The theory of Evolution

Jean Staune
Quilliam Foundation
London, 20 January 2013

“Evolution” and “Darwinism” are two different matters

"Evolution means nothing else than: all organisms are united by the links of descent. This definition says nothing in regards to the mechanisms involved in evolutionary changes".

S. J. Gould

Darwin didn’t invent the notion of evolution.

He himself mentions that 3 specialists arrived to the same conclusion regarding the origin of species:

- **Goethe in Germany,**
- **His grand-father Erasmus Darwin in the United-Kingdom,**
- **and Geoffroy Saint Hilaire in France.**

In the 4th edition of the Origin of Species, he also reminds us that:

« Lamarck was the first person whose conclusion on the subject received major attention. This naturalist defends the doctrine that all species, including Man, descend from another species ».

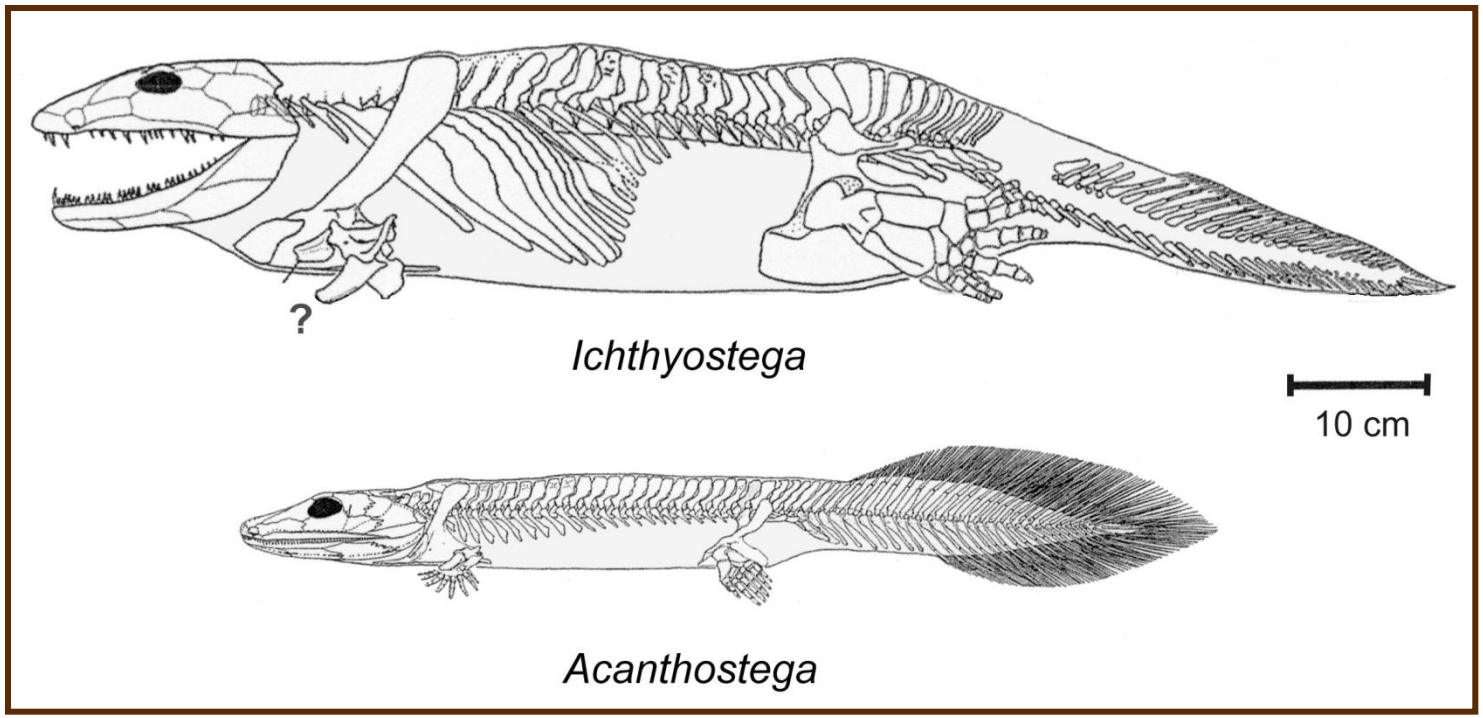
The term "Creationist" designates those that believe in a separate creation of species

There are therefore:

- **Creationists**
- **Non-Darwinian Evolutionists (ex Pierre Teilhard de Chardin)**
- **Darwinian evolutionists**

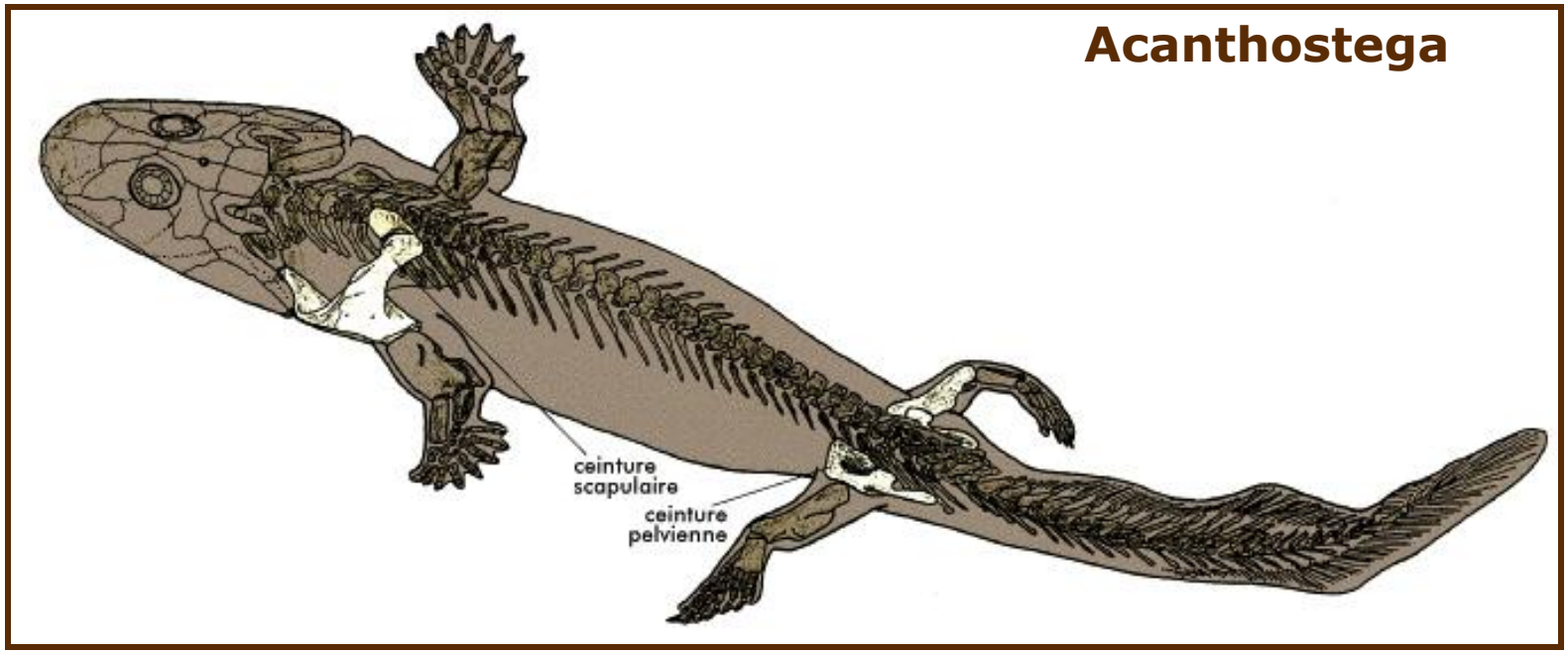
I- The facts of Evolution

Out of the water: the transition between fishes and amphibians



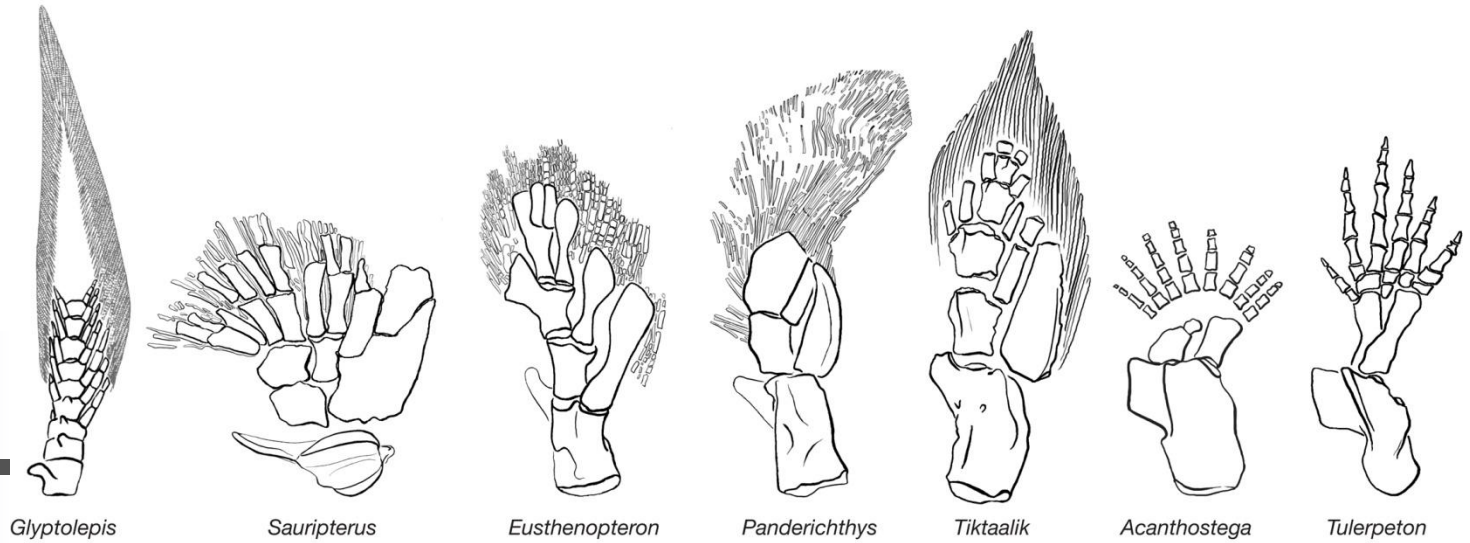
The first 2 transition fossils: Ichthyostega and Acanthostega

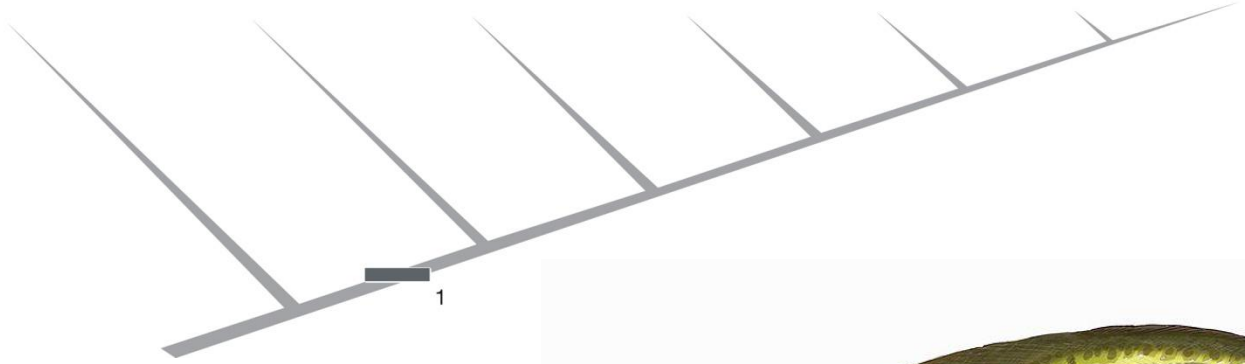
Already having no longer the structure of a fish: presence of a neck, shoulders and proto-elbows on limbs

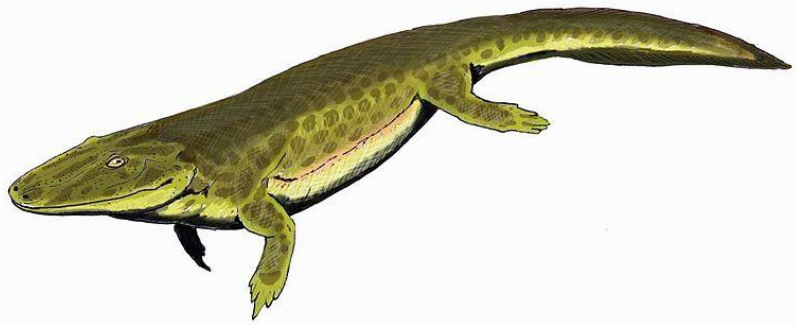


Tiktaalik discover in 2004 in Canada 380 millions years

Evolution of the legs



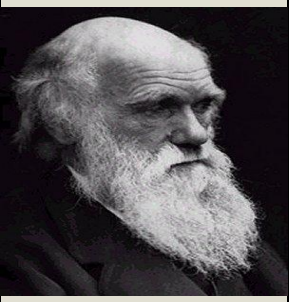




«No fossils which proves the existence of a half fish, half amphibian creature has ever been found».

Harun Yahya Page 620

Quotations translate from FRENCH EditionPage numbers refer to this edition



The Amazing Metamorphosis of the Axolotl

"Why are evolutionists incapable to find fossils with half a wing or a single wing to prove the veracity of their theory?"

Harun Yahya Page 624

The transition between reptiles and birds

Archaeopteryx : almost a bird

Possible reconstitution of Archaeopteryx

Anchiornis, a precursor of birds, discover in 2009

Other possible reconstitution

"An example of existing structural barriers between reptiles and mammals is the structure of the jaw.

The jaws of mammals consist of a mandibular bone containing teeth. In reptiles, there are three different small bones on both sides of the mandible.

Another basic difference is the presence in all mammals of three small bones in the middle ear: the hammer, anvil and stirrup.

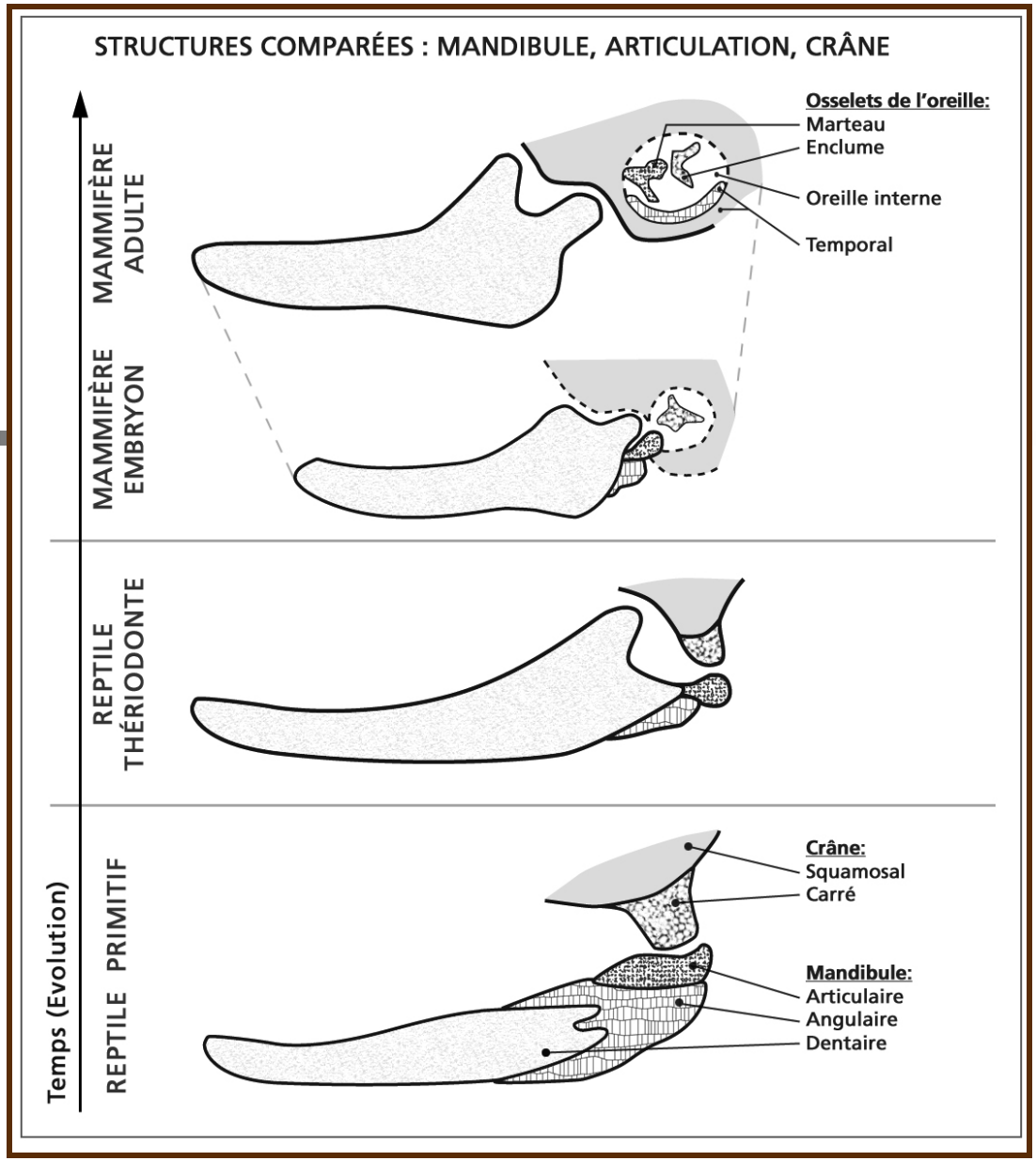
Reptiles have a single bone in the middle ear. Evolutionists thinks that the jaw and middle ear of reptiles gradually became a jaw and ear of a mammal. But how can an ear with a single bone evolve into an ear with three bones?

These questions remain forever without explanation.

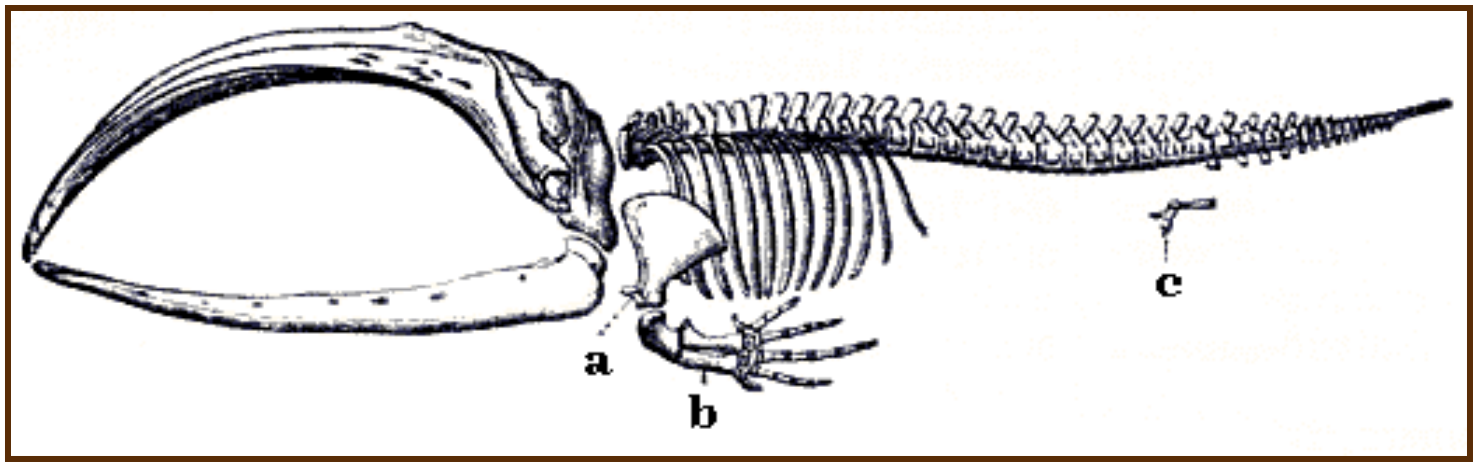
In addition, no fossil has ever been found to establish the link between reptiles and mammals".

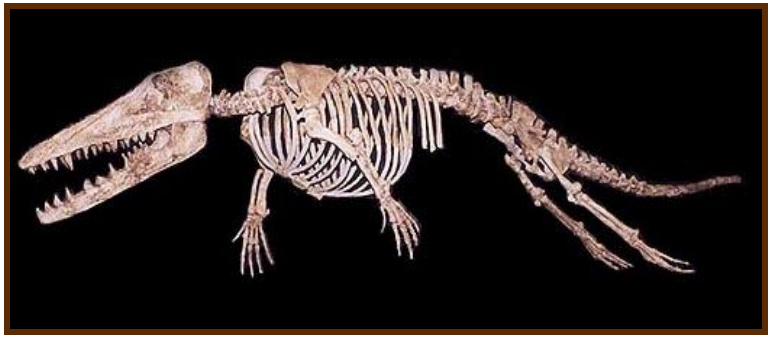
Harun Yahya Page 632

The transition between Reptiles and Mammals



Evolution of the Whales

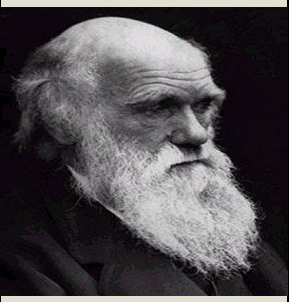


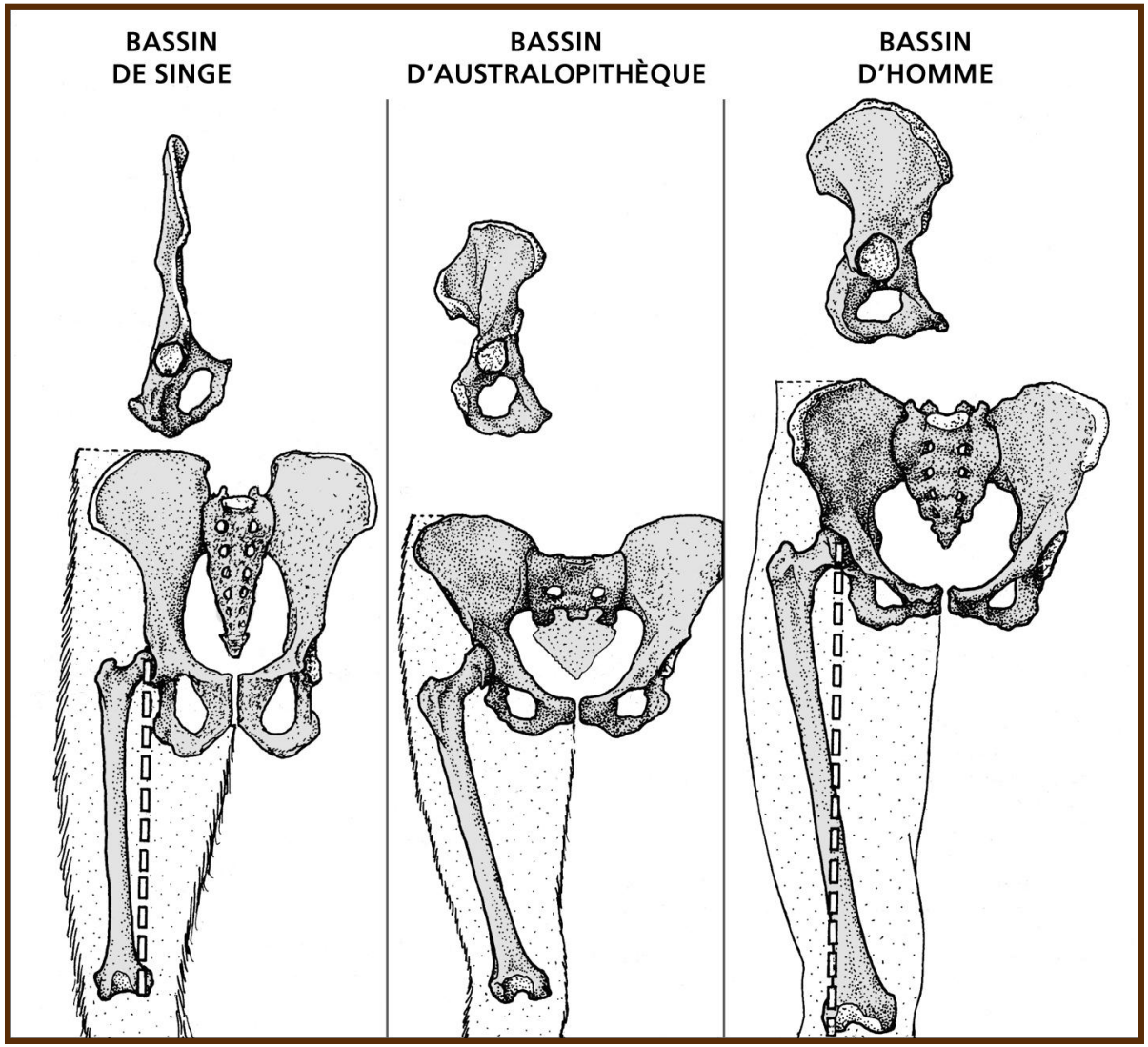


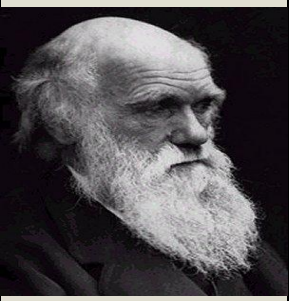
LUCY
3,5 Millions
years

"The great similarity between the skeletal and cranial structures of australopithecines and chimpanzees, in addition to the established evidence that these creatures did not walk upright, has caused enormous difficulties for paleoanthropologists".

Harun Yahya Page 644




BASSIN
DE SINGE
BASSIN
D'AUSTRALOPITHÈQUE
BASSIN
D'HOMME



Creationist Classifications of Hominid Fossils

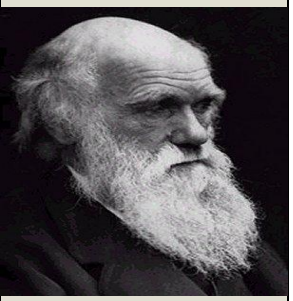
Specimen		Cuozzo (1998)	Gish (1985)	Mehlert (1996)	Bowden (1981) Menton (1988) Taylor (1992) Gish (1979)	Baker (1976) Taylor and Van Bebber (1995)	Taylor (1996) Lubenow (1992)
	ER 1813 (510 cc)	Ape	Ape	Ape	Ape	Ape	Ape
	Java (940 cc)	Ape	Ape	Human	Ape	Ape	Human
	Peking (915-1225 cc)	Ape	Ape	Human	Ape	Human	Human
	ER 1470 (750 cc)	Ape	Ape	Ape	Human	Human	Human
	ER 3733 (850 cc)	Ape	Human	Human	Human	Human	Human
	WT 15000 (880 cc)	Ape	Human	Human	Human	Human	Human

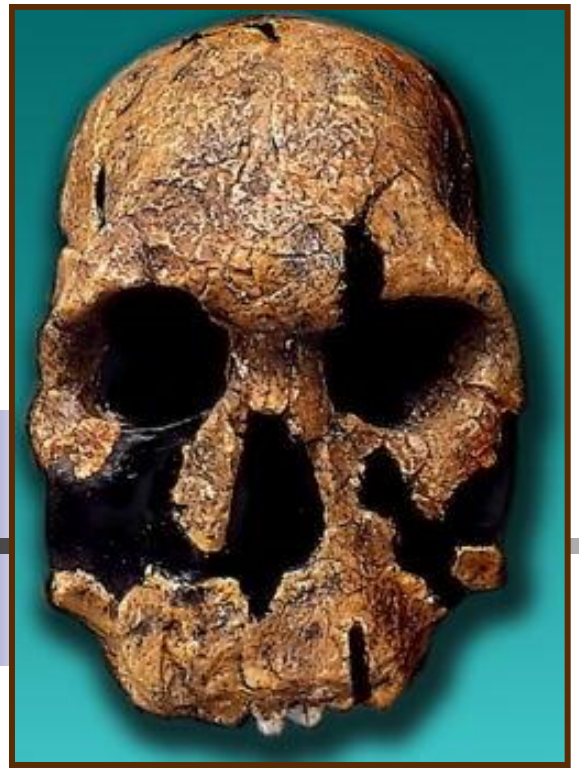
Tassot (p.80) :

"No *Homo Erectus* withstands analysis under the triple relationship of the reality of fossils, bipedalism and the ancestral link to Man"

Harun Yahya (p.649 FRENCH Edition) :

«*Homo erectus*: an ancient human race. All the fossils included in this species belong to particular human races»





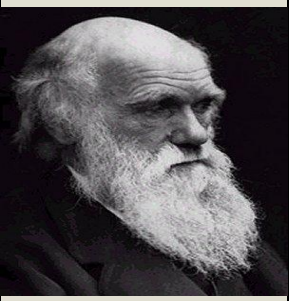
KNM 1470
775 CM 3

Tassot (p.88) : "Richard Leakey made in 1973 a troubling discovery: among scattered debris of Australopithecus, a human skull (Skull 1470)".

Yet Tassot writes: "We therefore refuse to call «Homo» these beings with cranial capacities that are weak (Australopithecus) or intermediary (*Homo Erectus*)". (p.90)

"It is not enough to call "Homo Erectus" a being with a cranial capacity less than 1200 cm3 to make him able of consciousness".

For Harun Yahya page 646 (French edition), the same fossil cannot belong to the human species.

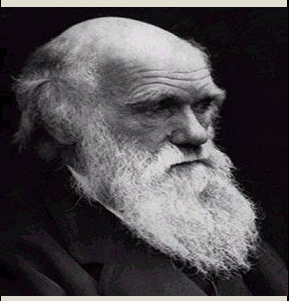


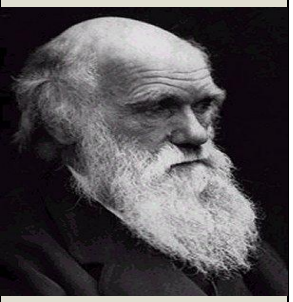
Laetoli's Footprints

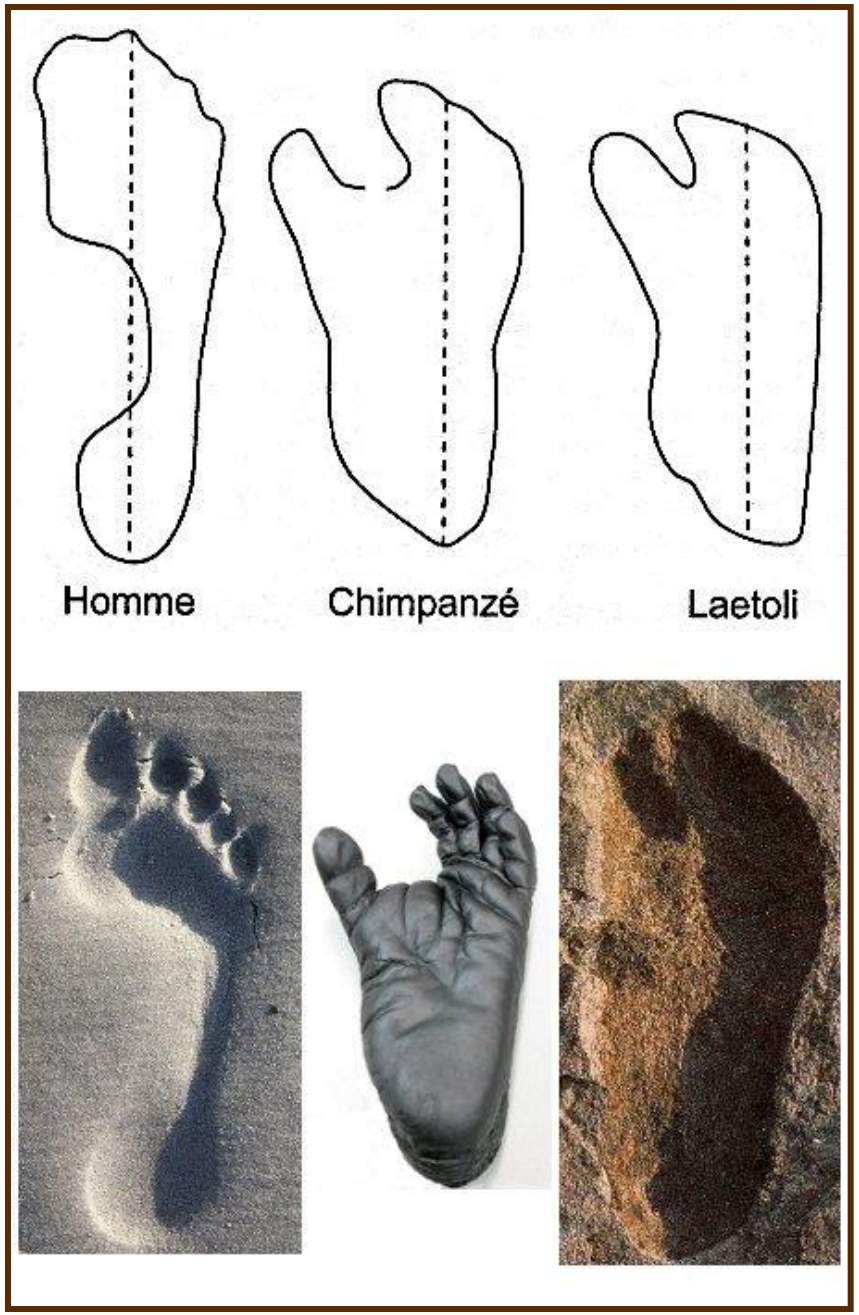
3,5 Millions years

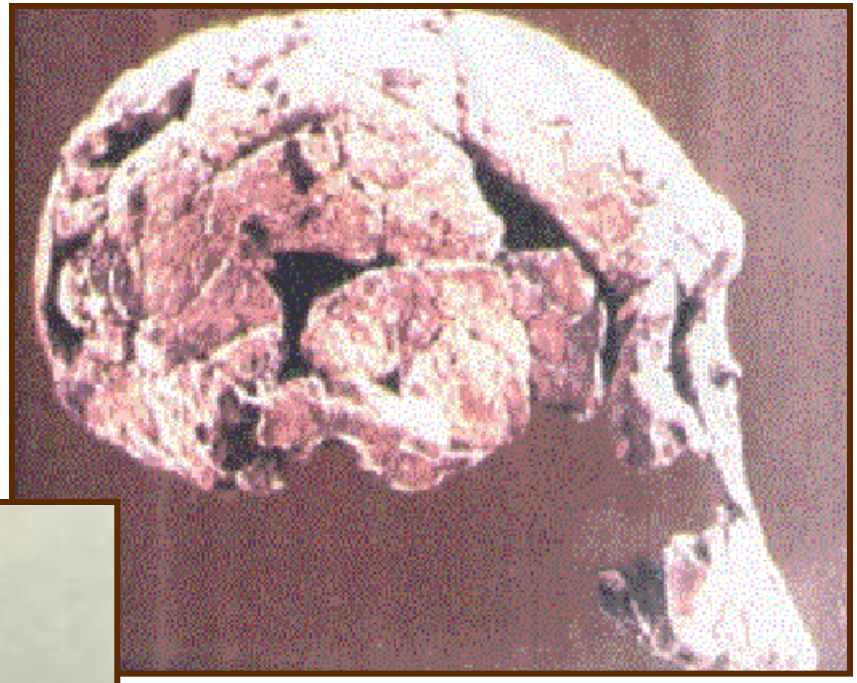
The footprints at Laetoli were not different from those that a man would have left today.

The examinations of the morphological shape of the tracks showed once again that these prints were human, and even more, those of a contemporary human.



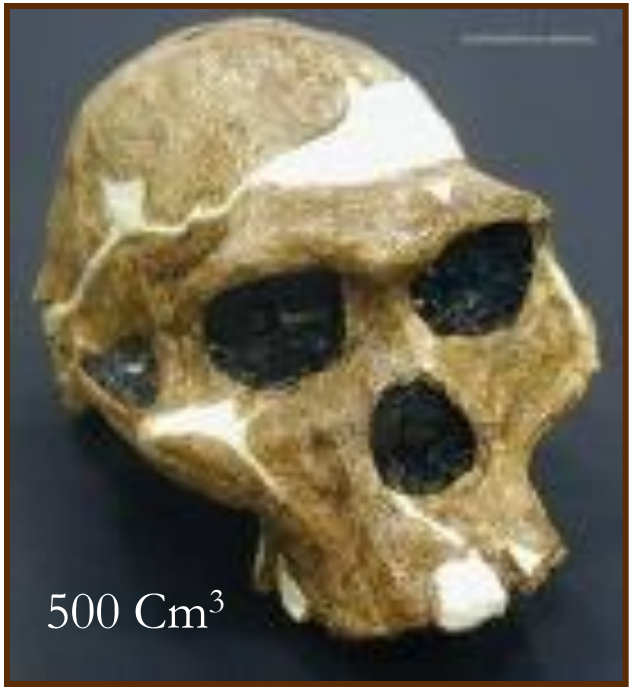



Homme
Chimpanzé
Laetoli



HOMO Habilis
800 CM^3

HOMO Erectus
1200 CM^3

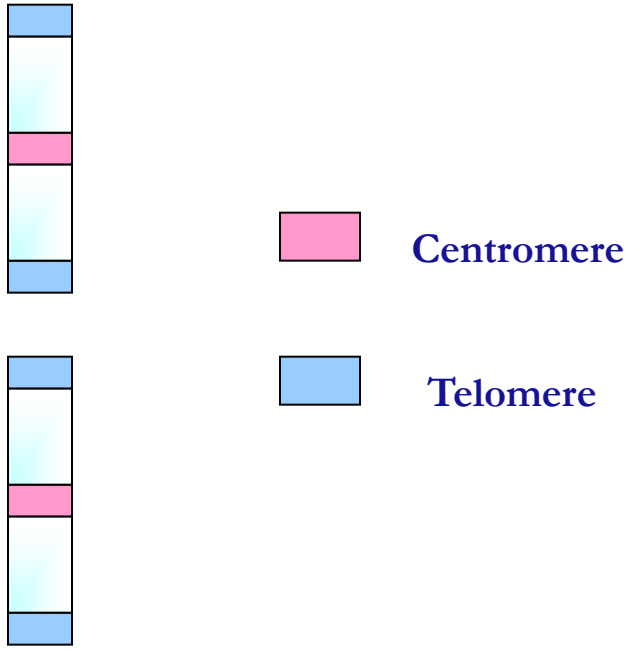

500 Cm3


800 Cm3

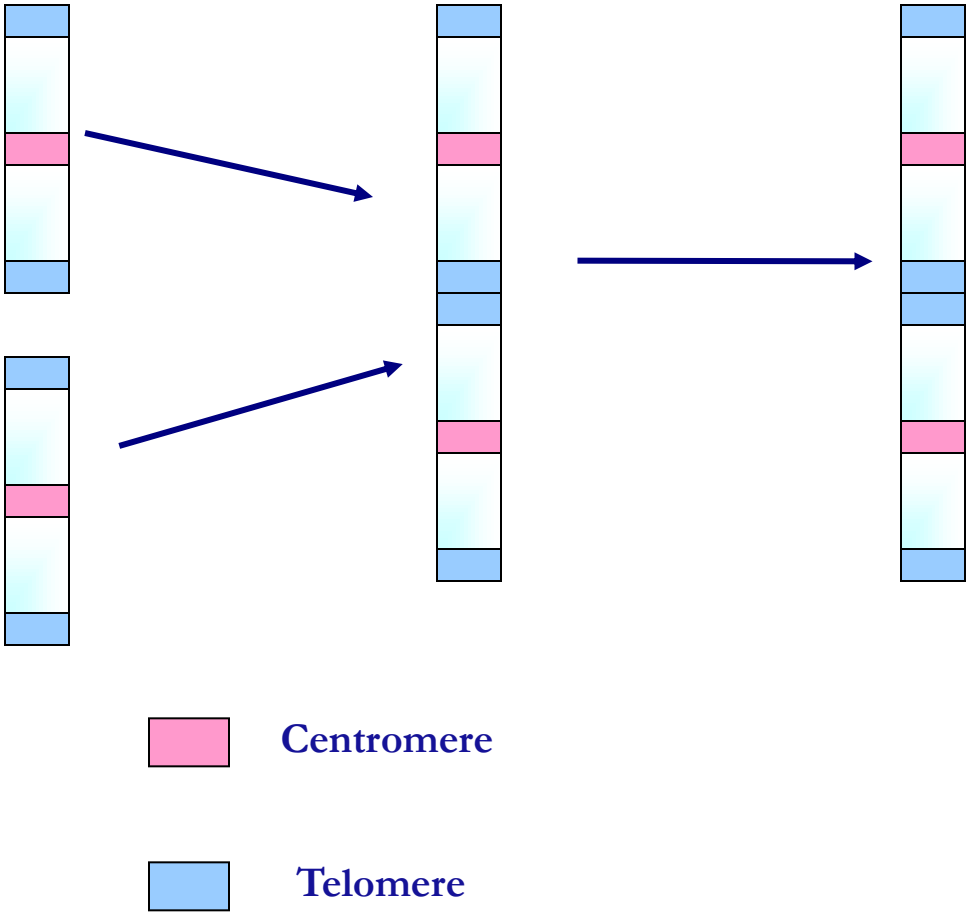

1200 Cm3


1400 Cm3

Chromosome 2 and 3 of the apes
(Apes have 24 pairs of chromosomes)



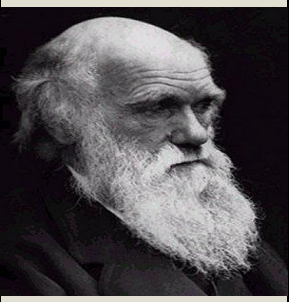
The chromosomes 2 and 3 of Apes become the chromosome 2 of Man



THE MANIPULATIONS OF RICHARD DAWKINS

He takes a sentence of Shakespeare made of 28 letters including spaces. Because there are 26 letters in the alphabet, 27 counting the space between letters, there are 10 TO THE POWER 40 possibilities to form sentences of 28 letters.

If we randomly explored the space of possible sentences, it would take a computer 10 to the power 30 years to find the sentence in question, a period which represents 1 million of a million of a million time the duration of the current universe. Richard Dawkins points out, rightly, that a random process would never find the sentence in



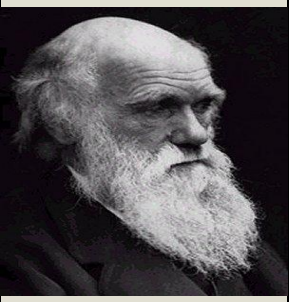
So he then built a small program that generates a sentence of 28 letters and which then makes it mutate, and gets a number of "daughter" sentences, which represent the "next generation".

His program then compares each "daughter" sentence with the target sentence and keeps the closest one.

Then, a second generation of sentences is generated, still randomly, and here also, the different "daughter" sentences of this generation are compared with the target sentence, etc. Dawkins makes the reader marvel at the fact that in a few seconds and sixty generations, the computer produces the target sentence.

Is not this a wonderful illustration of the power of the couple mutation-selection?

Does this not demonstrate that all those who doubt the ability of Darwinian mechanisms to explain evolution are appalling obscurantist?

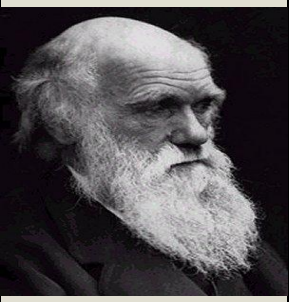


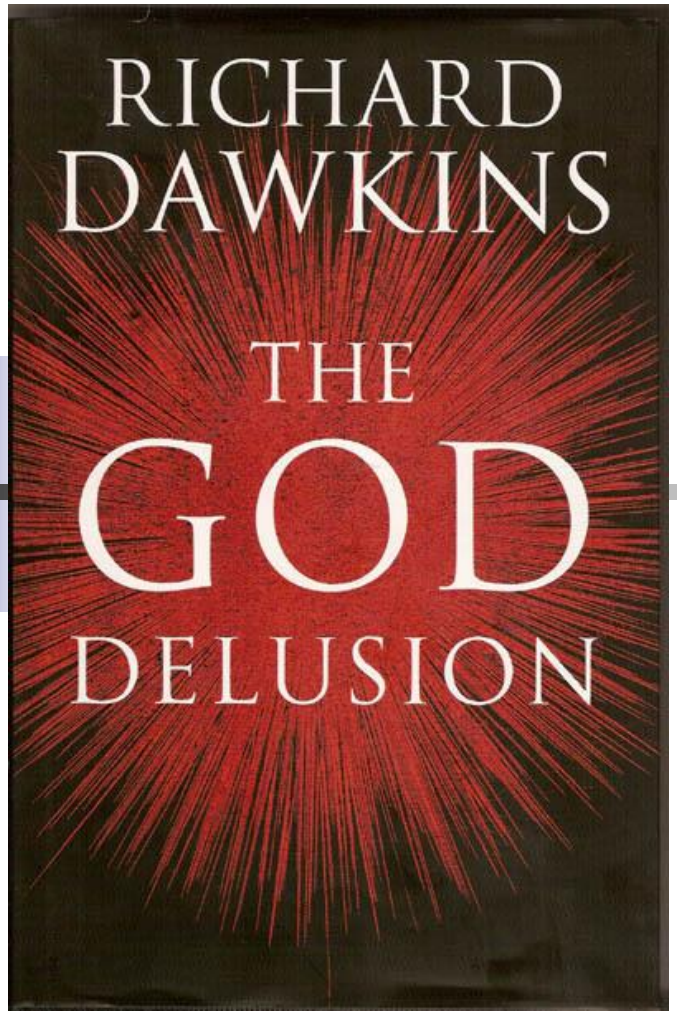
In fact, it is exactly the contray; Dawkins' program is only successful because it knows the target sentence!

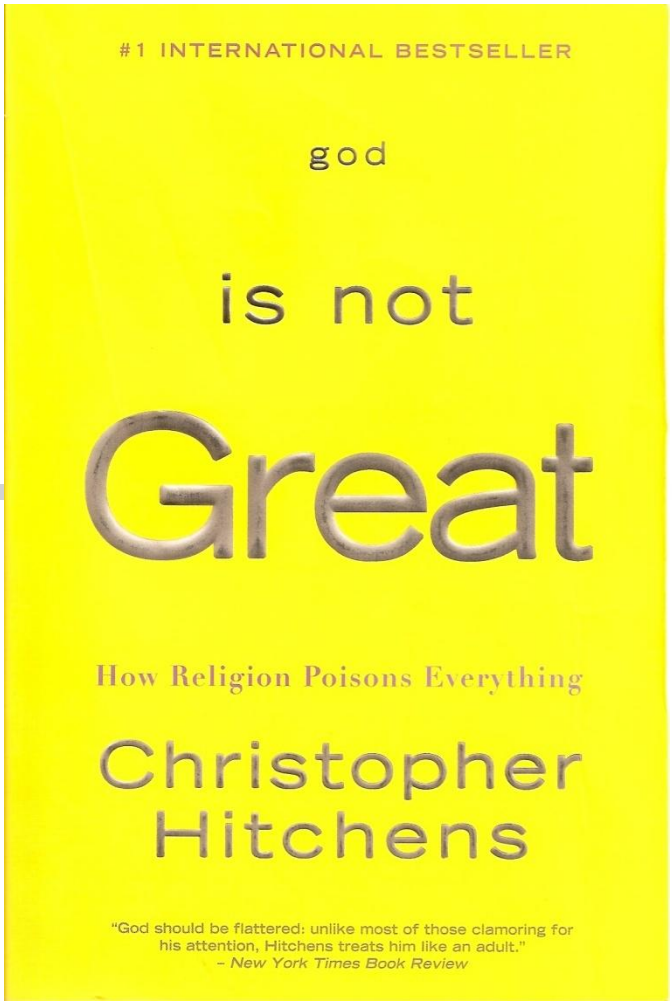
Yet, precisely, the very essence of Darwinism illustrated by the title of the Dawkins' book , *The Blind Watchmaker*, is that nature can not know the goal to be reached because it doesn't have any!

If Dawkins had wanted to show, conversely, that evolution can only work because it knows what goal it must reach, he could not have done better.

Dawkins is well aware of his dishonesty. He says a few pages later: "Life is not like that, evolution has no long-term goal, there is no distant target, no final perception that can serve as a criterion for selection, although human vanity cherishes the absurd notion that our species is the final goal of evolution".




RICHARD
DAWKINS
THE
GOD
DELUSION

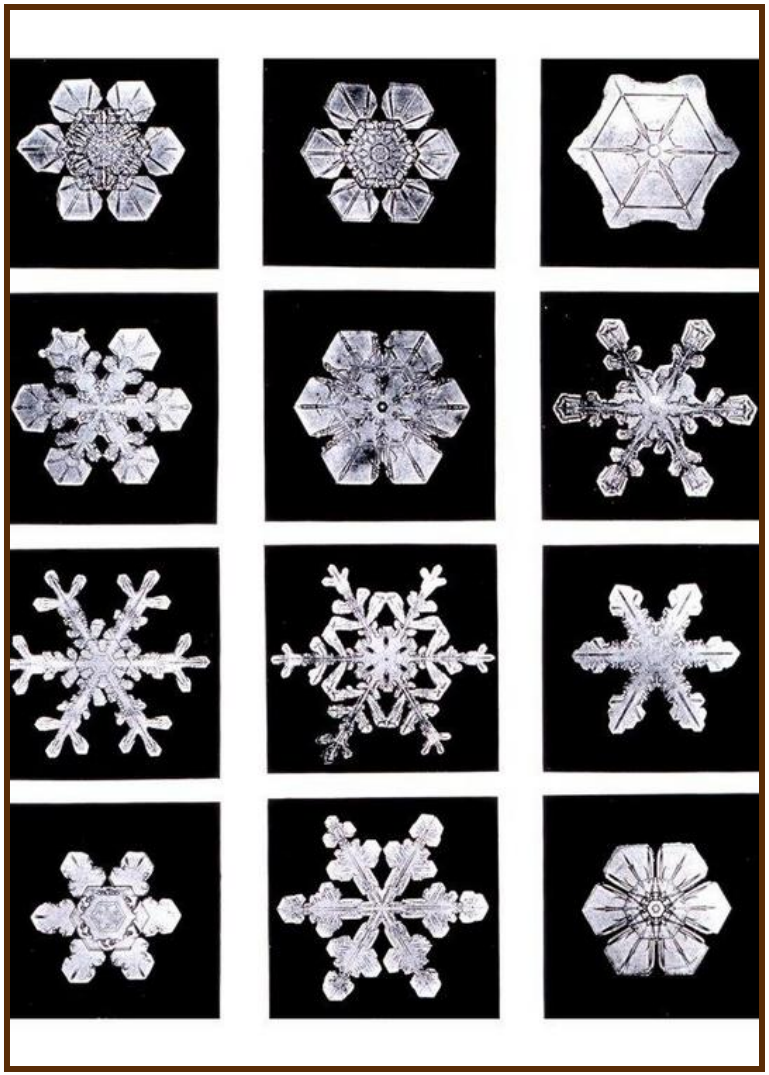

#1 INTERNATIONAL BESTSELLER
god
is not
Great
How Religion Poisons Everything
Christopher
Hitchens
"God should be flattered: unlike most of those clamoring for his attention, Hitchens treats him like an adult."
– New York Times Book Review

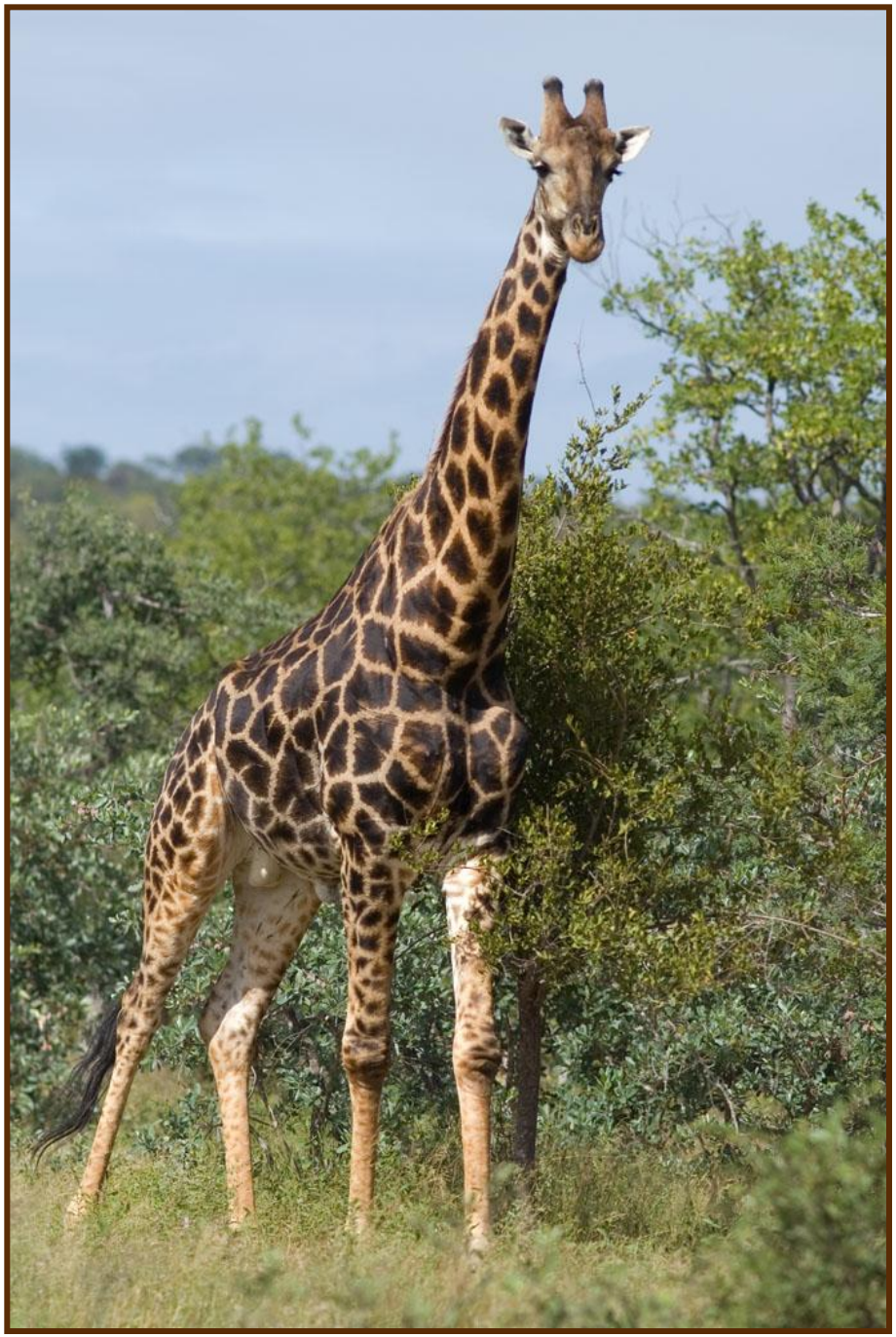
II- The big debate between structure and function *(Adaptation)*

Snow cristal

or

girafe's neck ?





Evolution favors structuralism

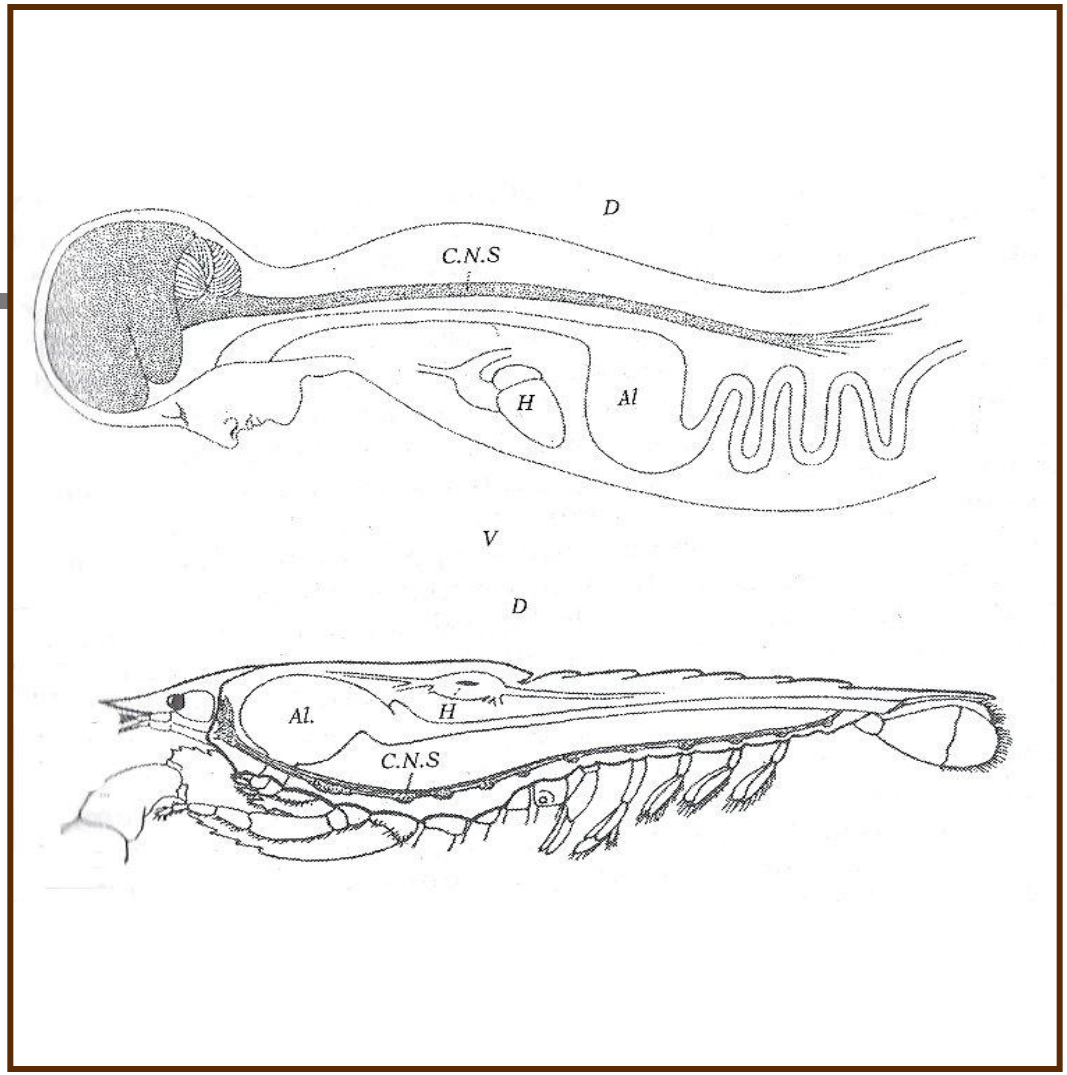
Goethe's intuition «Although seemingly dissimilar, the different organs of a flowering plant all originate from a unique organ, namely the leaf».

Quoted by S. J. Gould, The structure of the Theory of Evolution, p. 401

In 2001, an article published in Nature simply starts with the following words: "Goethe was right by proposing that flowers were modified leaves".

Gunther Theiben and Heinz Saedler, « Plant biology: floral quartets », Nature, 409, 26 January 2001, p. 469-471.

According to Geoffroy Saint Hilaire arthropods and vertebrates share a common overall structure



"The same gene acts in both the development of the dorsal neural tube in vertebrates and in the ventral nerve chain of Drosophila, in accordance with Geoffroy's old assertion according to which it was possible to establish a correspondence by inversion among these two phyla. "

"This heresy, which has been most ridiculed and which is so contrary, in its foundations, to the predictions of strict Darwinism espoused by the modern synthesis, and which had been widely dismissed as romantic illusion until recently, has now resurfaced, of course in a revised form".

Gould, The structure of the theory of Evolution
p. 1562-1563 and 1567

Laws of form revisited
Nature, 410, 22 March 2001, p. 417

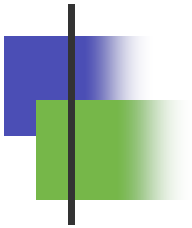
Michael Denton and Craig Marshall

«The laws of physics must have had a much more important role in the evolution of biological forms than is generally imaged».

«And this will mean a return to the pre-Darwinian conception that, underlying all the diversity of life, there is a finite set of natural forms that reappear again and again throughout the universe where there is life based on Carbon».

Like physics and chemistry, biology is subject to laws.

These play a role that is still greatly unknown in the structuring of living beings.



III- Is Evolution reproducible, if not predictable?

Channeled randomness and Convergence

The fundamental question:

Is Evolution reproducible or predictable, or would it give completely different results if it had to start over in an identical environment?

Christian de DUVE

Nobel Prize in Medicine, Biochemist, Professor at the University of Louvain (BE) and Rockefeller University New York (USA)

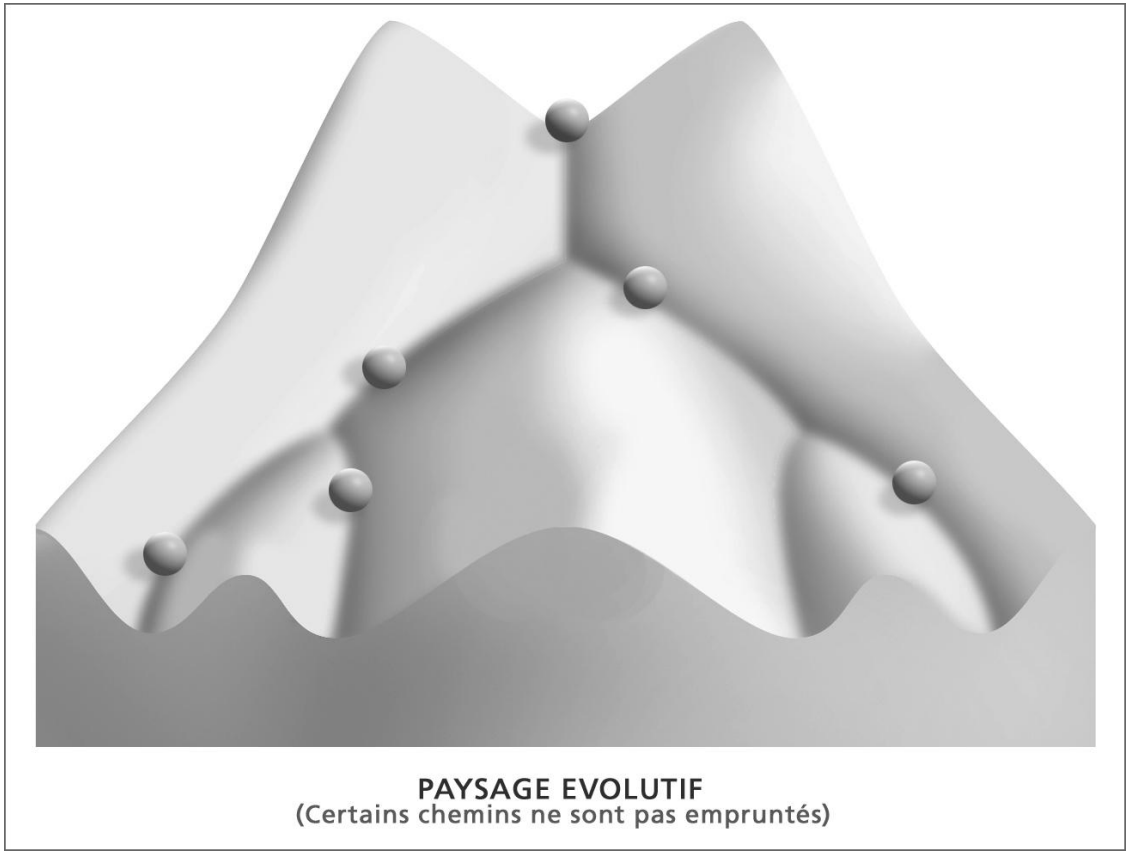
"God plays dice because he is sure to win"

"Life is a cosmic imperative"

"The laws of biochemistry produce such strict constraints that chance is channeled and that the appearance of life and even of conscious thought becomes an obligation in the universe and so on many occasions".

"According to the theory I defend, it is in the very nature of life to generate intelligence everywhere (and when) the necessary conditions are met. Conscious thought belongs to the cosmological scheme, not as an epiphenomenon due to the strictly inherent randomness in our biosphere, but as a fundamental manifestation of matter ».

«Poussière de Vie», Editions Fayard, 1996



PAYSAGE EVOLUTIF
(Certains chemins ne sont pas empruntés)

Convergence

Nature produces identical complex organs in living beings which are so remote that their common ancestors could not have had the organ in question

Reproducibility of Evolution

Simon CONWAY MORRIS

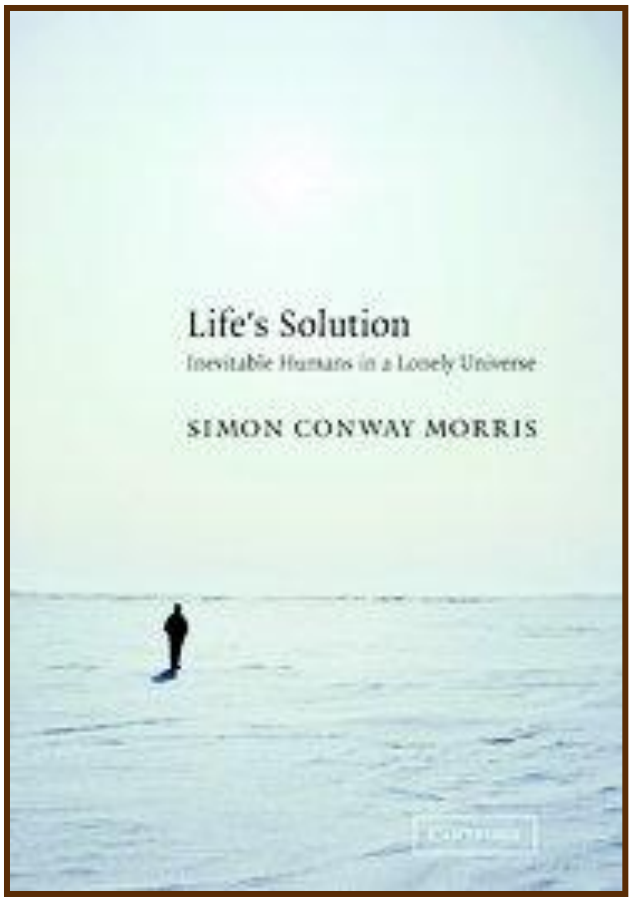
Palaeontologist, Professor at the University of Cambridge

" For classical Darwinians, it is highly improbable that the occupants of a planet may resemble those of another planet.

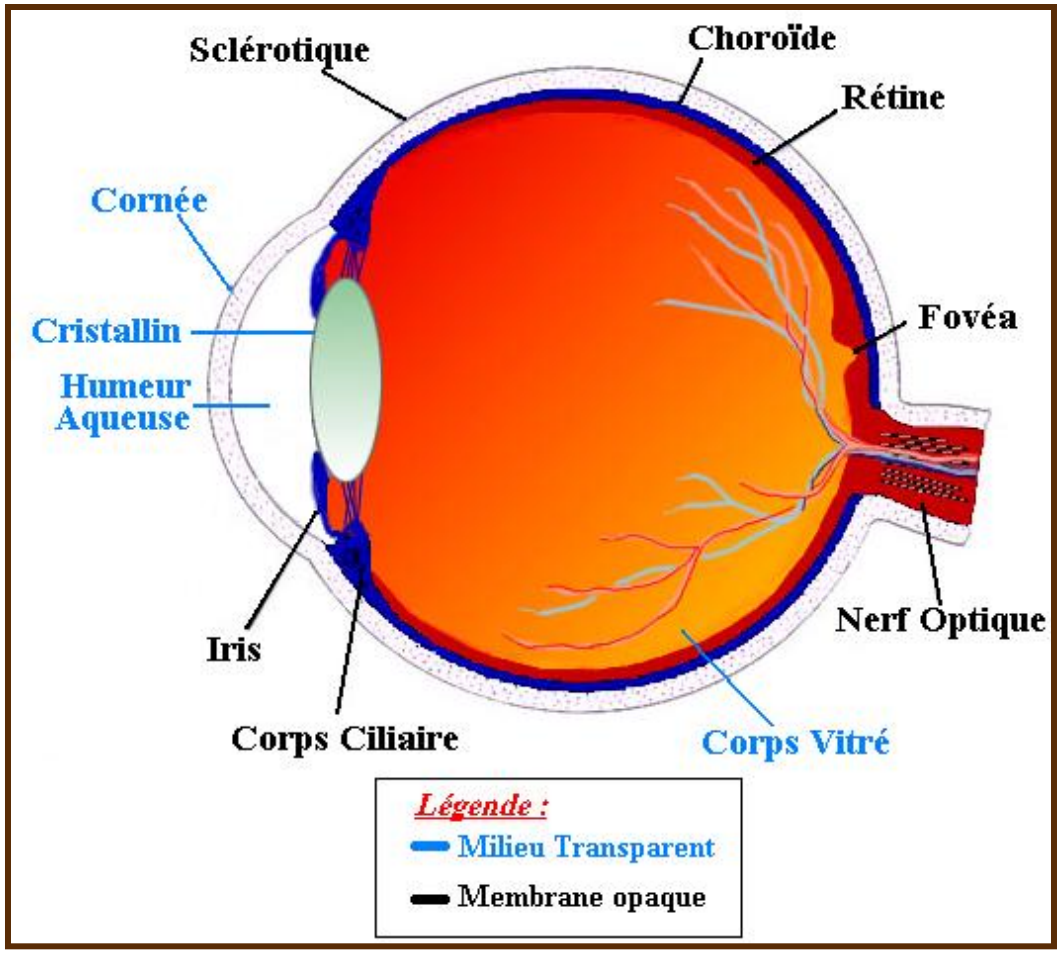
The phenomenon of evolutionary convergence indicates that, on the contrary, the number of alternatives is strictly limited (...). If this thesis is correct, it suggests that if we explore how evolution "navigates" to a particular functional solution, it could provide the basis for a more general theory of biology.

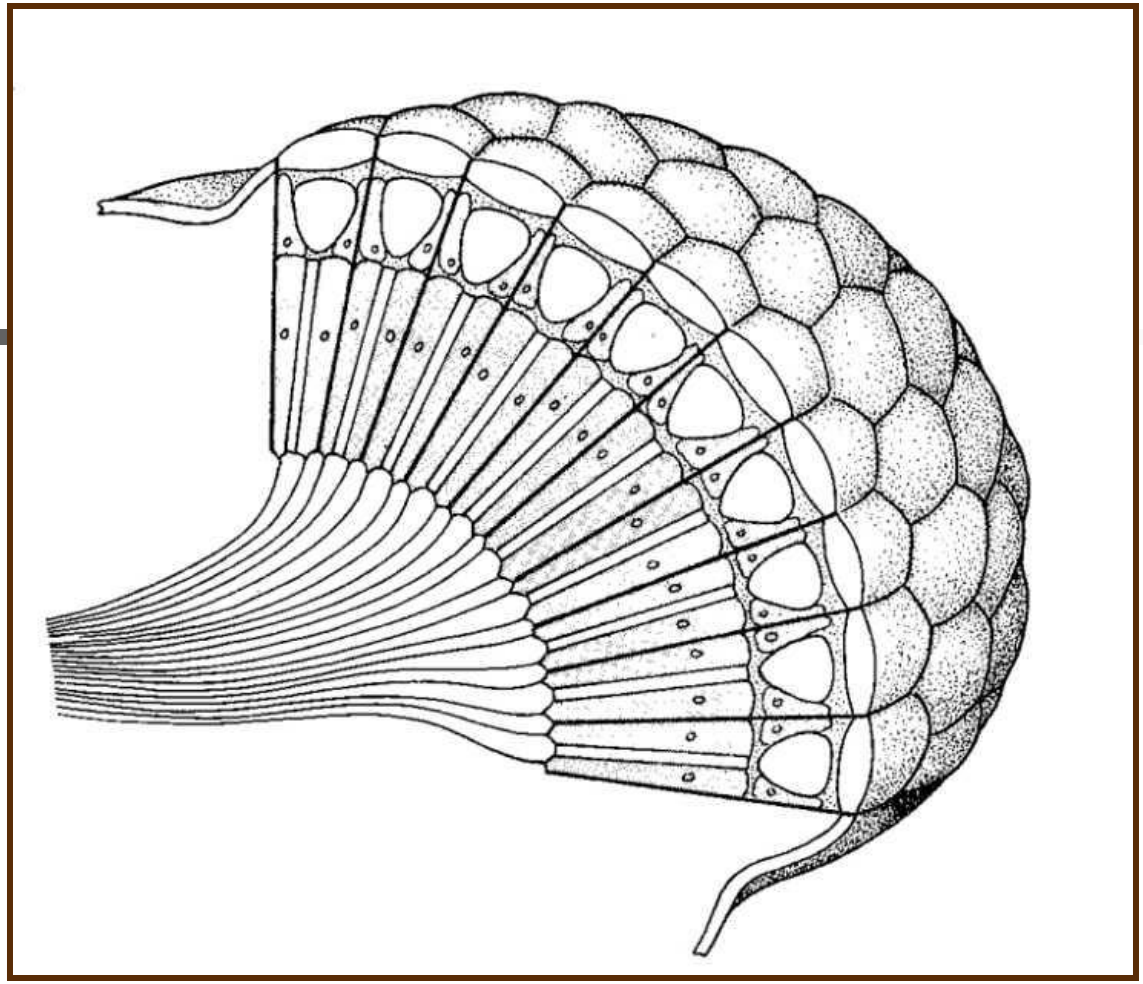
Essentially this approach points to the existence of something like an 'attractor' by which evolutionary trajectories are channeled into modes of stable functionalities »

Simon Conway-Morris,
Lifes solution, Cambridge University Press, 2003
p. 309-310.



Simon Conway Morris, professeur de paléontologie à l'Université de Cambridge

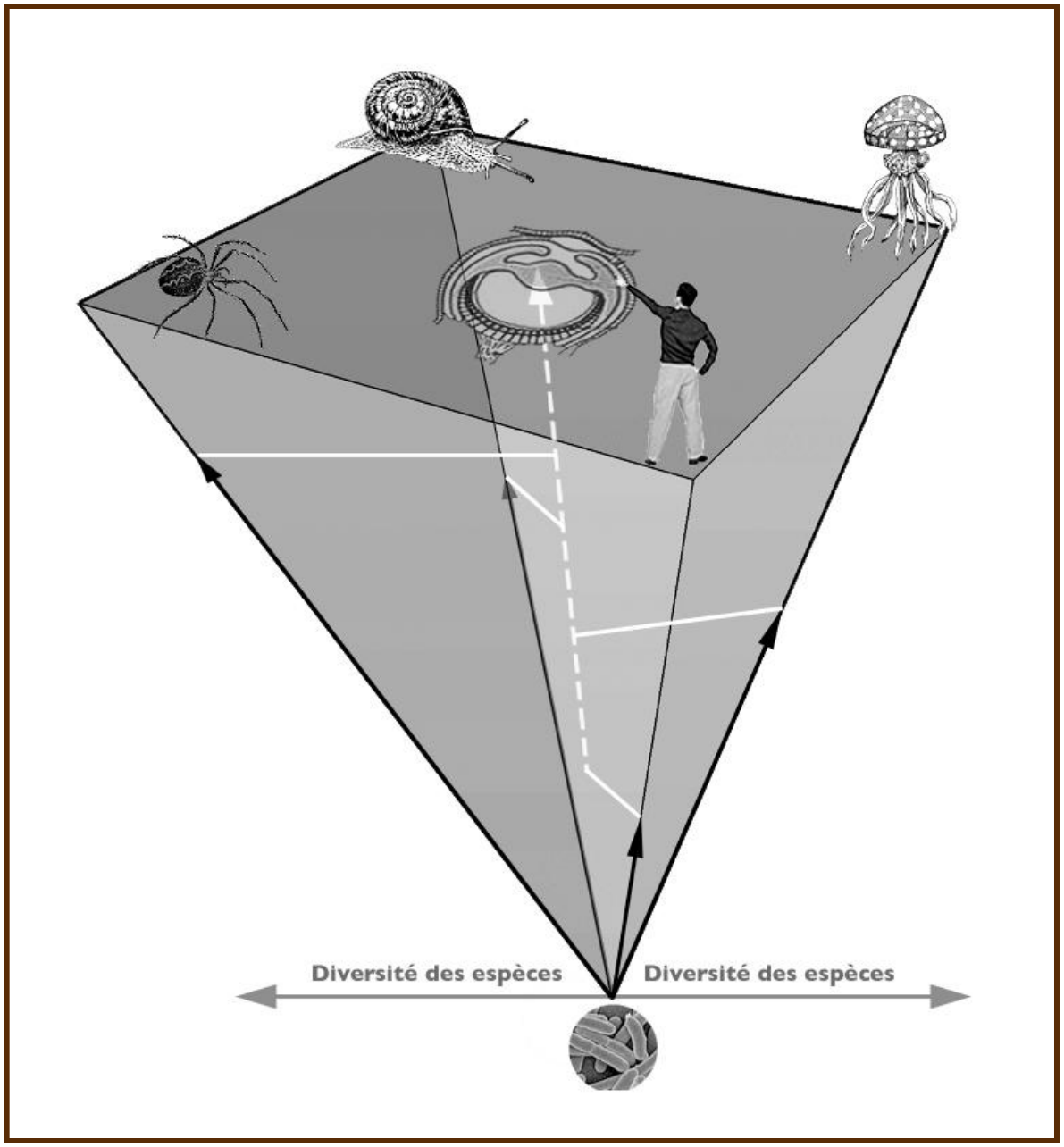

Sclérotique
Choroïde
Rétine
Cornée
Cristallin
Fovéa
Humeur Aqueuse
Iris
Nerf Optique
Corps Ciliaire
Corps Vitré
Légende :
Milieu Transparent
Membrane opaque



The same than us

The same eyes than us

and no brain


Diversité des espèces
Diversité des espèces

Cameron's AVATAR: Darwin or not Darwin ?

"Cameron is evolutionist but not quite Darwinian in the modern sense of the term."

http://www.lemonde.fr/opinions/article/2010/01/21/le-non-darwinisme-visionnaire-de-james-cameron-par-jean-staune_1295072_3232.html

Conclusion on Convergence

"Mammals and monkeys (or all other biological entity) emerged through specific historical trajectories, but in these cases (and in many others), the various convergences towards mammals and monkeys that we have gathered here, indicate that while each story is necessarily unique, the complex forms we find at the end of these processes are not simply the result of local and random events.

On any other planet with similar characteristics, I suggest we will find animals very close to mammals, and mammals closely related to monkeys. Not identical, but similar, perhaps surprisingly similar".

Simon Conway Morris,
«Life's solution», page 308.

Conclusion I

- Selection does not explain the fundamental structure of living beings, but only some of their adaptations. In living beings, structure is first towards function. Adaptation is secondary, it does not produce a fundamental structure such as the plan of tetrapod vertebrates.

- Organisms have their own internal logic and sometimes seem to follow it regardless of environmental changes they are going through and the selection exerted on them.

- Randomness does not exclude inevitability. Constraints exerted on living beings can ensure that certain results will appear, even in cases where the basic process of evolution were to be based on chance.

Conclusion II

- **Evolution, seen in its entirety, has a logic which includes growth towards complexity. It does not at all correspond to the idea of a "bushy" evolution going in all directions.**

- The independant emergence of identical forms (convergence) is a strong argument in favor of Structuralism.

- The basic elements of life that the proteins are, are like snowflakes, their three-dimensional form is written in the laws of nature.

- Biological forms can therefore be of natural origin and not the result of contingent processes and the more so as a number of these forms can be represented using mathematical formulas.

Conclusion III

"My opinion is that such a research program could reveal a deeper level of biology in which Darwinian evolution remains a central concept, but where possible functional forms are predetermined since the Big Bang".

Simon Conway-Morris, Lifes solution, Cambridge University Press, 2003, p. 309-310.

Conclusion IV

An evolution through the laws of nature and not only through selection.

Such a conception rejects both Darwinism and creationism, which BOTH consider that living beings are artifacts (AND NOT NATURAL FORMS SUCH AS SNOW CRYSTALS) formed by the blind watchmaker of natural selection for one, or by a designer for the other.