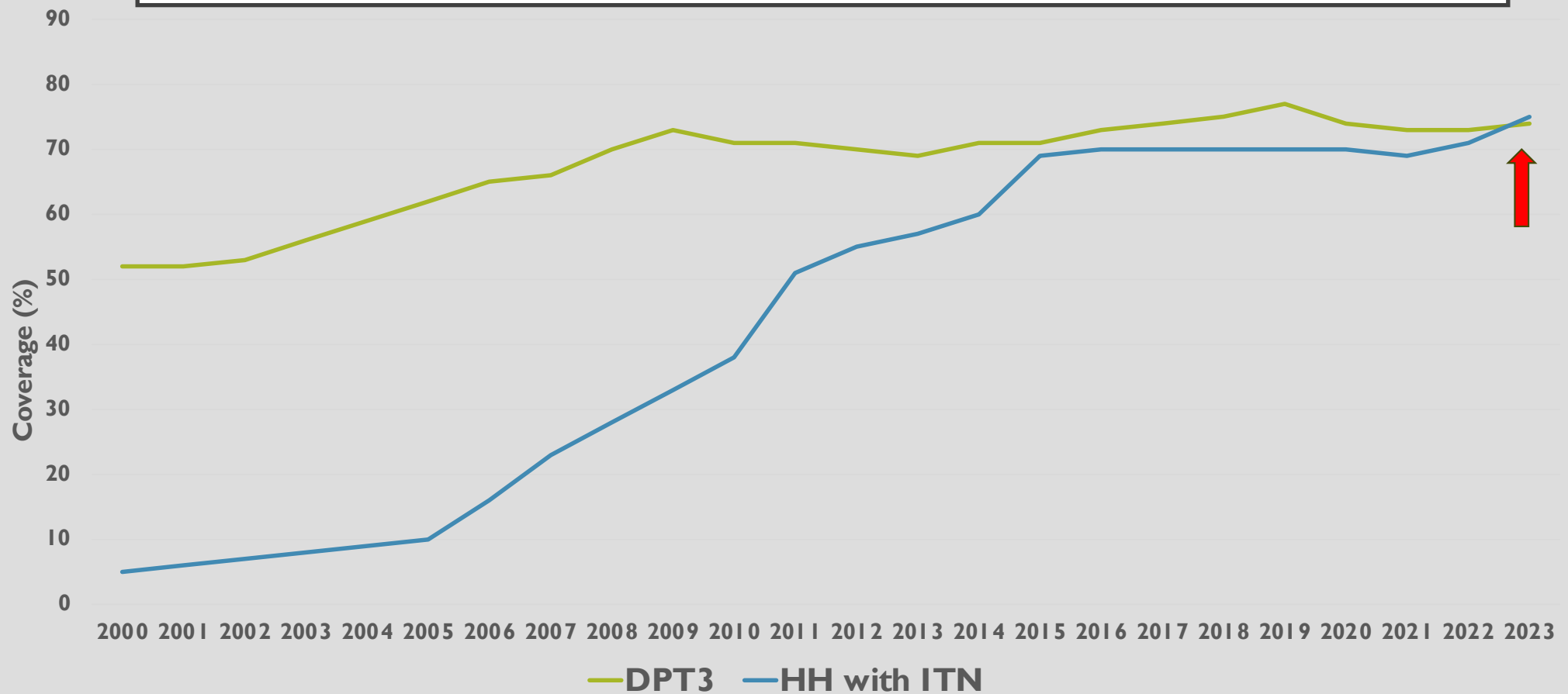




## PERFORMANCE OF HEALTH INTERVENTIONS, AFRO



# **CHANGE AND EVOLUTION**

**Mark Grabowsky, MD, MPH**  
**Independent Observer**



T. Rodley Sc.

*Present state of the Temple of Serapis at Pozzuoli.*

*London, Published by John Murray, Albemarle St. June, 1830.*

# PRINCIPLES

OF

# GEOLOGY,

BEING

AN ATTEMPT TO EXPLAIN THE FORMER CHANGES  
OF THE EARTH'S SURFACE,

BY REFERENCE TO CAUSES NOW IN OPERATION.

BY

CHARLES LYELL, Esq., F.R.S.

FOR. SEC. TO THE GEOL. SOC., &c.

IN TWO VOLUMES.

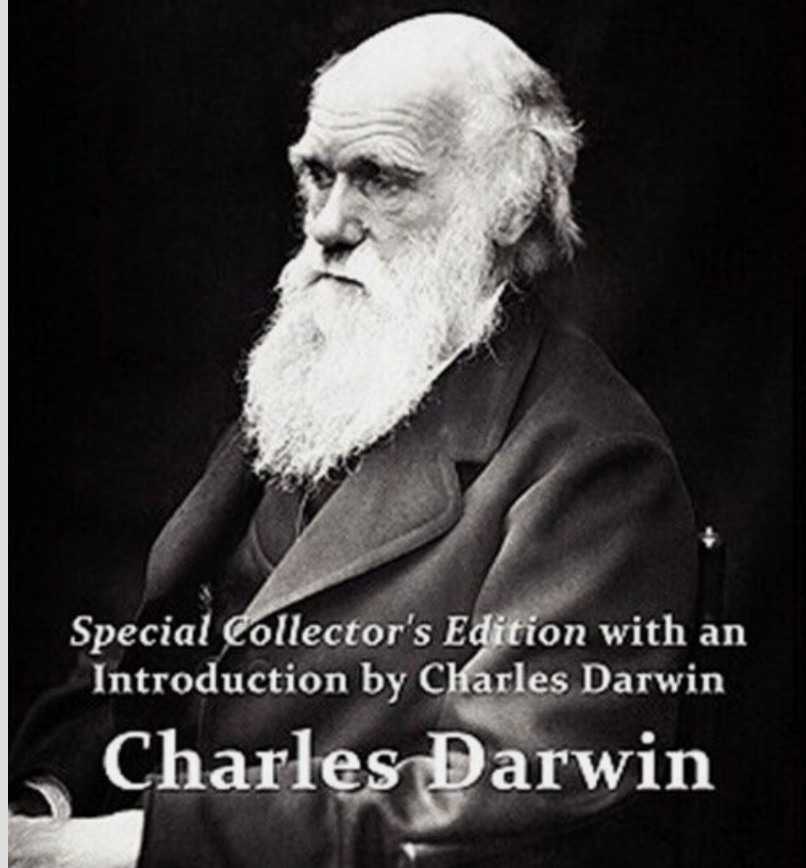
VOL. I.

LONDON:

JOHN MURRAY, ALBEMARLE-STREET.

MDCCLXXX.

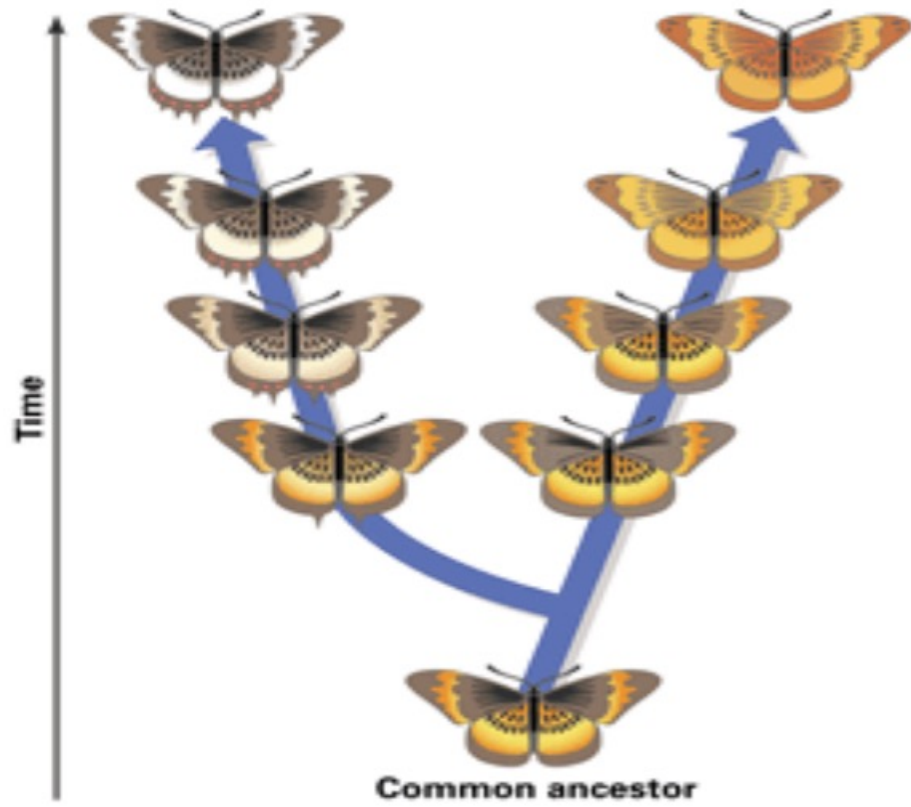
# THE ORIGIN OF SPECIES



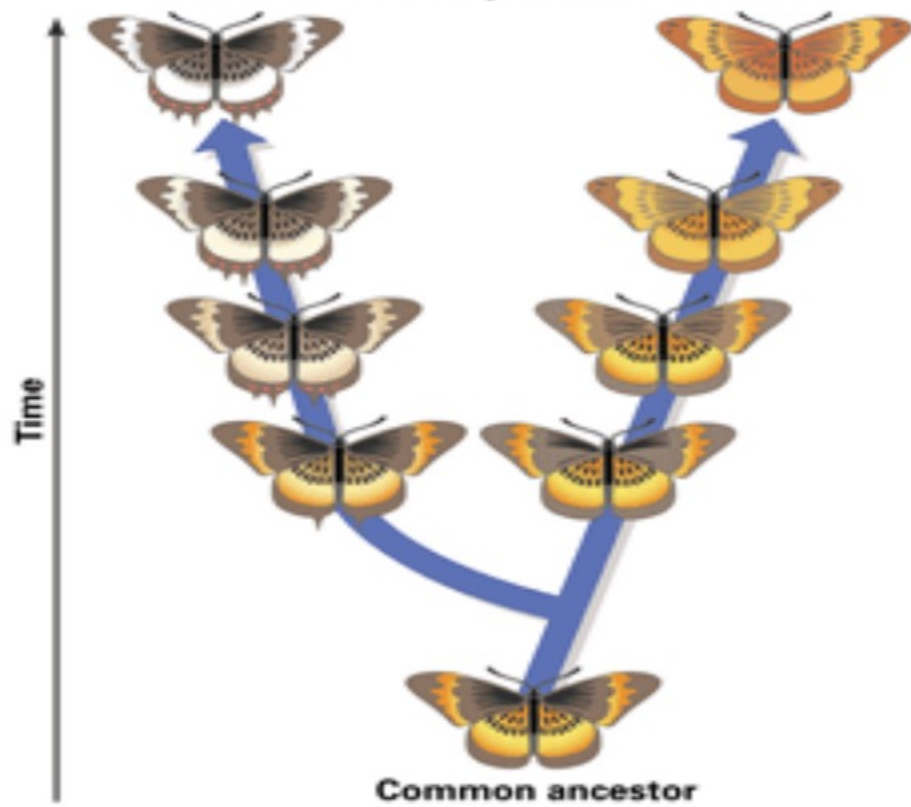
*Special Collector's Edition with an  
Introduction by Charles Darwin*

**Charles Darwin**

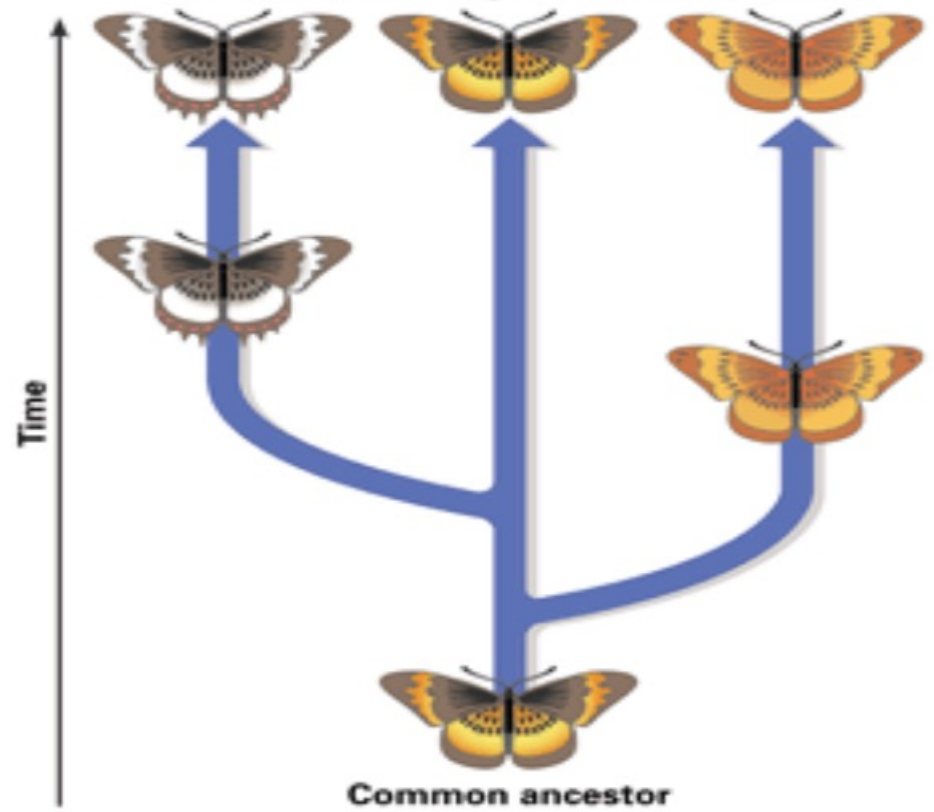
### Gradual Adaptation Model



### Gradual Adaptation Model



### Punctuated Equilibrium Model





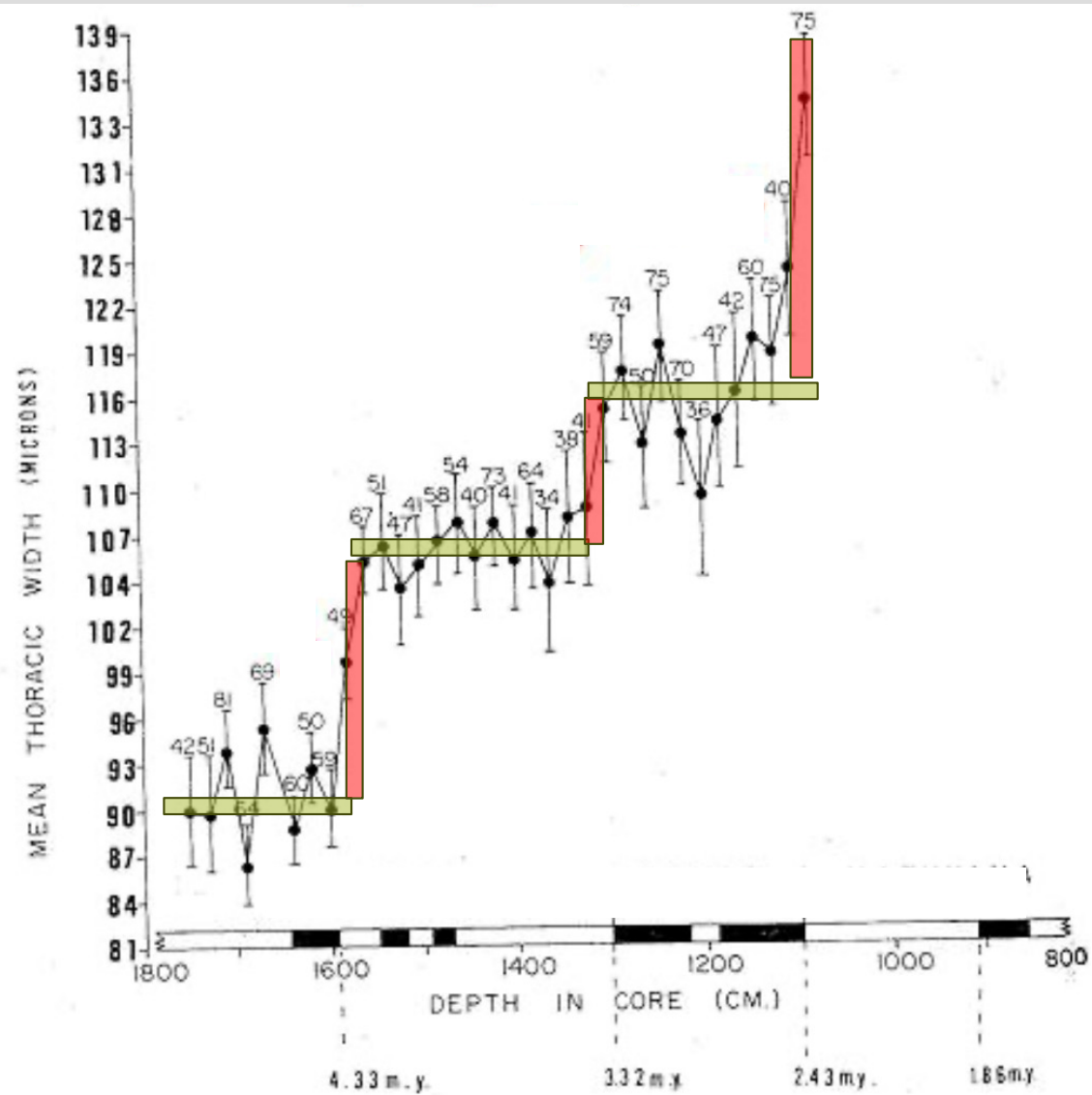
*Stephen Jay Gould*

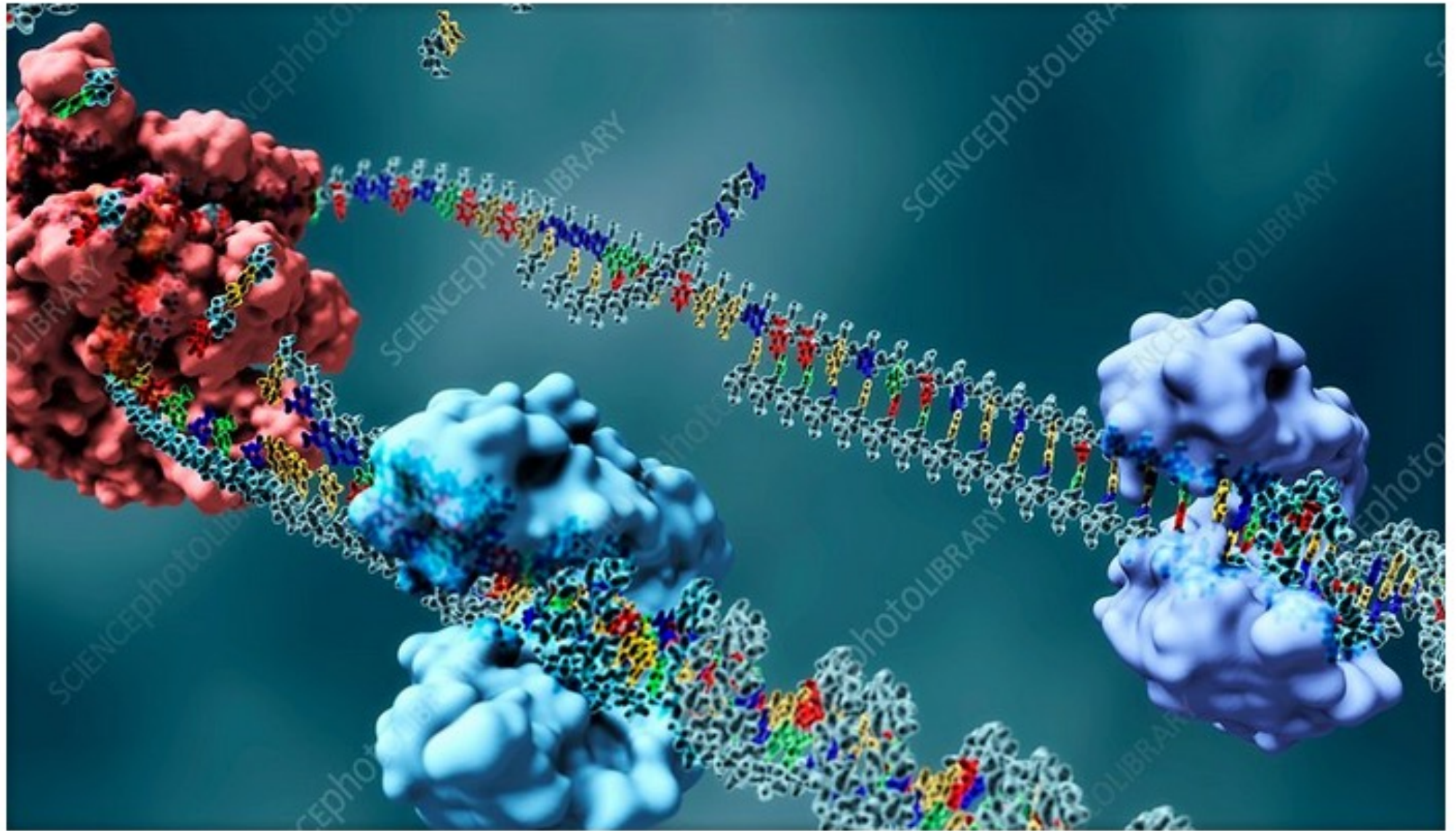


PUNCTUATED

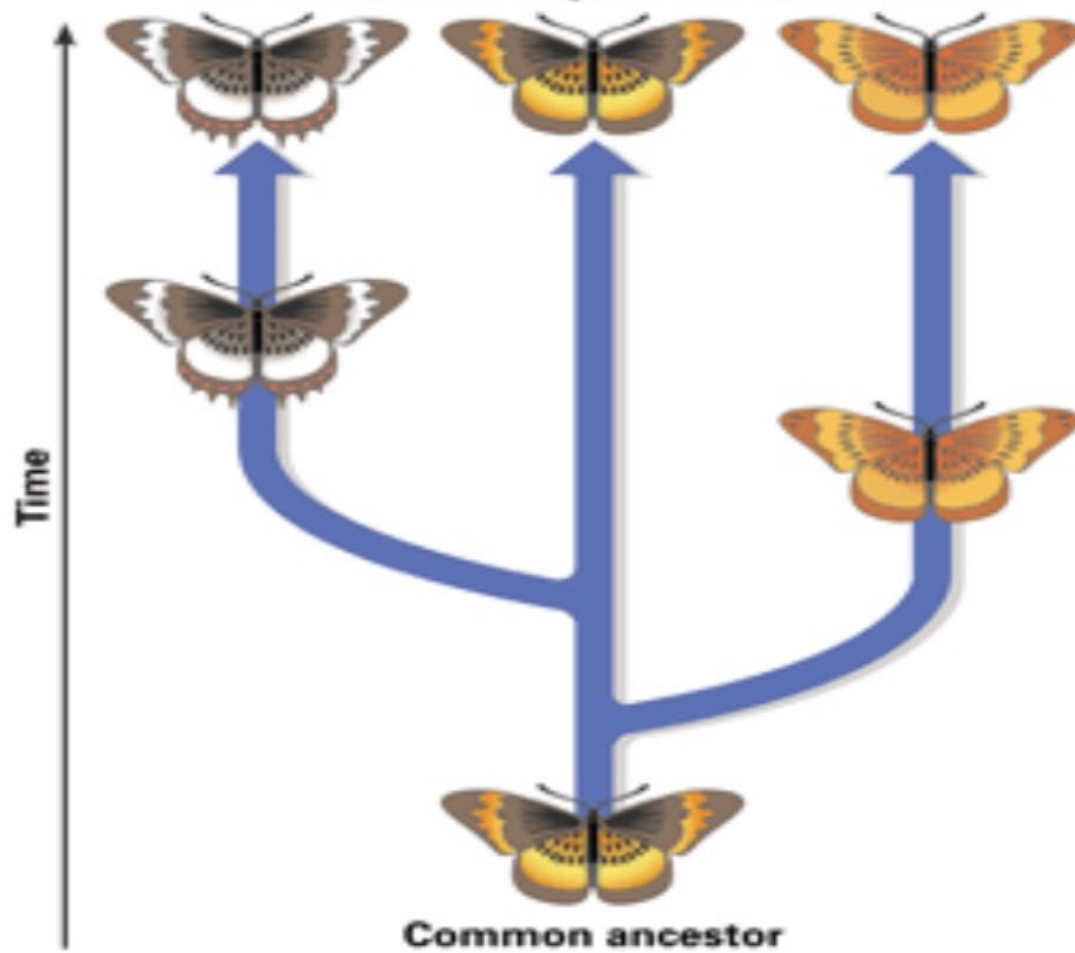
EQUILIBRIUM

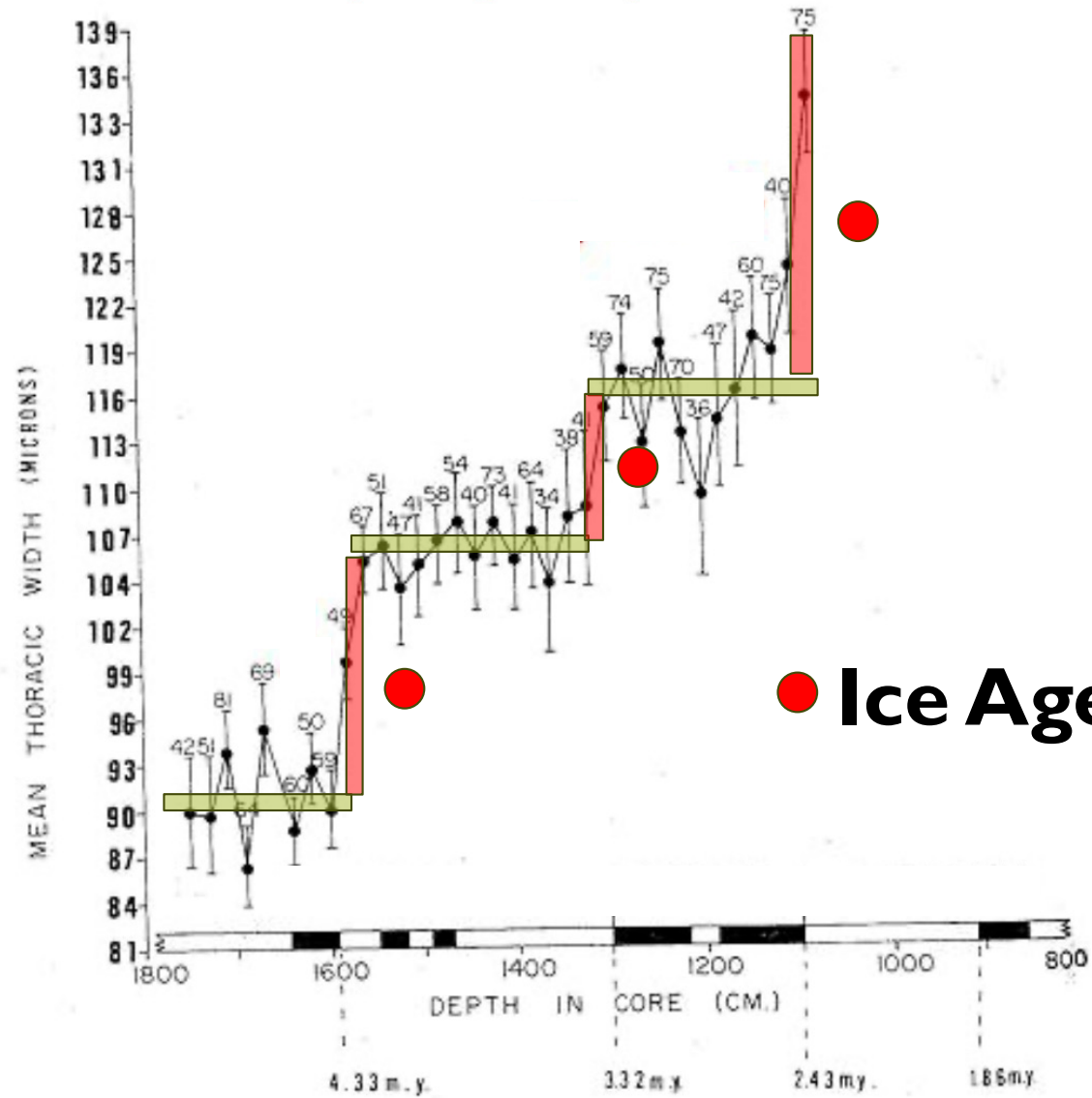






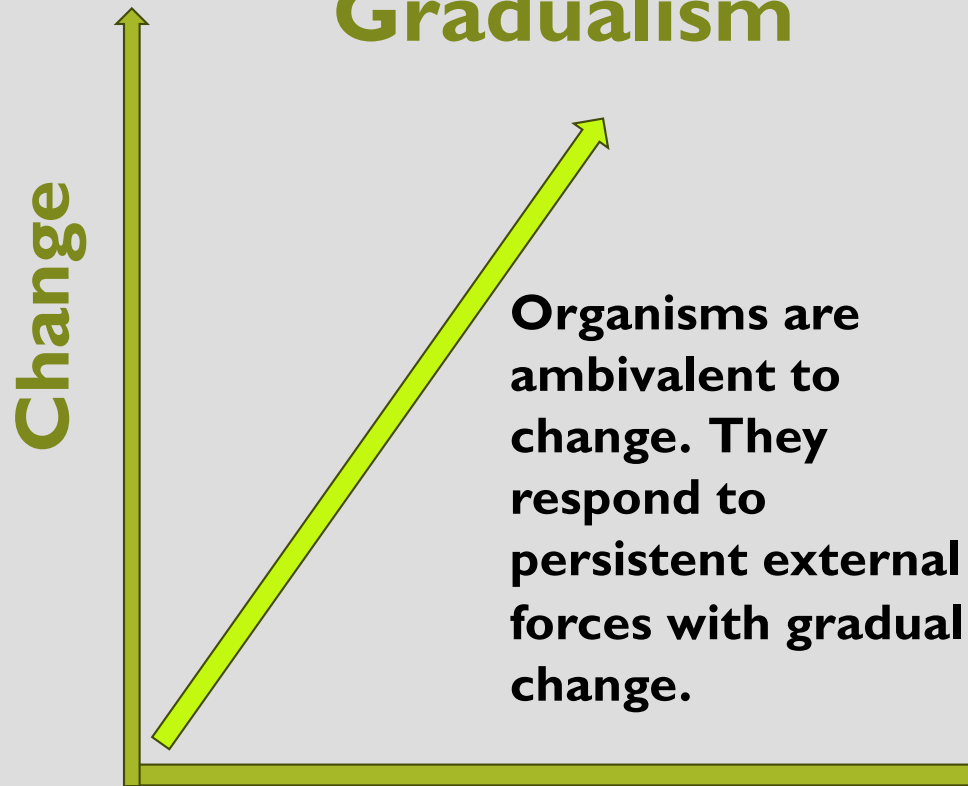
## Punctuated Equilibrium Model





(Darwin)

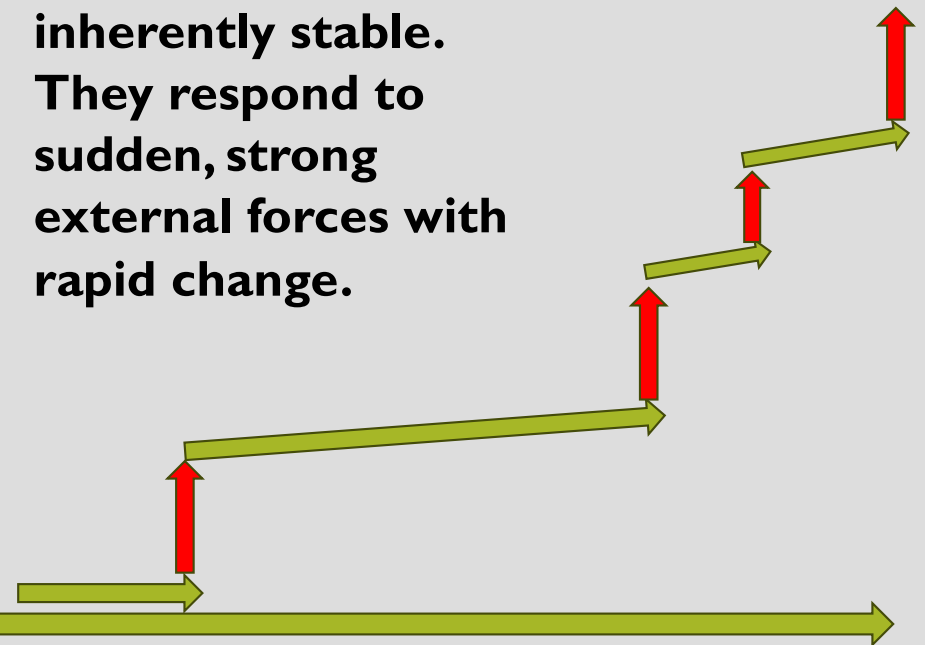
## Gradualism



(Gould)

## Punctuated Equilibrium

Organisms are inherently stable. They respond to sudden, strong external forces with rapid change.



Time



## HOW TO FLOURISH IN A CHANGING WORLD:



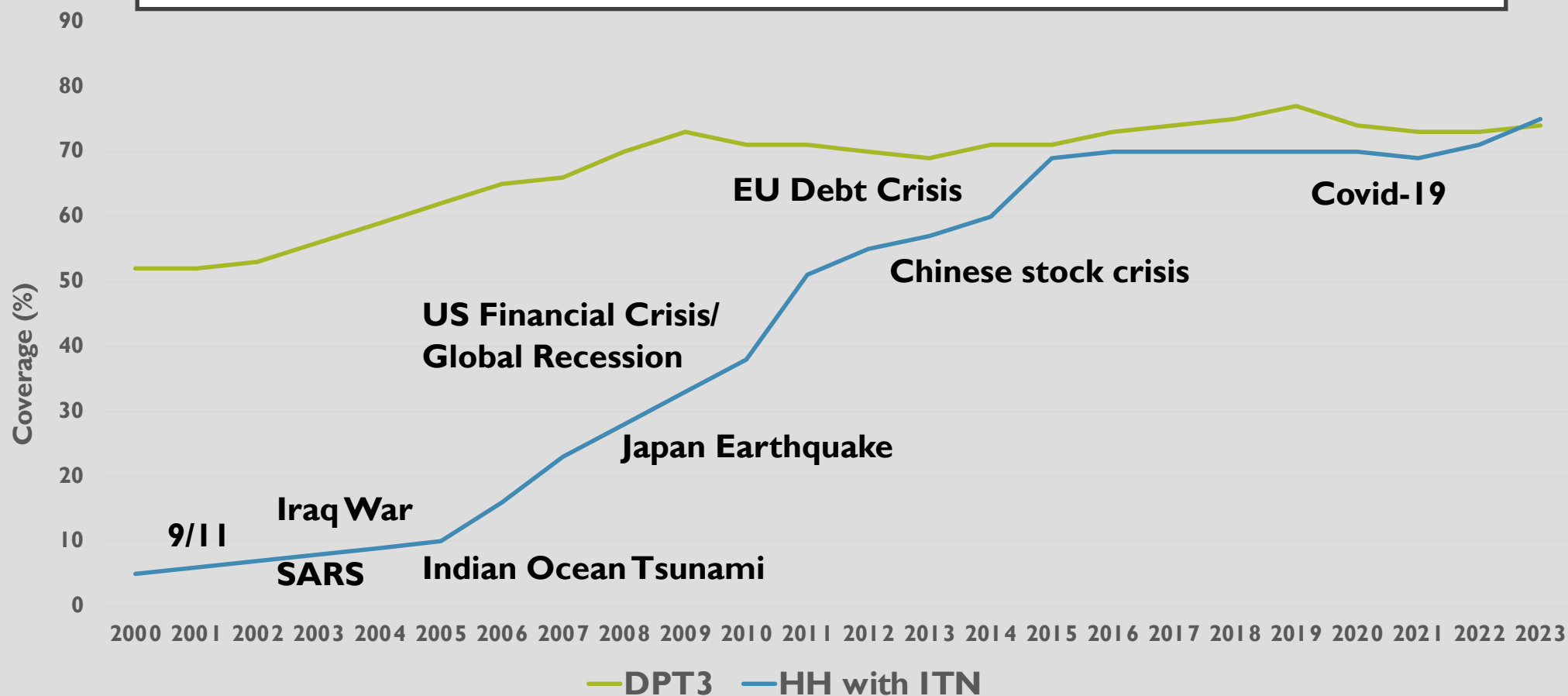
- **Be nimble**
- **Be efficient**
- **Diversify resources**
- **Find new niches**
- **Don't overthink it**



***WHAT THE PUNCTUATED EQUILIBRIUM MODEL  
TELLS US ABOUT OUR RESPONSE TO CHANGE***

- 1. We are inherently stable beings. We trick ourselves into expecting the world to also be stable.**
- 2. We perceive change as abnormal and threatening.**
- 3. When we recognize that instability is normal, we can move from being victims of change to being active participants in change.**

# PERFORMANCE OF HEALTH INTERVENTIONS, AFRO



There is a story from Persia that a monarch once charged his wise men with inventing a sentence that, despite a changing world, would be true, and appropriate in all times and situations.

این نیز بگذرد

**“This, too, shall pass.”**



Thank you and Congratulations!

***"It's astounding to think that dinosaurs that had been around for so many millions of years, evolve into giants the size of airplanes – and then it all came crashing down in an instant when the Earth changed so quickly. They were just so ill-suited to that new reality and they couldn't adapt."***

Stephen Jay Gould

*Adaptation was the key to survival*