with all its resources, could not produce a single example of one phylum evolving into another. It is the mechanisms of macro-evolution, the change of one phylum or class of animal into another that has been called into question by these data.

<http://www.geraldschroeder.com/Evolution.aspx>

Evolutionary Biologists refute this claim and point to recent finds which significantly plug those gaps.

6. The fact that some transitional fossils are not preserved does not disprove evolution. Evolutionary biologists do not expect that all transitional forms will be found and realize that many species leave no fossils at all. Lots of organisms don't fossilize well and the environmental conditions for forming good fossils are not that common. So, science actually predicts that for many evolutionary changes there will be gaps in the record. Also, scientists have found many transitional fossils. For example, there are fossils of transitional organisms between modern birds and their theropod dinosaur ancestors, and between whales and their terrestrial mammal ancestors.

<https://evolution.berkeley.edu/misconcepts/IICgaps.shtml><sup>7</sup>

Most evolutionary biologists subscribe to the Punctuated Equilibrium model, although others still oppose it.<sup>8</sup>

(iv) Random mutation leading to new species which are superior to those before them is a statistical possibility, but its likelihood is so infinitesimally small as to be effectively impossible. Mutations are extremely rare and almost always lead to a defect and not an advantage. Even given a time period of 4 billion years, it is effectively impossible for random genetic mutation to produce our current planet. Some therefore subscribe to the concept of Intelligent Design - that the mutation has been directed by an outside Being. See the book 'Not by Chance' by Dr Lee Spetner.

6. Developed by paleontologist and evolutionary biologist Steven Jay Gould.

7. For a more up to date account of the filling of gaps in the fossil record see <https://www.scienceandreligion.org/evolution/fossils.php> (1 Jan 2020) by Berkely Mathematician and Computer Scientist David H Bailey

8. Some have rather disparagingly described it as 'evolution by jerks'. Those on the other side have equally mischievously described gradualism as 'evolution by creeps'.



10. (ז) וַיִּצַר ה' אֱלֹהִים אֶת-הָאָדָם עֶפְרָר מִן-הָאֲדָמָה וַיִּפְרַח בְּאֶפְרוֹ נִשְׁמַת חַיִּים וַיְהִי הָאָדָם לִנְפֹשׁ חַיָּה:

בראשית ב:ז

- The biblical account appears to present a highly punctuated, static and speciated picture, with each specific species being created separately. There seems to be no indication of one species becoming another.
- The biblical account clearly presents mankind as quantitatively different to all other species - in terms of its dominion over and superiority to other species, and also qualitatively - in terms of its unique status as a creature made from both earth and spirit - in the 'image of God'.

## E] PHILOSOPHICAL QUESTIONS RAISED AGAINST EVOLUTION

11. In crossing a heath, suppose I pitched my foot against a stone, and were asked how the stone came to be there; I might possibly answer, that, for anything I knew to the contrary, it had lain there forever: nor would it perhaps be very easy to show the absurdity of this answer. But suppose I had found a watch upon the ground, and it should be inquired how the watch happened to be in that place; I should hardly think of the answer I had before given, that for anything I knew, the watch might have always been there. ... There must have existed, at some time, and at some place or other, an artificer or artificers, who formed [the watch] for the purpose which we find it actually to answer; who comprehended its construction, and designed its use. ... Every indication of contrivance, every manifestation of design, which existed in the watch, exists in the works of nature; with the difference, on the side of nature, of being greater or more, and that in a degree which exceeds all computation.

William Paley, *Natural Theology* (1802)

*In the late 18th Century, the watch represented the pinnacle of human technology<sup>14</sup>. Paley presents the teleological proof of God - the argument from design - by famously arguing that the existence of a watch is the clearest indication of the existence of the watchmaker. So too, the existence of the detail of creation is clear evidence of the Creator.*

12. ויאמר ה' אל אברם לך מארצך וגו'; .... אמר רבי יצחק משל לאחד שהיה עובר ממקום למקום, וראה בירה אחת דולקת. אמר תאמר שהבירה זו בלא מנהיג; הציץ עליו בעל הבירה - אמר לו 'אני הוא בעל הבירה' כך לפי שהיה אבינו אברהם אומר תאמר שהעולם הזה בלא מנהיג, הציץ עליו הקב"ה ואמר לו אני הוא בעל העולם

בראשית רבה פרשת לך לך פרשה לט סימן א

*This argument is found in Chazal in the famous Midrash of Avraham discovering the lit tower.*

13. אם ישפך לאדם דיו פתאום על נייר חלק, שא"א שיצטייר ממנו עליו כתב מסודר ושיטות נקראות כמו שיהיה בקולמוס. ואלו הביא אדם לפנינו כתב מסודר ממה שאי אפשר להיות מבלי מצוע קולמוס, ואומר כי נשפך הדיו על הנייר ונעשתה צורת הכתב עליו מעצמה, היינו ממהרים להכזיבו על פניו! שאיננו נמלט מכוונת מכוון. וכיון שזה בעינינו דבר שא"א להיות בצורות רשומות בהסכמת דעתנו. איך יוכל לומר בדבר שמלאכתו יותר דקה ותקונו יותר רחוק ועמוק בעינינו עד אין תכלית, שיהיה מבלי כוונת מכוון וחכמת חכם ויכולת יכול!?

ספר חובות הלבבות שער א - שער היחוד פרק ו

*Chovot Halevavot brings the classic argument from design in nature - the mashal of spilling random ink on a page and producing a work of writing. All the more so the incredible depth of design in nature bespeaks a Designer.*

- A modern presentation of this question revolves around the 'Goldilocks Principle'<sup>15</sup> - that a number of key constants<sup>16</sup> in the laws of physics seem to be exactly calibrated to permit the existence of life. If any of these laws or variables were even minutely adjusted, it would be impossible for life, and us, to exist.<sup>17</sup>

14. This was a product of the search for a way to measure Longitude on sea journeys. See *Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time*, Dava Sobel

15. See Paul Davies's book *The Goldilocks Enigma* (2006).

16. See *Just 6 Numbers*, Martin Rees (1999). Rees (The Right Honourable The Lord Rees of Ludlow OM FRS FEng FMedSci FRAS) has been British Astronomer Royal since 1995, was Master of Trinity College and also President of the Royal Society. Rees identifies 6 essential numbers without which the universe would not exist. These include the balance between the nuclear force and the power of gravity, giving us N, a huge number with 36 zeroes. If gravity not almost exactly 10 to the power 36 times weaker than nuclear force then we wouldn't be here. So too, the density parameter, Omega, one second after the big bang could not have varied from unity by more than one part in a million billion or the universe would not still be expanding 13.7bn years on. Had there been four dimensions, not three, gravitational and other forces would have varied inversely as the cube of the distance rather than the square, and the inverse cube law would be an unforgiving one. Any orbiting planet that slowed for whatever reason in its orbit would swiftly plunge into the heart of its parent star; any planet that increased its speed ever so slightly would spiral madly into the cold and the dark - see <https://www.theguardian.com/science/2012/jun/08/just-six-numbers-martin-rees-review>

17. Davies gives 7 responses to the Goldilocks Enigma: (i) The Absurd Universe - our universe just happens to be the way it is; (ii) The Unique Universe - there is a deep underlying unity in physics which necessitates the universe being the way it is; (iii) The Multiverse - an infinite number of multiple universes exist, having all possible combinations of characteristics, and we inevitably find ourselves within a universe that allows us to exist; (iv) A Created Universe - A Creator designed the Universe with the purpose of supporting complexity and the emergence of Intelligence. (v) The Life Principle - there is an underlying principle that constrains the universe to evolve towards life and mind; (vi) The Self-explaining Universe - a closed explanatory or causal loop: perhaps only universes with a capacity for consciousness can exist - this is related to the Anthropic Principle; (vii) The Fake Universe - we live inside a virtual reality simulation.



14. Although I did not think much about the existence of a personal God until a considerably later period of my life, I will here give the vague conclusions to which I have been driven. The old argument of design in nature, as given by Paley, which formerly seemed to me so conclusive, fails, now that the law of natural selection has been discovered. We can no longer argue that, for instance, the beautiful hinge of a bivalve shell must have been made by an intelligent being, like the hinge of a door by man. There seems to be no more design in the variability of organic beings and in the action of natural selection, than in the course which the wind blows. Everything in nature is the result of fixed laws.

Charles Darwin, *The Autobiography of Charles Darwin 1809–1882*

15. Paley's argument is made with passionate sincerity and is informed by the best biological scholarship of the day, but it is wrong, gloriously and utterly wrong. The analogy between telescope and eye, between watch and living organism, is false. All appearances to the contrary, the only watchmaker in nature is the blind force of physics, albeit deplored in a special way. A true watchmaker has foresight: he designs his cogs and springs, and plans their interconnections, with a future purpose in his mind's eye. Natural selection, the blind unconscious, automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparently purposeful form of all life, has no purpose in mind. It has no mind and no mind's eye. It does not plan for the future. It has no vision, no foresight, no sight at all. If it can be said to play the role of watchmaker in nature, it is the blind watchmaker.

*The Blind Watchmaker*, Richard Dawkins (1986)

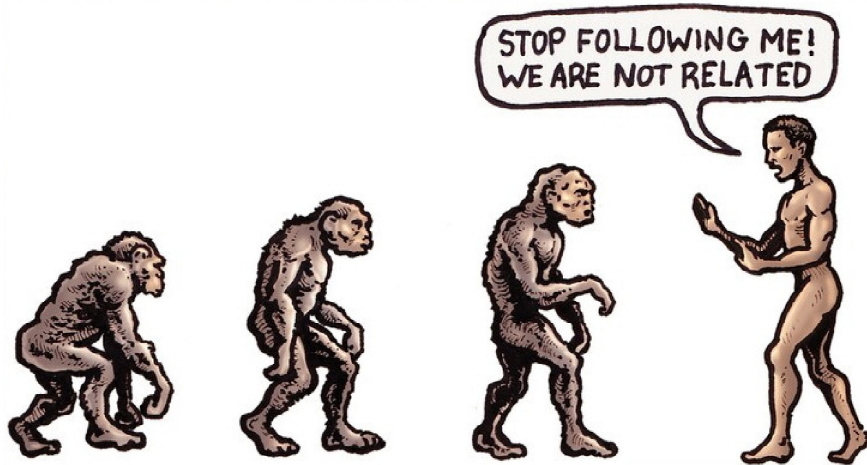
## F] TORAH AND EVOLUTION

Consider the difference between the following questions:

- HOW WAS THE WORLD MADE? - Scientific
- WHO MADE THE WORLD? - Theological
- WHY WAS THE WORLD MADE? - Philosophical

Since Darwin, and subsequently with NDE, the responses of the Orthodox Torah community<sup>18</sup> to Evolution fall into 4 basic categories:

### F1] REJECTION OF THE SCIENTIFIC POSITION AS FALSE



• Some authorities have rejected evolution as being fundamentally opposed to the account of creation in Bereishit and classic Torah thought. The argument often goes as follows: evolution is often compared to the Aristotelian theory of the Eternity of the Universe, which was consistently opposed by Torah thinkers<sup>19</sup>, despite its complete acceptance by philosophy for most of history. Just as Torah stood firm and insisted on creation ex nihilo, evidentially being proved correct by the Big Bang Theory<sup>20</sup>, so too Torah must stand firm against evolution until it is disproved. Sometimes, this is accompanied by critiques of Evolution itself to weaken the case for evolution.

18. For a very comprehensive 66 page power point by a R. Moshe Tendler, see <https://www.yutorah.org/download.cfm?materialID=506891>. Rabbi Tendler is not only a prominent Rosh Yeshiva and posek but also a professor of biology and expert in medical ethics. Nevertheless, his presentation is now 10 years old and some of the science will need to be brought up to date. See his shiur *The Theology of Randomness: A Torah View of the Theory of Evolution* at <https://www.yutorah.org/lectures/lecture.cfm/741392/rabbi-moshe-d-tendler/the-theology-of-randomness-a-torah-view-of-the-theory-of-evolution/>

Rabbi Tendler laments the lack of grasp of the scientific method by so many Torah commentators, which renders their criticisms facile. On the other hand, he lambasts the deep biases and agendas of many in the scientific community which prevent them from seeing the failings in the arguments for evolution.

19. Actually, the position of many Torah thinkers was far less clear than is often represented. Both the Rambam and R. Yehuda Halevi leave the door open for acceptance of the Platonic theory of creation and the existence of an original proto-matter (hyuli) from which the universe was created. There is a significant literature on the esotericism of the Rambam's Moreh Nevuchim and the possible hints that he gives as to his 'real' opinion.

20. Again, this is often quoted, but really somewhat misleading. Creation ex nihilo means that existence came from absolutely nothing, with NO prior natural cause. The proponents of the Big Bang Theory do not accept this. They fully expect there to be a cause for the Big Bang - they just haven't found it yet. Fundamentally, they continue to subscribe to Aristotle's theory of the Eternity of the Universe ie there are rules built into reality which work in a cause and effect manner. These have always existed and will always exist.

16. The issue is not a new one. It was first discussed in our sources in medieval times. Ever since Aristotle science had claimed that the world had no beginning. His attitude was that the world has always existed just as we see it today. In more recent times Newton's laws together with Laplace's work seemed to have proven this conclusively. Neither the philosophic/scientific proofs of Aristotle, however, nor the scientific proofs of Newton and Laplace moved our Mesorah. None of the Chachmei haMesorah who confronted the issue ever suggested that the received position be reevaluated. Creation ex nihilo has always remained a fundamental belief.<sup>21</sup> The scientific approach has always been simply rejected, even in the face of so called proofs

The Question of Time, Rabbi Moshe Meiselman, 2011

17. ואעפ"י שיהיה הרצ"ל חכם בחכמת הרפואה והטבע ובקי בנתוח, כי לא מפי הטבע והרפואה אנו חיינו, ואנחנו על חכמינו ז"ל נסמוך. אפילו יאמרו לנו על ימיו שהוא שמאל. שהם קבלו האמת ופירושי המלואה, איש מפי איש עד משה רבינו ע"ה. לא נאמין אל חכמי היונים והישמעאלים, שלא דברו רק מסדרתם ועל פי אי זה נסיון מצלי שישגיחו על כמה ספקות יפלו בנסיון הבורא.

שר"ת הריב"ש סימן תמו

*On issues of halacha<sup>22</sup>, the Rivash was insistent that we pay attention to the Mesorah and not to scientific theories proposed by the Greek and Arab scientists. The main reason is because their 'science' was based on theories and agendas but not on objective experimentation. Clearly, the more a scientific process is based on evidence and verifiable experimentation, the more credence it will have in Jewish thought.*

- R. Avigdor Miller (1908-2001) is often quoted as one of the most staunch opponents of evolution and its incompatibility with Torah. In *Sing You Righteous - A Jewish Seeker's Ideology*,<sup>23</sup> he sets out his total dismissal of evolution. He claims that much of it is biased, fabricated, unreliable and full of wishful assumptions. He also accused the scientific establishment of effectively boycotting and coercing any views that do not accord with their 'orthodoxy'.

- In truth, most of the scientific material quoted by Rav Miller is from the 1960s and, as such, is now outdated. We cannot fall into the trap of quoting arguments against evolution which are based on incorrect science and faulty assumptions!

- However, R. Miller does raise an issue which is even more relevant in today's world. This is the problem of 'scientism' - an almost religious belief in science as the means of understanding ultimate truth<sup>24</sup>.

## F2] ACCEPTANCE OF THE SCIENTIFIC POSITION AND ATTEMPTED SYNTHESIS WITH TORAH

- Others accept evolution as a plausible scientific thesis and seek to show that the wording of the Torah itself, as understood by the classic commentators, takes a similar position in terms of the evolution of life.
- We will look at this further iy'H in Part 2.

## F3] SEPARATION OF SCIENCE AND TORAH AS INCOMPATIBLE ALTERNATIVES

- Some 20th Century Torah thinkers regarded Science and Torah as two entirely separate realms, each with its own focus and agenda. Where they appear to clash, either that clash is only imagined, or the Torah is ultimately true and science is untrue in absolute terms (although perhaps correct within its own parameters).

18. By the Grace of G-d - 18th of Teveth, 5722 [December 25, 1961], Brooklyn, NY  
Greeting and Blessing:  
1 - After not having heard from you for a long time, I was pleased to receive regards from you through the young men of Chabad who visited your community recently in connection with the public lecture. I was gratified to hear that you participated in the discussion, but it was quite a surprise to me to learn that you are still troubled by the problem of the age of the world as suggested by various scientific theories which cannot be reconciled with the Torah view that the world is 5722 years old. I underlined the word theories, for it is necessary to bear in mind, first of all, that science formulates and deals with theories and hypotheses while the Torah deals with absolute truths. These are two different disciplines, where reconciliation is entirely out of place. ....

21. As we noted above, this is a significant oversimplification of the Torah position as found in the Rishonim.

22. The issue of Creation vs Evolution is not one of halacha but hashkafa, which may give more room for flexibility.

23. See paragraphs 143, 173, 177 and 178.

24. For more on scientism and Jewish responses to it, see <https://midreshetrachel.com/judaism-vs-scientism-which-religion-is-more-logical-by-rabbi-shaya-karlinsky/> for a shiur by R. Shaya Karlinsky. The debate between Richard Dawkins and Francis Collins in Time Magazine that R. Karlinsky analyzes in that shiur can be found at <http://content.time.com/time/magazine/article/0,9171,1555132-1,00.html>

2 - Even assuming that the period of time which the Torah allows for the age of the world is definitely too short for fossilization (although I do not see how one can be so categorical), we can still readily accept the possibility that G-d created ready fossils, bones or skeletons (for reasons best known to him), just as he could create ready living organisms, a complete man, and such ready products as oil, coal or diamonds, without any evolutionary process.

3 - As for the question, if it be true as above, why did G-d have to create fossils in the first place? The answer is simple: We cannot know the reason why G-d chose this manner of creation in preference to another, and whatever theory of creation is accepted, the question will remain unanswered. The question, Why create a fossil? is no more valid than the question, Why create an atom? Certainly, such a question cannot serve as a sound argument, much less as a logical basis, for the evolutionary theory. What scientific basis is there for limiting the creative process to an evolutionary process only, starting with atomic and subatomic particles - a theory full of unexplained gaps and complications, while excluding the possibility of creation as given by the Biblical account? For, if the latter possibility be admitted, everything falls neatly into pattern, and all speculation regarding the origin and age of the world becomes unnecessary and irrelevant.

4 - It is surely no argument to question this possibility by saying, Why should the Creator create a finished universe, when it would have been sufficient for Him to create an adequate number of atoms or subatomic particles with the power of colligation and evolution to develop into the present cosmic order? The absurdity of this argument becomes even more obvious when it is made the basis of a flimsy theory, as if it were based on solid and irrefutable arguments overriding all other possibilities.

Letter of the Lubavitcher Rebbe, Dec 25 1961<sup>25</sup>

19. 1 - If you are still troubled by the theory of evolution, I can tell you without fear of contradiction that it has not a shred of evidence to support it. On the contrary, during the years of research and investigation since the theory was first advanced, it has been possible to observe certain species of animal and plant life of a short life-span over thousands of generations, yet it has never been possible to establish a transmutation from one species into another, much less to turn a plant into an animal. Hence such a theory can have no place in the arsenal of empirical science.

2 - The theory of evolution, to which reference has been made, actually has no bearing on the Torah account of Creation. For even if the theory of evolution were substantiated today, and the mutation of species were proven in laboratory tests, this would still not contradict the possibility of the world having been created as stated in the Torah, rather than through the evolutionary process. The main purpose of citing the evolutionary theory was to illustrate how a highly speculative and scientifically unsound theory can capture the imagination of the uncritical, so much so that it is even offered as a "scientific" explanation of the mystery of Creation, despite the fact that the theory of evolution itself has not been substantiated scientifically and is devoid of any real scientific basis.

3 - Needless to say, it is not my intent to cast aspersions on science or to discredit the scientific method. Science cannot operate except by accepting certain working theories or hypotheses, even if they cannot be verified, though some theories die hard even when they are scientifically refuted or discredited (the evolutionary theory is a case in point). No technical progress would be possible unless certain physical laws are accepted, even though there is no guarantee that the law will repeat itself. However, I do wish to emphasize, as already mentioned, that science has to do only with theories but not with certainties. All scientific conclusions, or generalizations, can only be probable in a greater or lesser degree according to the precautions taken in the use of the available evidence, and the degree of probability necessarily decreases with the distance from the empirical facts, or with the increase of the unknown variables, etc., as already indicated. If you will bear this in mind, you will readily realize that there can be no real conflict between any scientific theory and the Torah.

Letter of the Lubavitcher Rebbe, Dec 25 1961

• This argument was also put by R. Avigdor Miller. If Adam was created with a non-existent past, so too the universe was created with a billions of year-old non-existent past, including fossils of animals that never existed. It has support in classic sources<sup>26</sup>.

20. דאמר רבי יהושע בן לוי: כל מעשה בראשית בקומתן נבראו (רש"י - וביינו 'עץ פרי'. ראו כיב לטעון פרי מיד)

ראש השנה יא.

*The Gemara states that the creation was made in a fully mature state. The tree had mature fruit and, presumably, pre-existing tree rings.*

25. For the full letter see [https://www.chabad.org/library/article\\_cdo/aid/435111/jewish/The-Age-of-the-Universe.htm](https://www.chabad.org/library/article_cdo/aid/435111/jewish/The-Age-of-the-Universe.htm)

26. It is also found in 19th Century literature as the Omphalos Hypothesis, named after an 1857 book - *Omphalos* - by Philip Henry Gosse, in which Gosse argued that in order for the world to be functional, God must have created the Earth with mountains and canyons, trees with growth rings, and Adam and Eve with hair, fingernails, and navels (omphalos is Greek for navel), and that therefore no empirical evidence about the age of the Earth or universe can be taken as reliable.



21. וַיִּצְרָה אֱלֹקִים אֶת-הָאָדָם עֶפְרָה מִן-הָאֲדָמָה ... עפר, ר"י בר סימון אומר 'עופר' - עולם על מליאתו נברא. אר"א בר שמעון אף חוה על מליאתה נבראת. אמר רבי יוחנן אדם וחווה כבני עשרים שנה נבראו

בראשית רבה פרשה י"ז:

*The Midrash learns from the word 'afar' ('ofer' is a poetic expression for a young man) that Adam and Chava were created as adults aged 20.<sup>27</sup>*

22. It was especially surprising to me that, according to the report, the said problem is bothering you to the extent that it has trespassed upon your daily life as a Jew, interfering with the actual fulfillment of the daily Mitzvoth. I sincerely hope that the impression conveyed to me is an erroneous one. For, as you know, the basic Jewish principle of na'aseh (first) and v'nishma (afterwards) makes it mandatory upon the Jew to fulfill G-d's commandments regardless of the degree of understanding, and obedience to the Divine Law can never be conditioned upon human approval. In other words, lack of understanding, and even the existence of "legitimate" doubts, can never justify disobedience to the Divine Commandments; how much less, when the doubts are illegitimate, in the sense that they have no real or logical basis, such as the problem in question.

Letter of the Lubavitcher Rebbe, Dec 25 1961

#### F4] SEPARATION OF SCIENCE AND TORAH AS COMPATIBLE PARTNERS

23. It would be worthwhile to add the following in order to place the dilemma in the proper focus. I have never been seriously troubled by the problem of the Biblical doctrine of creation vis-a-vis the scientific story of evolution at both the cosmic and the organic levels, nor have I been perturbed by the confrontation of the mechanistic interpretation of the human mind with the Biblical spiritual concept of man. I have not been perplexed by the impossibility of fitting the mystery of revelation into the framework of historical empiricism. Moreover, I have not even been troubled by the theories of Biblical criticism which contradict the very foundations upon which the sanctity and integrity of the Scriptures rest. However, while theoretical oppositions and dichotomies have never tormented my thoughts, I could not shake off the disquieting feeling that the practical role of the man of faith within modern society is a very difficult, indeed, a paradoxical one.

Rav Soloveitchik, *The Lonely Man of Faith* p.7

24. The issue of evolution and its seeming irreconciliation with the Bible troubled Christian theologians more than Jewish scholars. The naturalistic formula of man was to a certain extent common knowledge among the Jewish sages, who did not resent it, whereas Christian theologians are still struggling with the secularization of human existence by scientific research. The reason lies in the discrepancy between the Jewish Bible and the Christian Gospels, the 'Old' and 'New' Testaments.

Rav Soloveitchik, *The Emergence of Ethical Man*

- In Part 2 we will explore in more detail the sources in Torah thought which appear to synthesize with evolution (F2 above). We will also explain in depth the ideas introduced in F4 - that Torah and Science could be two separate but complimentary approaches to understand truth. To be continued .....

27. There are legitimate questions on this approach. In particular, (i) Adam obviously could not be created as a new-born or indeed as an embryo. But why should God try to fool us with 'pretend' fossils? On the other hand, the Lubavitcher Rebbe anticipates these questions and points out that there is no philosophical legitimacy to the question 'why' would God do anything? (ii) If one sees it as a test of faith, how can this be when the fossils can be explained in other ways? (iii) There is a principle that the world was not created to fool us. On the contrary, we are meant to see *emet* through the Creation. ג. אליהו חוטה פרשה - אלהיו חוטה פרשה. (iv) How far does this argument go? Did God include in creation the cave-paintings which appear to be 10,000 yrs old? Was light created on its way to earth, looking as though it had started its journey billions of years earlier? What about civilizations that appear to have existed between 6000 and 5000 years ago. Were these people given false memories of previous centuries? This would mean that God created false information in the minds of men even after the Creation? If the world was created 5781 years ago with a 'false' history, maybe the world was created 5 minutes ago to look as though it had a longer history. Some respond by arguing that 5 mins is an arbitrary time-frame, but 5781 years is not arbitrary. It is based on a literal explanation of the pesukim, which is a much more authentic approach.