

JTB on 2/16/17

Reviewers' comments:

EDITOR COMMENTS:

This work is not in the shape for publication. there may be a small gem of an idea buried deep, but it is too deep to be extracted in its current form.

Reviewer #1: In this ms., the A. suggests a new "theory of evolution" that should specifically apply to the bilaterian animals. Unfortunately, the A. fails to formulate the theory in precise terms and using scientific vocabulary and to support the claim that this theory would precisely apply to the Bilateria. Additional but not less important faults are the following.

Line 4

"Reasoning from the tautology that no ancestral animal died as a juvenile,"

The Author fails to distinguish between 'animal' as individual and 'animal' as species. For example, at least some individuals of all animal species ancestral to any living species survived until sexual maturity [let's ignore here asexually reproducing species], but a huge number of individuals of the same species very likely died at any age, including embryos or juveniles.

Line 4

"no ancestral animal died as a juvenile"

What does the A. mean as juvenile? For example, in the case of a frog, would the term include both the tadpole phase and the pre-adult froglet? Etc.

Lines 5-6

"unbroken chains of virtually perfect development in every single breeder."

Not true. The chain is NOT unbroken. (i) In sexually reproducing animals at least, at each generation the cells undergoing mitosis are genetically different from those of the previous generation, thus the chain is perhaps unbroken but made of frequently changing kinds of rings; (2) the genetic re-setting occurring at the gamete/zygote single-cell bottleneck is sometimes also accompanied by a resetting of the epigenetic markings preserved throughout mitosis in the parental animal

Lines 6-7

"This precision had to entail highly-efficient developmental mitosis"

We simply have no way to measure mitotic efficiency in long extinct animals. To provide evidence, the A. should mine the literature for proxy data on extant animals.

Lines 9-10

"lethal juvenile cancer imposed an imperative of precision in the production of somatic cells"

What would remain of this bold statement, if re-phrased in non-teleological terms? See also line 80 "natural selection imposed an imperative of perfect development"

Line 16

