

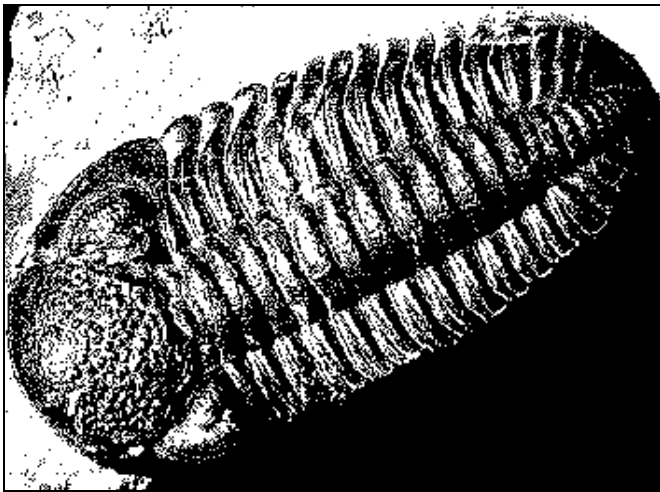
THERE ARE NO PRIMITIVE LIFE-FORMS:

The Case of the Trilobite

Evolution needs to find primitive ancient creatures to verify its claim that life has evolved from the simple to the complex. All forms of life were created in the same week (Genesis 1:1-31), so that no form of life is more "ancient" than any other. **But there is also the fact that no primitive life-form exists.**

When examined with sufficient care, all organisms are found to have unique complexities that falsify the evolutionary claim of "primitivity."

For decades, various creatures such as the duck-billed platypus, the cockroach, and the trilobite have been endlessly described as "primitive." Since the evolutionary chronology considers the trilobite one of the oldest forms of life and therefore one of the most primitive, it is especially fitting to examine whether this claim has any merit.



The Trilobite: An Arthropod with Three Lobes

Evolutionary researchers have documented two facts about trilobites disproving their "primitive" status: (1) the complexity of their visual system; and (2) their strong resemblance to modern day crabs, assumed in evolutionary terms to be less primitive (since they are modern).

I. Trilobite Vision Was Not Primitive.

Creationist Ian Taylor has written: "[Trilobites] came in various shapes and in all sizes up to about twenty inches, and ... had large compound eyes. Clarkson and Levi-Setti¹ of the University of Chicago have done some spectacular work on the optics of the trilobite eye lenses. It turns out that each lens is a doublet, that is, made up of two lenses, while the shape of the boundary between the two lenses is unlike any now in use - either by animals or humans.²

"However, the lens shape and the interface curvature is nearly identical to designs published independently by Descartes and

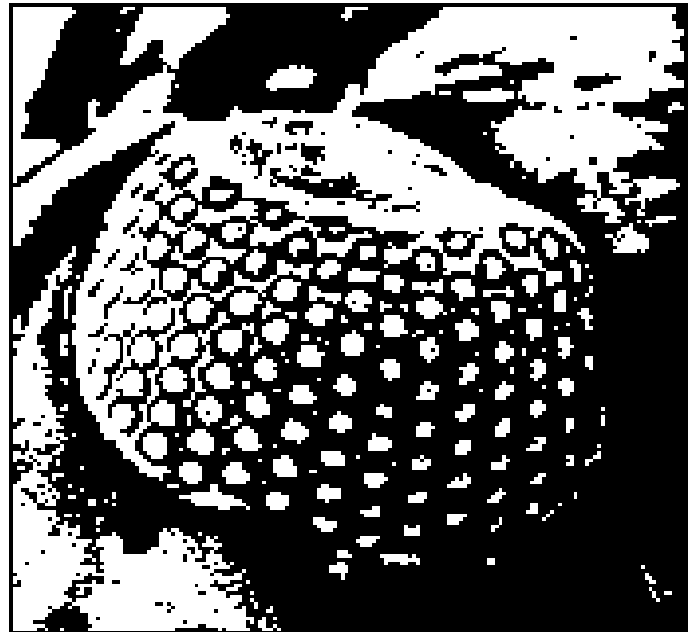
Huygens in the seventeenth century. Their design had the purpose of avoiding spherical aberration and were known as aplanatic lenses.

"Levi-Setti pointed out that the second lens in the doublet of the trilobite eye was necessary in order that the lens system could work under water where the trilobites lived. **Thus [they] used an optimal lens design that would require very sophisticated optical engineering procedures to develop today.**"³

Creationist Harold Coffin has also noted the complexity of trilobite vision:

"Trilobites had both simple and compound eyes. Even those considered the oldest have well-developed optical organs [i.e., they are not primitive]. Research has shown that at least some of the trilobites have calcite lenses crystallographically arranged to focus an image onto possible miniature retinas at the base of each unit of the compound eye (schizochroal eye).^{4,5}

"The calcite functioned as glass (without the double refraction typical of calcite) because of its correct orientation. The lenses and the intralensar bowls below the lenses produce the least spherical aberration because of their unique shapes, shapes suggested by Descartes and Huygens in their pioneer studies of optics in the seventeenth century. It appears that the animal could have a reasonably sharp image of objects ranging from a few millimeters in front of the eye to infinity.



*A Trilobite Compound Eye Magnified:
Some Had Thousands of Facets*

"Since arthropods almost universally have lenses of chitinous tissue, the discovery of calcite lenses for trilobites was unexpected. A few modern marine arthropods have calcite lenses, but their orientation is haphazard and thus unlikely to give sharp images. **It therefore appears that the trilobites**

had a better optical system than modern arthropods with calcified lenses despite their stratigraphic position low in the Paleozoic era (and therefore a supposed great age and early evolutionary development)."⁶

Far from being primitive, trilobite vision was actually better than that of arthropods today. This fits with a perfect creation degrading, not a primitive creation improving by evolution.

II. The Complexity of Trilobites Has Been Noted by Evolutionists.

A standard text has noted: "Trilobites are an extinct group of arthropods. ... It is rather surprising to find that one of the most highly organized [i.e., non-primitive] of all invertebrate phyla comprises the chief element of the oldest faunas. The variety and structural complexity of trilobites found near the base of Cambrian rocks surely indicates a very long antecedent existence of animal life ..."⁷

This last sentence is saying that **trilobites are so complex that they cannot have been one of the first life-forms to have evolved.** More straightforwardly, the complexity of trilobites is excellent evidence for special creation.

Not only does the complexity of trilobites point to creation, but **it is far from being proved that trilobites are really extinct.**

As Moore et al. state, trilobites "are exclusively marine,"⁸ and as such may still exist in unexplored parts of the ocean. In fact, trilobites have rather commonly been compared with still-existing crabs.

III. Remarkably Like Modern Crabs: Where's the Evolution?

Steven Stanley has stated: "Nearly all groups of trilobites that lived after the Cambrian could roll up in the manner of a pill bug. ... Modern crabs ... are fully housed in a boxlike exoskeleton that is formed by the folding of the carapace under the body while the legs remain free for locomotion. ..."⁹

In a similar vein, it has also been written: "In many respects the remarkable horseshoe crab, or *Limulus*, to give it its proper name, has little real resemblance to any living creature and ...

the animals [trilobites] most closely allied to it became extinct millions of years ago and are found only as fossils."¹⁰ These words were penned by 1940, so the crab-trilobite resemblance is hardly a new realization. Other authors have also made the trilobite-crab comparison.^{11,12,13}

References. Bolding in quotations is added.

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3 I.T. Taylor, *In the Minds of Men*, TFE Publishing, 1987, pp. 168-169.

4 K.M. Towe, "Trilobite Eyes: Calcified Lenses In Vivo," *Science*, Vol. 179, March 9, 1973, pp. 1007-1009.

5 Clarkson and Levi-Setti, op. cit., pp. 663-666.

6 H.G. Coffin, *Origin by Design*, Review and Herald, 1983, pp. 231-232.

7 R.C. Moore et al., *Invertebrate Fossils*, McGraw-Hill, 1952, p. 475.

8 *ibid.*

9 S.M. Stanley, *Extinction*, Scientific American Library, 1987, p. 67.

10 A.H. Verrill, *Wonder Creatures of the Sea*, Appleton-Century, 1940, pp. 246-248.

11 J.L. Amos, "Fossils," *National Geographic*, Vol. 168, August 1985, p. 184.

12 W.P. Davis and E.P. Solomon, *The World of Biology*, Saunders, 1986, p. 206.

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