

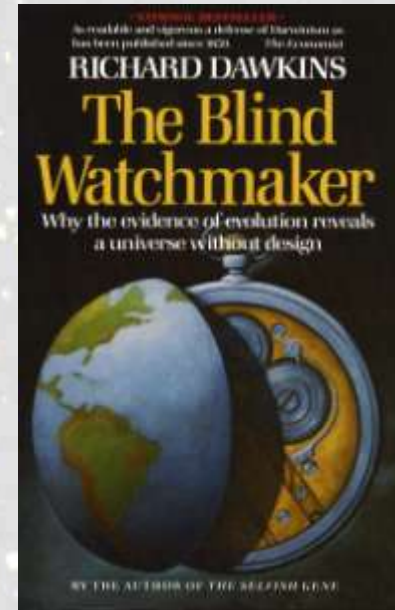
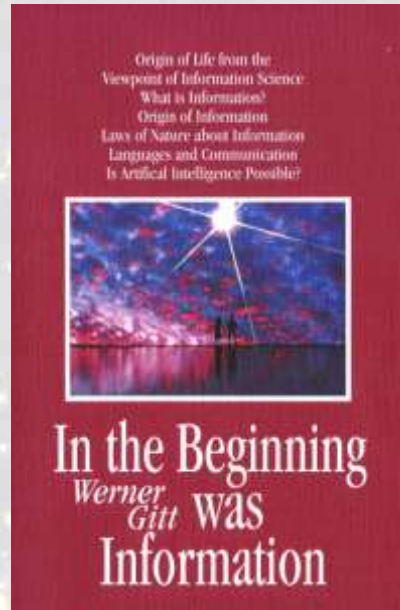
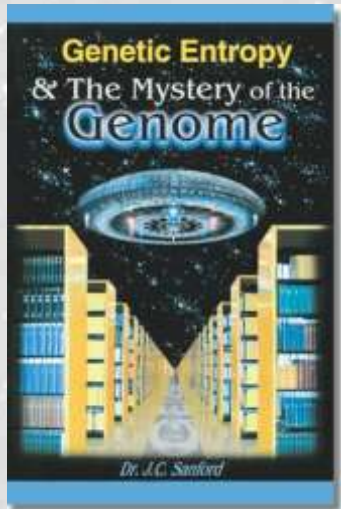
Does Evolution have a Source of Genetic Information?

Evolution is impossible if there is no naturalistic mechanism for generation of the information content of life forms – a new numerical simulation program illustrates the impossibility of this happening

Jason D. Browning

October 2008

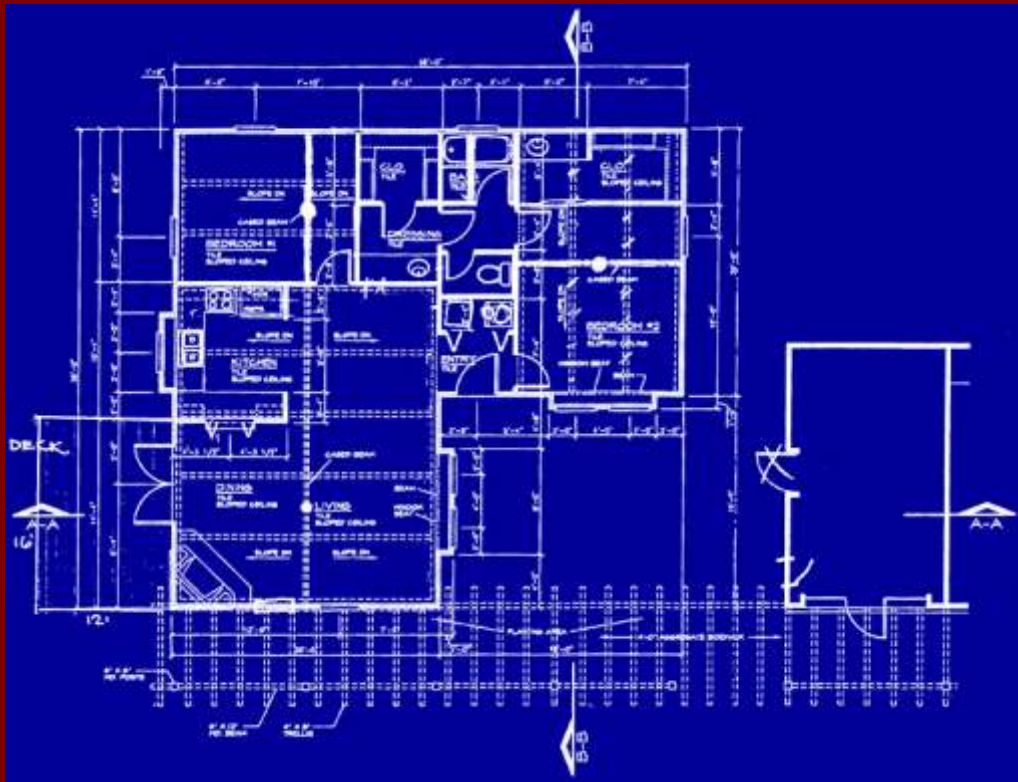
Source Materials



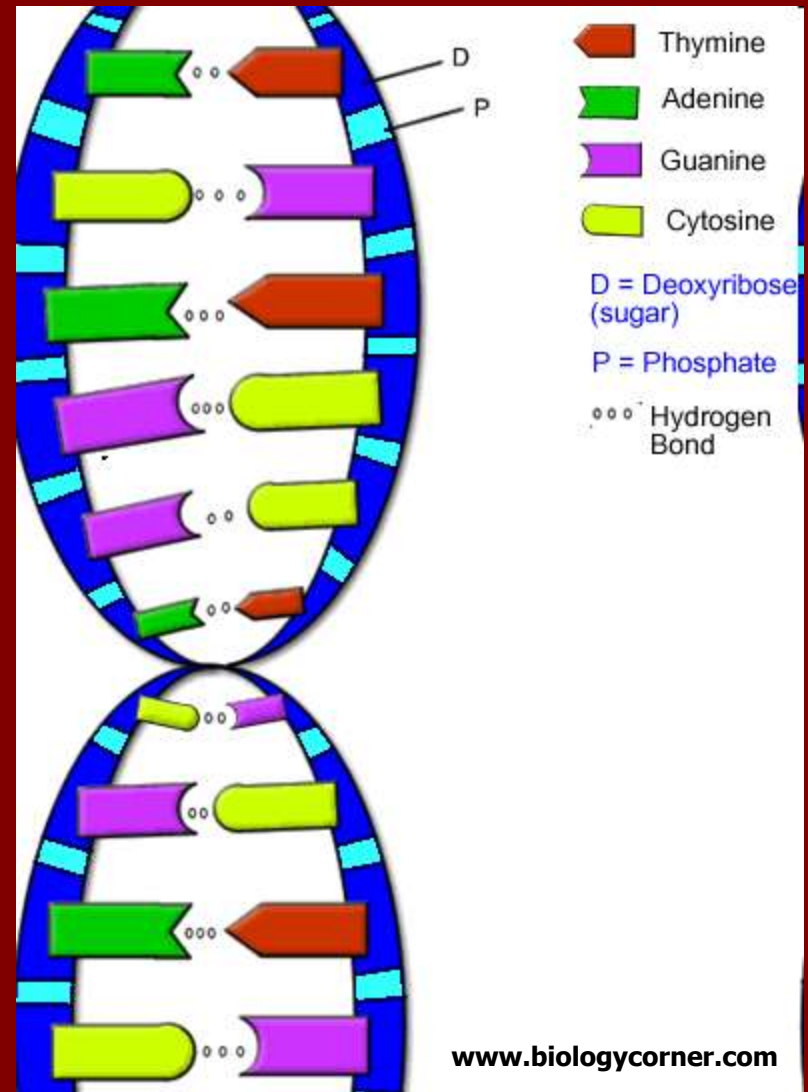
**International Conference on Creationism 08 Proceedings:
"Using Numerical Simulation to Test the Validity of
Neo-Darwinian Theory", Sanford, et. Al.**

What is Information?

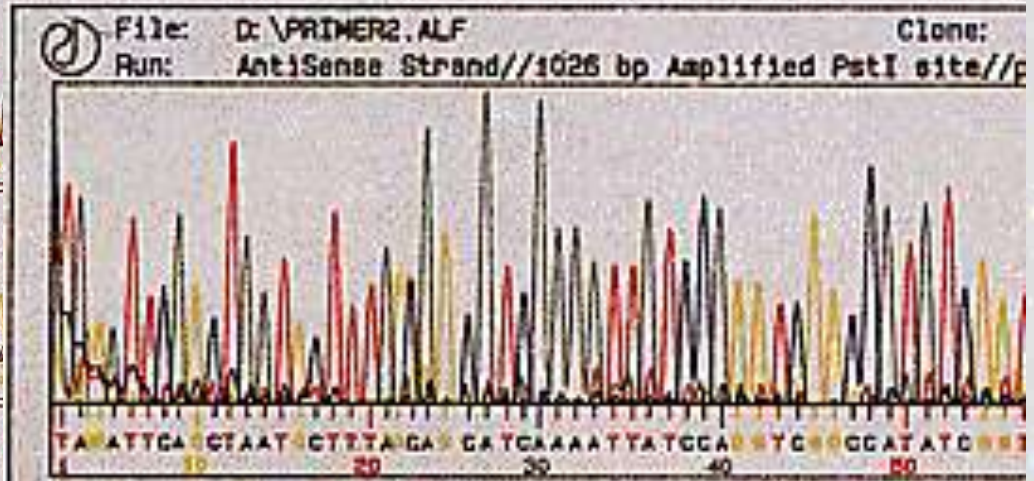
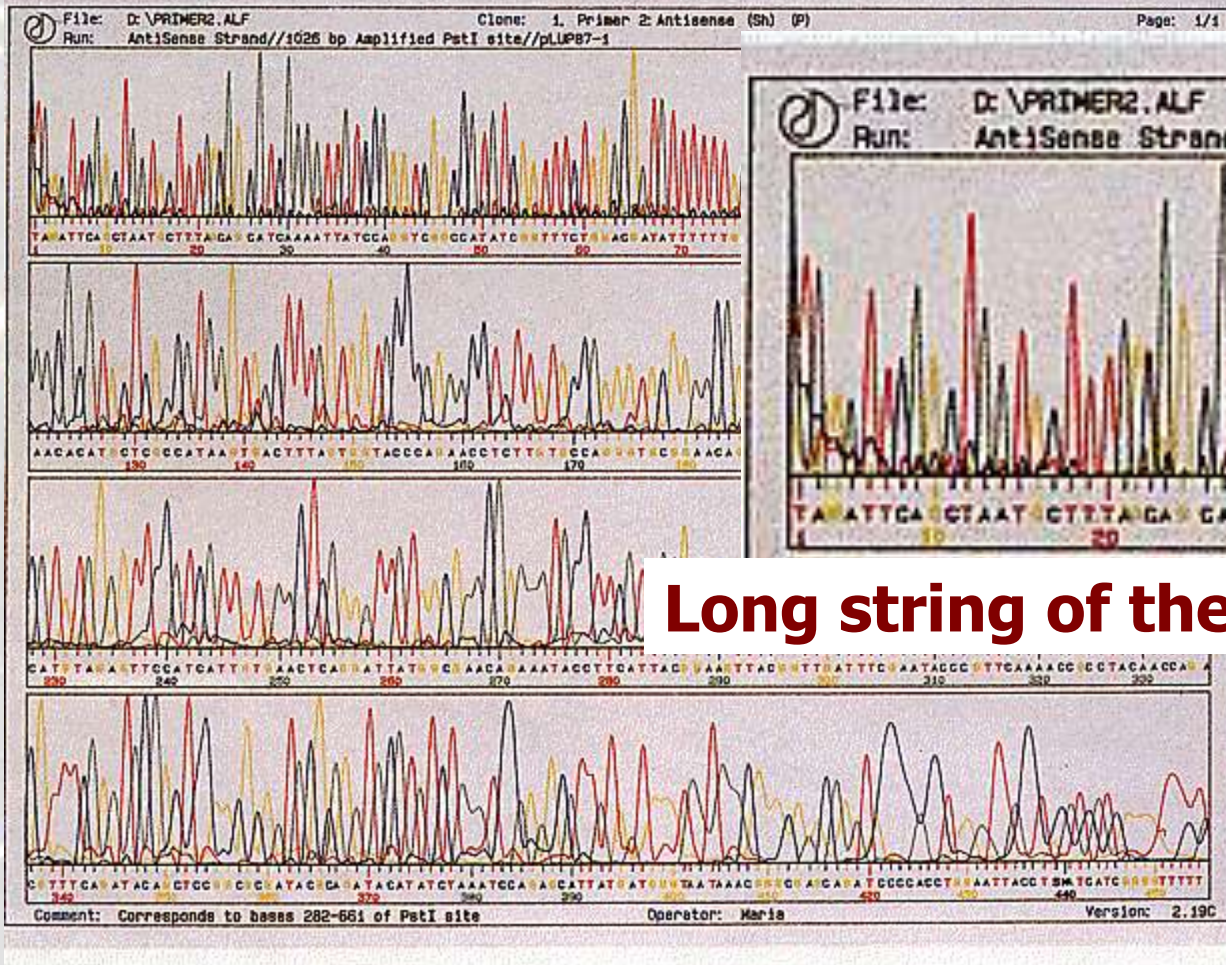
- ▶ **Information = knowledge or instructions; a blueprint**
- ▶ **The more complex something is, the more information it contains**
 - ▶ **More words are needed to describe it**
 - ▶ **Longer instructions are needed to build it**
- ▶ **The information for how to build, operate, and repair life is coded in the **DNA** of the genome**



DNA is the blueprint of life



DNA Sequencing Result



Long string of the letters T, A, G, C

Measuring Genetic Information

- ▶ The human genome contains three billion nucleotides (T, A, G, C)
- ▶ Reference points:
 - ▶ The Bible contains about 3.5 million letters
 - ▶ Encyclopedia Britannica online has about 300 million characters
 - ▶ A CD can store 650 million bytes (byte = 8 bits, bit = 0 or 1)
 - ▶ English Wikipedia has about 3.5 billion characters
 - ▶ A DVD can store 4.7 billion bytes
- ▶ The human genome has about the same amount of information as the English Wikipedia's over 2,000 articles and about ten times that of the Encyclopedia Britannica!

How is Evolution Supposed to Work?

- ▶ **Darwin's mechanism: evolution is caused by:**
 - ▶ **1. Spontaneous variation (mutation) +**
 - ▶ **2. Differential reproduction (natural selection)**

If evolution is true, Darwin's mechanism must have caused the development of the genetic information that builds, operates, and repairs living things

What is Meant by “Selection”?

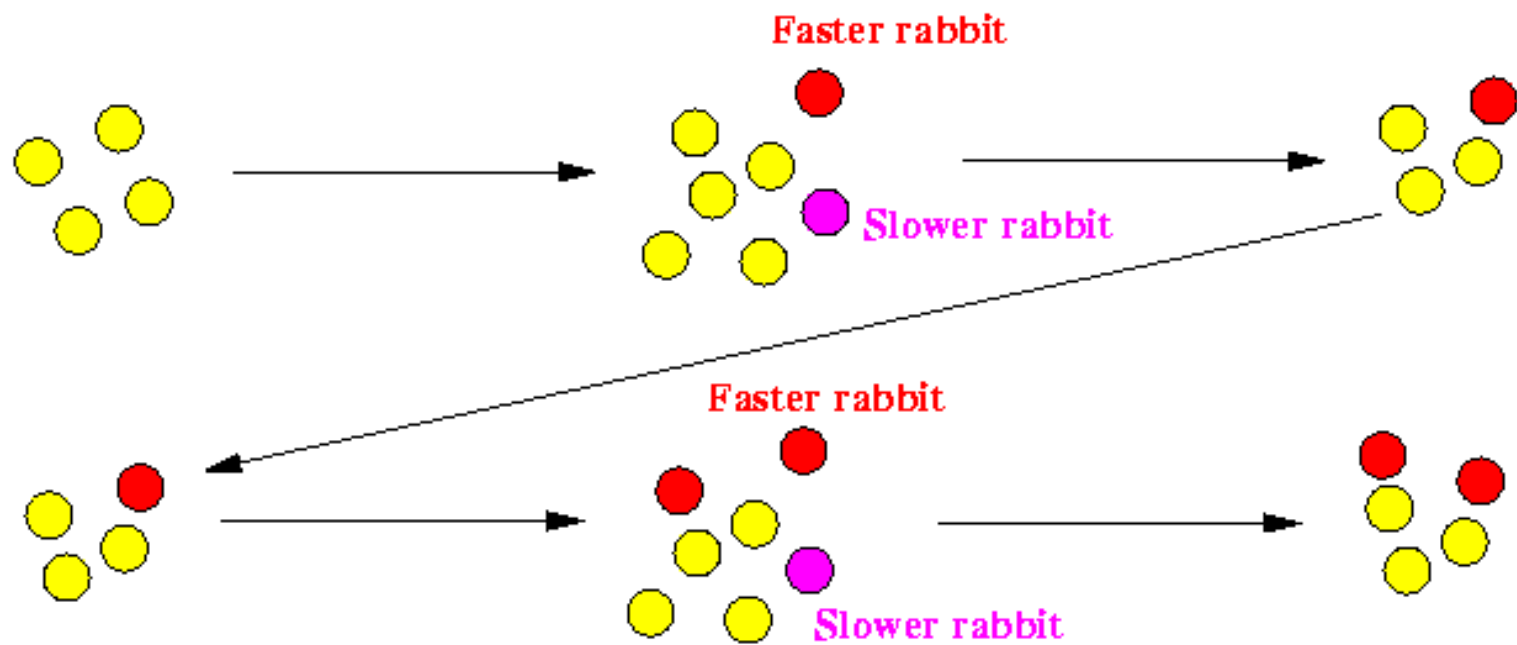
“Natural Selection” (“selection” for short):

- 1. Eliminates some of the least fit individuals and their bad mutations (they don’t stay alive to reproduce)**
- 2. Favors the reproduction of some of the most fit individuals and their beneficial mutations**

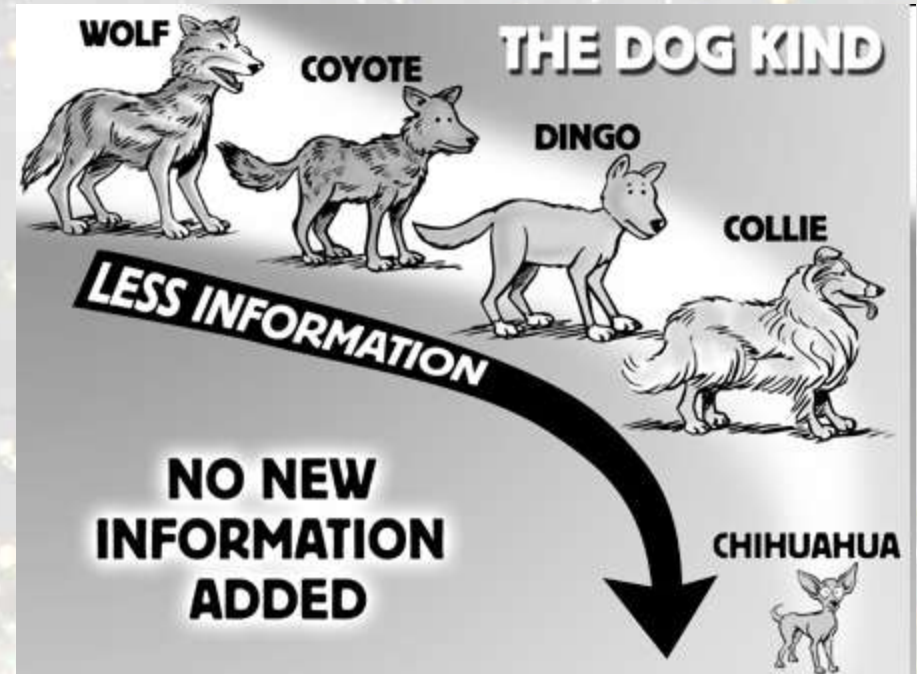
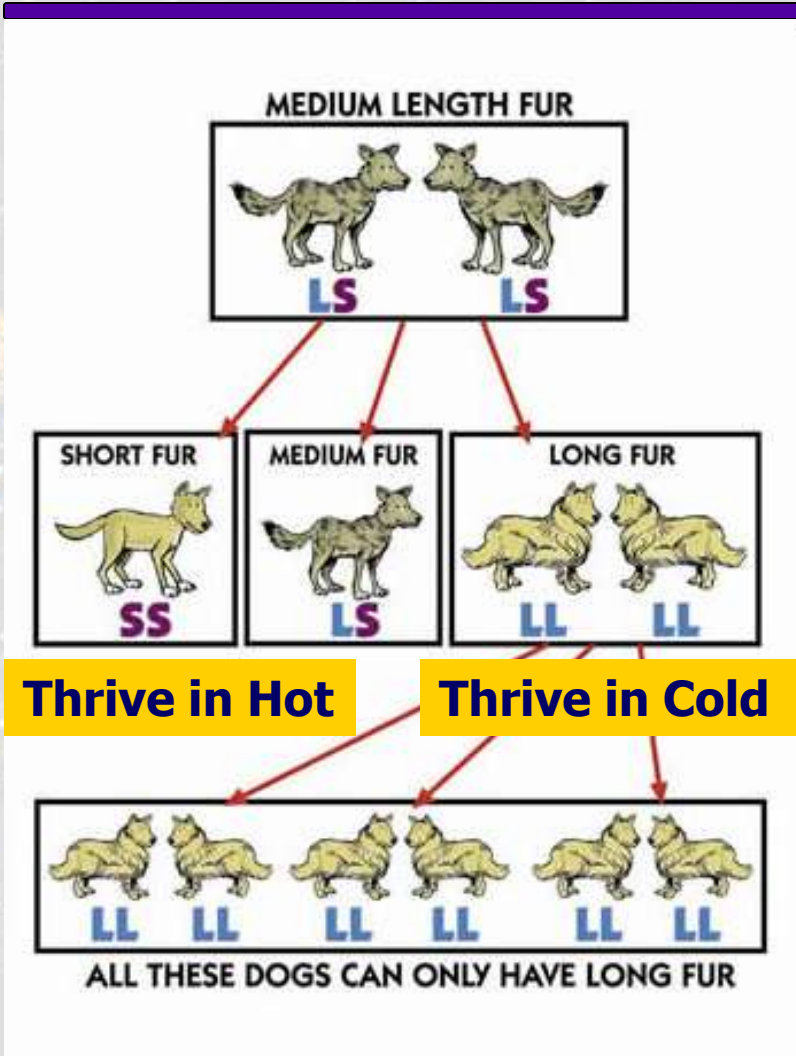
Original population

Random Mutation

Natural selection



Natural Selection is True – it is NOT Evolution



Answersingenesis.org

Natural selection selects from already existing information and causes a loss of information

Black and White Twins



Flightless Cormorant Bird The Result of a Beneficial Mutation?



So What's the Issue?

- ▶ **No one disputes that:**
 - ▶ **Mutations occur and some of them can be considered “beneficial” in certain situations**
 - ▶ **Bad mutations vastly outnumber “good/beneficial” mutations**
 - ▶ **Natural selection happens**

The Challenge

If Darwin's mechanism cannot produce or increase genetic information then evolution must be false!

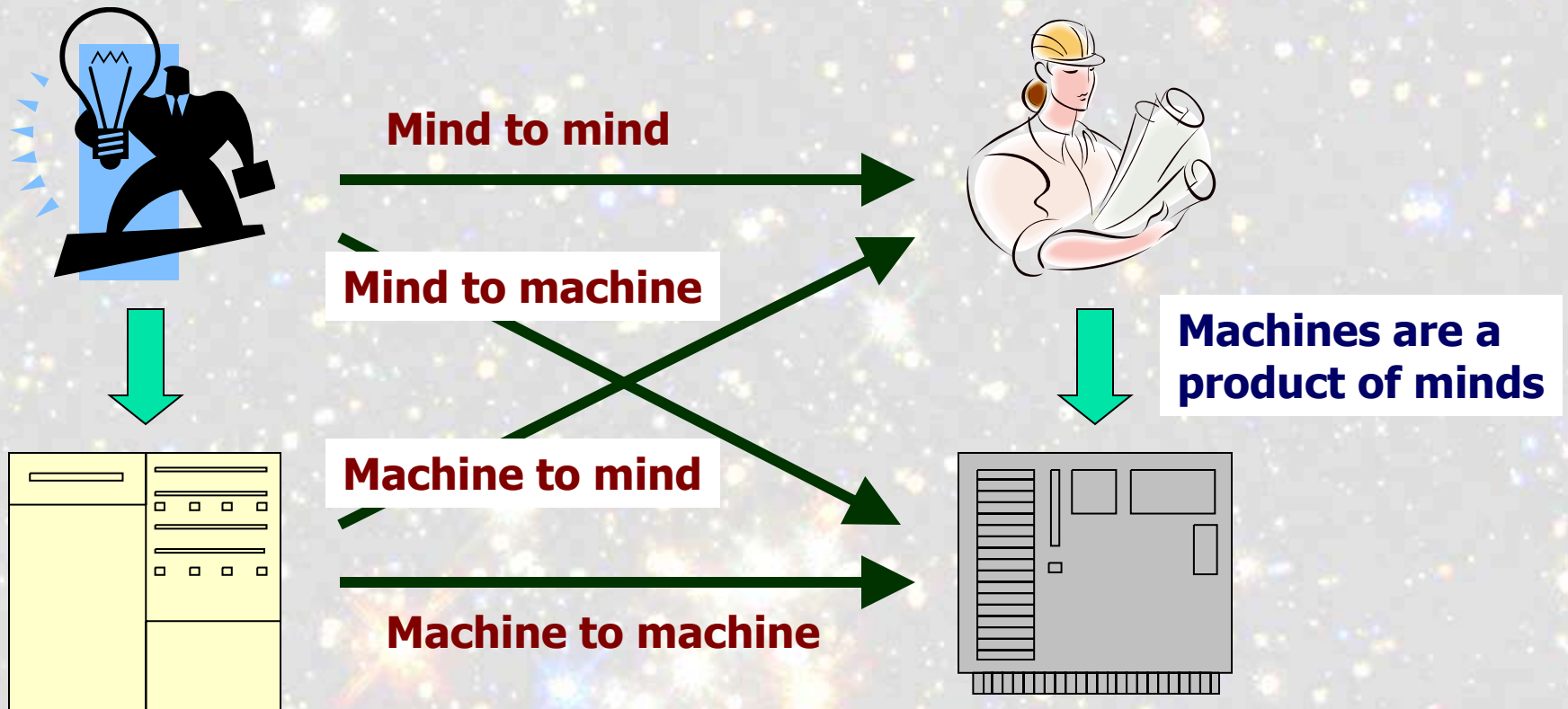
▶ **Logic and numerical simulation show that it cannot!**



Line of Reasoning #1

Information is a mental, not a physical concept

Information = Message with a Purpose



Information communicates purposeful ideas from one mind/machine to another mind/machine

Meaning and Purpose

- ▶ **A message must have meaning and purpose for the receiver for it to be information**

Meaning:

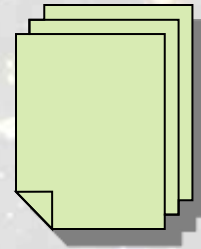
- ▶ **Example: for an English-speaking person, “cat” = a small furry animal (has meaning)**
- ▶ **“xgh” = not an English word, has no meaning**

Purpose:

- ▶ **Randomly texting the word “cat” to someone has no purpose and therefore provides no information**
- ▶ **Texting the word “cat” in response to a prior question about animals has a purpose and provides information**

Information is a Mental Concept

We must not confuse the physical representation of information with the information itself!



The information content in this PowerPoint presentation is the same whether it is on a computer hard-drive, a CD, seen projected on a screen, printed as a hardcopy, or read to you

The DNA is NOT the Information

- ▶ **The DNA of life houses information but is NOT the information itself!**
- ▶ **Modifying the physical housing (mutating the DNA) can never create new information!**
- ▶ **The information of life originated from the mind of God**



In the Beginning was Information

- ▶ **Page 124: “The basic flaw of all evolutionary views is the origin of the information in living beings. It has never been shown that a coding system and semantic information could originate by itself in a material medium, and the information theorems predict that this will never be possible. A purely material origin of life is thus precluded.”**

In the Beginning was Information

- ▶ **Page 127: “Can new information originate through mutations?”**

This idea is central in representations of evolution, but mutations can only cause changes in existing information. There can be no increase in information , and in general the results are injurious. New blueprints for new functions or new organs cannot arise; mutations cannot be the source of new (creative) information.”



Line of Reasoning #2

Intelligent design is evident in life

Intelligent Design

- ▶ **Intelligent Design = the study of intelligent causes and their effects**
- ▶ **“Design” is rigorously formulated as a scientific theory of information**

- ▶ **Life demands an explanation**
- ▶ **Darwinism tries to make physical causes do the work of an intelligent cause**

Establishing Intelligent Design

▲ **Contingency**

- ▶ **Ensures that the object in question is not the result of an automatic process that had no choice in its production**

▲ **Complexity**

- ▶ **Ensures that the object is not so simple that it can readily be explained by chance**

▲ **Specification**

- ▶ **Ensures that the object exhibits the type of pattern characteristic of intelligence**

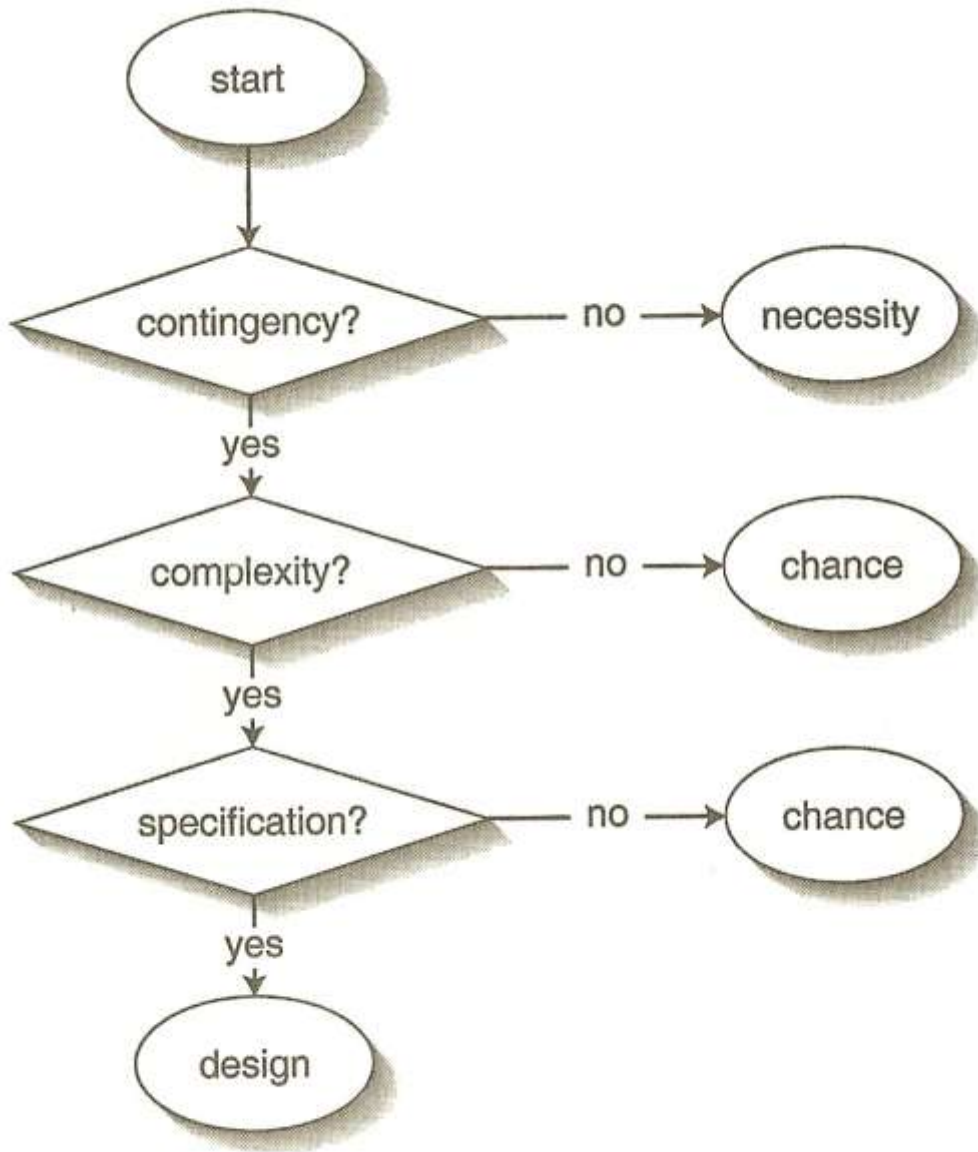


Figure 5.2. The explanatory filter

- ▶ Life is contingent (did not have to occur)
- ▶ Life contains many irreducibly complex systems (multiple components simultaneously necessary for overall function)
- ▶ Life systems embody (pre) specified patterns independent of the actual living systems (necessary functionality, e.g. reproduction, ingest food, convert to useful energy)

Conclusions of Intelligent Design Theory

- ▶ **The key feature of life is the presence of complex specified information**
- ▶ **“As a mechanism for conserving, adapting and honing already existing biological structures, the Darwinian mechanism is ideally suited. But as a mechanism for innovating irreducibly complex biological structures, it utterly lacks the informational resources” (Dembski, *Intelligent Design*, pg. 180)**
- ▶ **Only information begets information**

Line of Reasoning #3

Numerical simulation shows why upward evolution is impossible

Mendel's Accountant

simulating genetic change over time

[home](#) [run program](#) [screen shots](#) [download](#) [authors](#) [user manual](#) [discussion](#)

John C. Sanford

Courtesy Associate Professor

Department of Horticultural Sciences
Cornell University
New York State Agricultural Experiment Station
Geneva, NY 14456

E-Mail: jcs21@cornell.edu

Minnesota-St. Paul BS 1976 Horticulture
Wisconsin-Madison MS 1978 Plant Breeding/Plant Genetics
Wisconsin-Madison PhD 1980 Plant Breeding/Plant Genetics

Program Overview

My central research objectives have involved:

- Developing new genetic transformation technologies
- Developing new approaches to genetically engineer disease and insect resistance in horticultural plants
- Conventional breeding of strawberries and raspberries

My most significant accomplishments were:

- Primary inventor of the biolistic (gene gun) process
- Co-inventor of the Pathogen-derived Resistance (PDR) process
- Co-inventor of the Genetic Vaccination process
- Primary inventor of numerous conventionally-bred fruit varieties.
- Gene gun process used to engineer most of the world's transgenic crops.

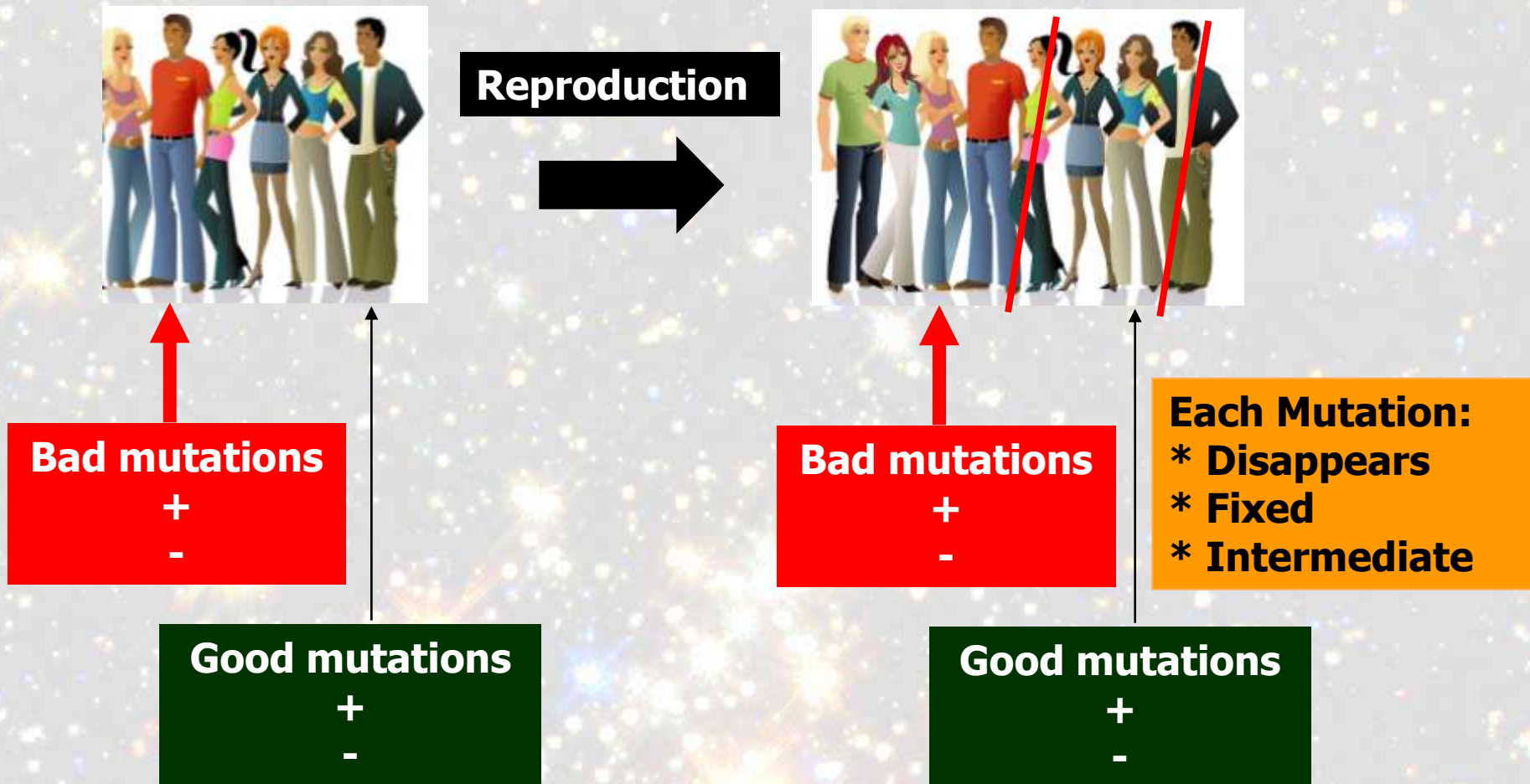


Mendel's Accountant

- ▶ www.mendelsaccountant.info
- ▶ Genetic numerical simulation program
- ▶ Tracks and counts mutations within populations
 - ▶ Bad and good mutations enter the population in each generation
 - ▶ Other mutations are subtracted away by selection or random drift
 - ▶ Every mutation is tracked generation to generation until its frequency goes to zero or 100%
 - ▶ Various rules determine which individuals reproduce to pass on their mutations

Numerical Simulation

Every mutation is tracked generation to generation



Program Input Parameters

Mendel's Accountant

Note: using parameters from case01

Choose parame

Basic parameters

1. Case ID:
2. New mutations per offspring:
3. Fraction of mutations beneficial:
4. Offspring per female:
5. Population size:
6. Generations:
7. Advanced settings:

Advanced:: mutations. selection. population. computation

1. Parameters shaping distribution of deleterious mutation effects:
 - a. genome size:
 - b. fraction of mutations have "major effect":
 - c. minimum mutation effect which is defined as "major":
2. Range and distribution of beneficial mutations:
 - a. maximal beneficial effect per mutation:

Most important input data:

- Mutation rate
- Fraction of mutations that are beneficial
- Mutation distribution
- Selection efficiency

v1.0.0

Case ID:

Case	case01	<input type="radio"/>
Gen	4223 (84.5%)	
Fit	0.8323057	
Mutns	40024 D / 6 F	
Time left	20.0 minutes	
Case	test02	<input type="radio"/>

Plot of Allele Frequencies

Mendel's Accountant

Distribution of minor and near-neutral mutation effects (case01)
Deleterious mutations -- actual versus theoretical (without selection)

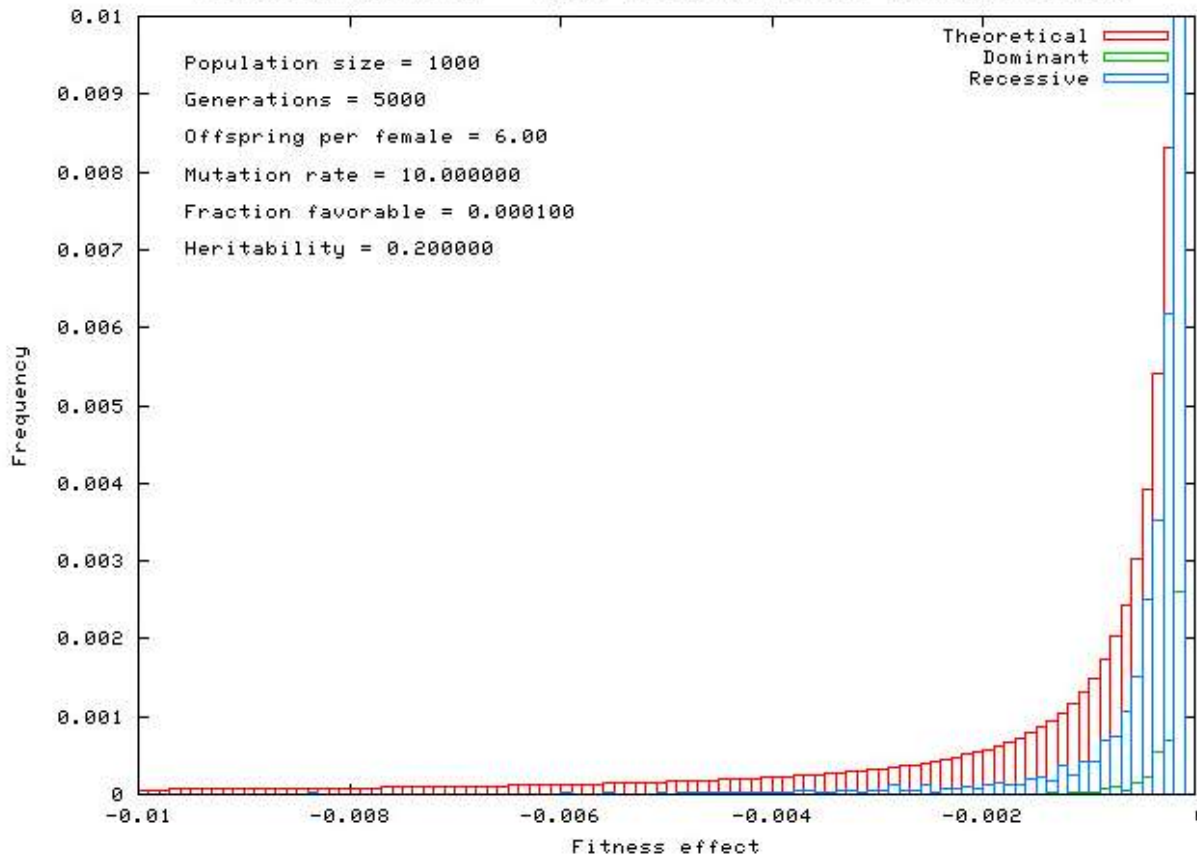
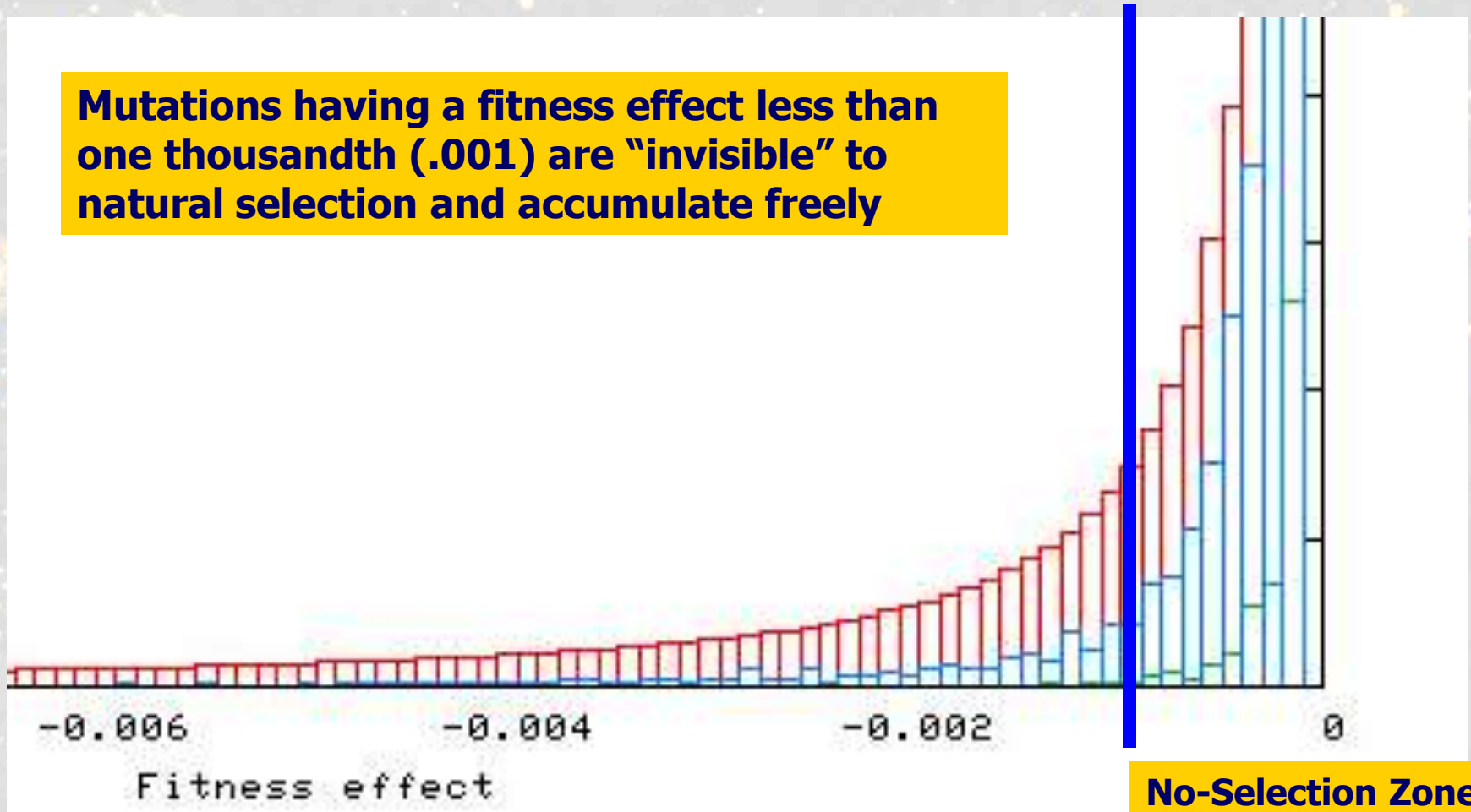


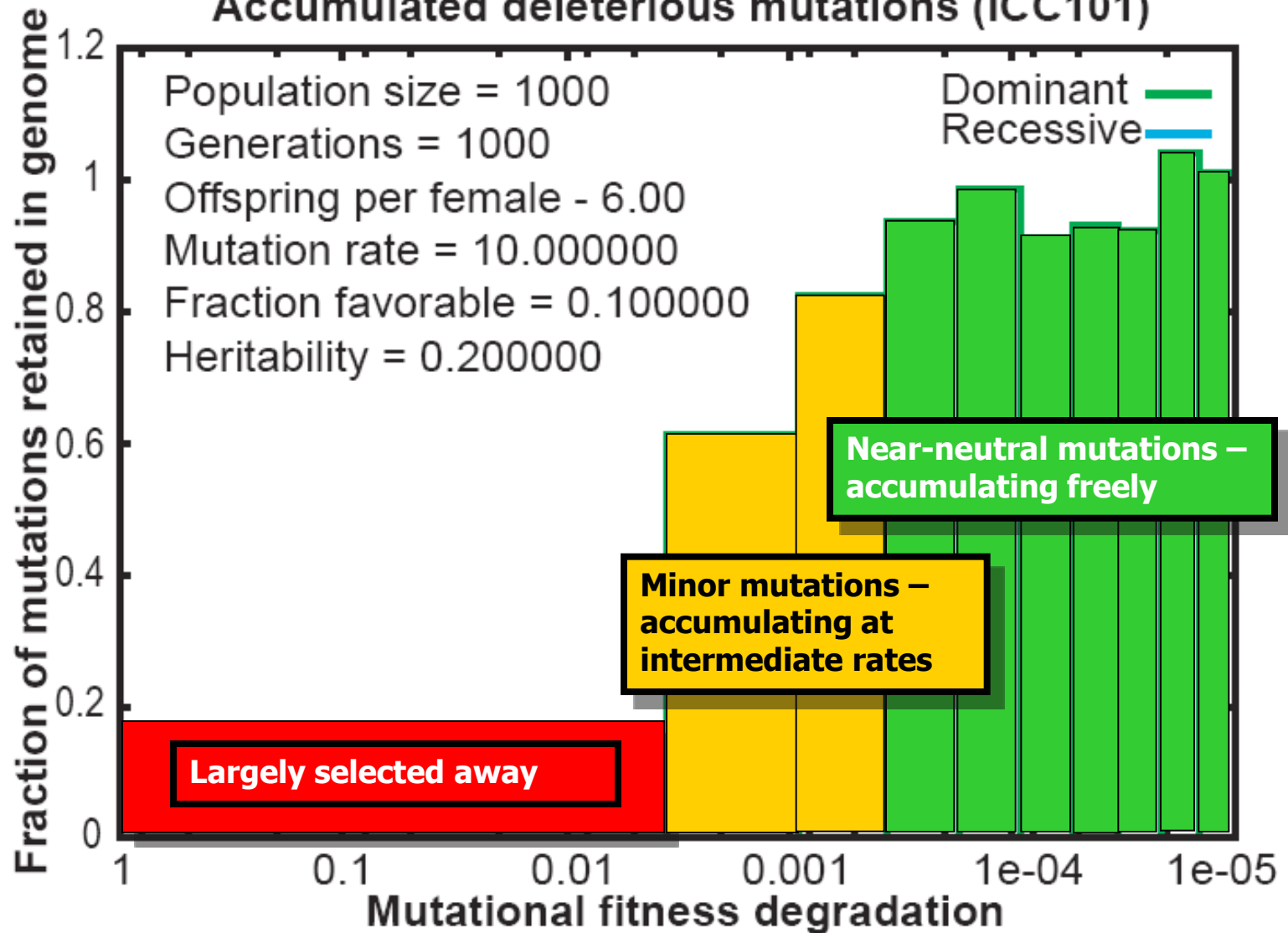
Illustration that Most Mutations Lie in “No-Selection” Zone

Mutations having a fitness effect less than one thousandth (.001) are “invisible” to natural selection and accumulate freely

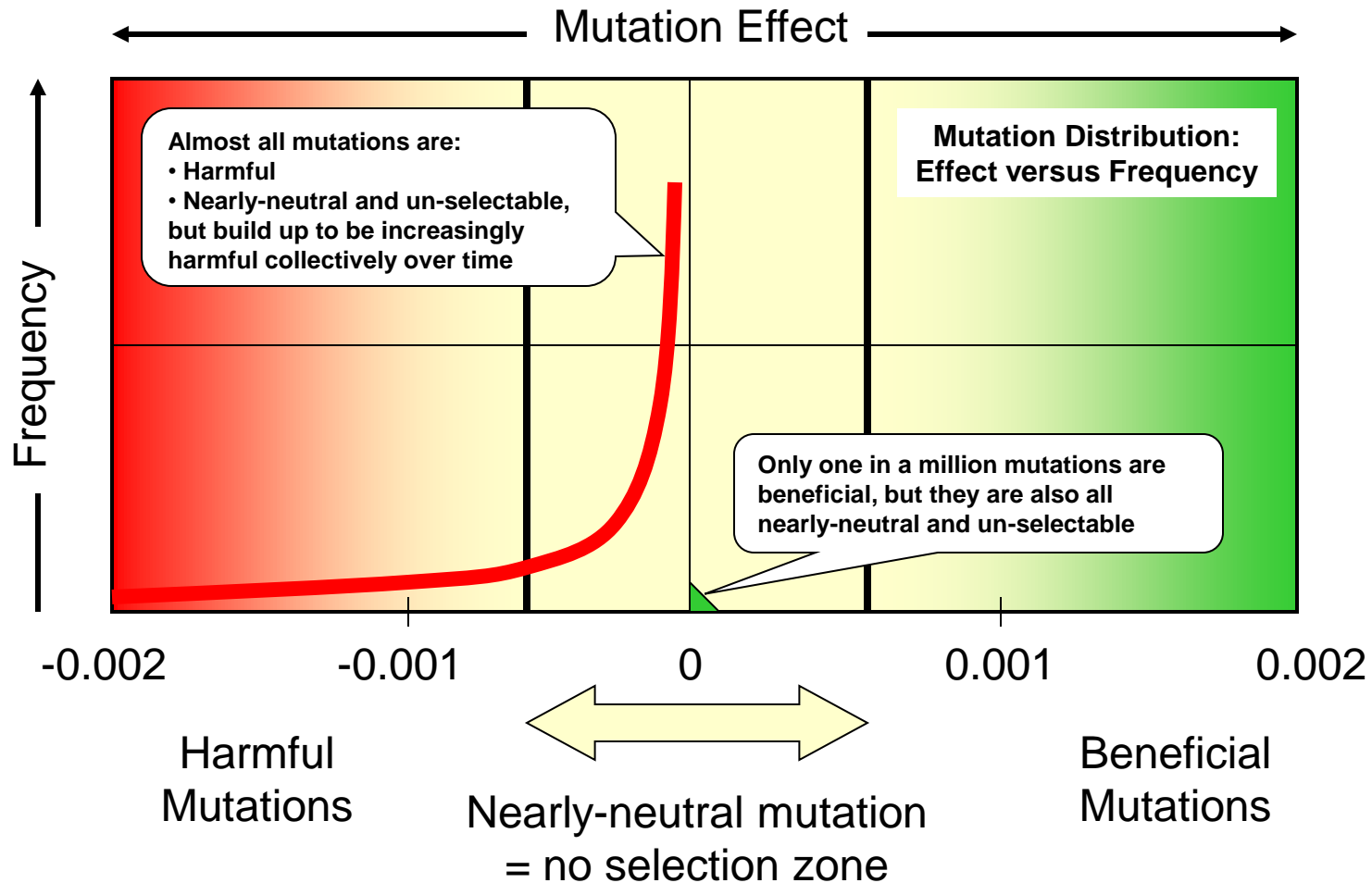


Distribution of accumulated mutations

Accumulated deleterious mutations (ICC101)

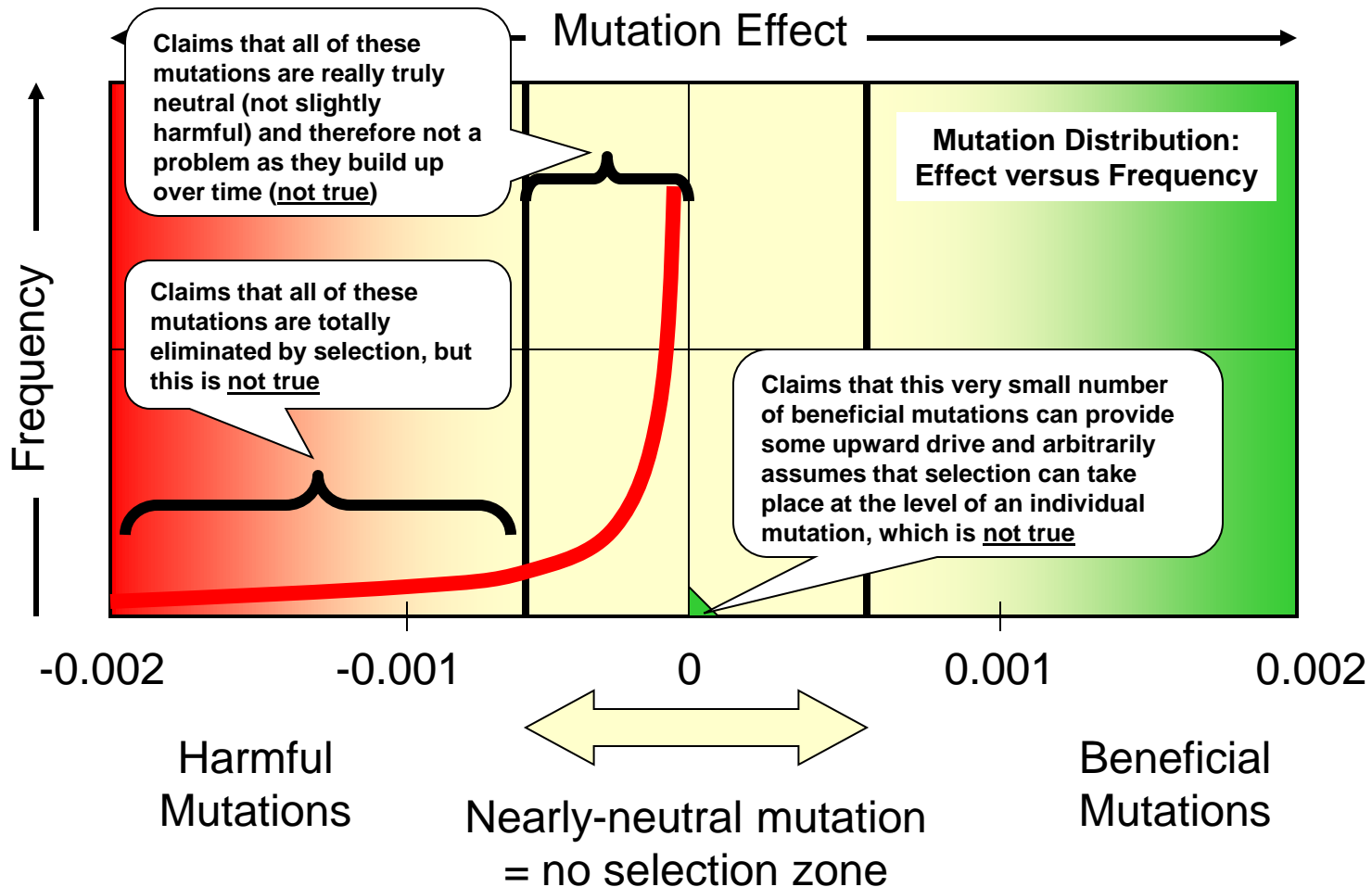


Why Mutation and Selection Cannot Drive Upward Evolution



Why is there a no selection zone? A single mutation only affects one three-billionth of the total information for a human, and selection (who reproduces more) happens at the level of individual people and not at the level of individual mutations. A single mutation will rarely affect the reproduction rate of a person. Many other environmental and personal factors totally overwhelm the mutation in determining how many children a person will have.

How Does the Evolutionist Deal With this?



For the mutation/selection mechanism to drive upward evolution (the only possible mechanism there is), the evolutionist incorrectly eliminates the effects of all harmful mutations by assuming they are either truly neutral or totally eliminated via selection (all those individuals having the mutation do not reproduce at all), leaving the very small number of beneficial mutations to drive upward evolution. The arbitrary assumption that selection can take place at the level of an individual mutation is needed otherwise the mutation's influence on reproduction is overwhelmed and lost at the level of the person. Also note that even though some mutations are classified as beneficial, they NEVER add new information.

The “Linkage Blocks” Problem

- ▶ **Linkage blocks are spans of about 30,000 nucleotides that do not recombine (clusters that never break apart)**
- ▶ **For forward evolution to occur good and bad mutations must be separated**
- ▶ **Most mutations are bad**
- ▶ **Therefore rare good mutations will always be linked to many bad mutations within its linkage cluster**
- ▶ **Therefore, every “building block” of the genome (every one of the approx. 100,000 linkage blocks in man) is degenerating**

Goal: Accumulate Three-Billion Pennies

- ▶ **Start with no money (no nucleotides/no information)**
- ▶ **Try to collect some money, penny by penny**
- ▶ **PROBLEM IS: for every penny you find (every beneficial mutation), someone comes in and steals away 100,000 of your pennies (bad mutations outnumber beneficial mutations by this order of magnitude)**



Line of Reasoning #4

Mathematics using the evolutionists own numbers shows that mutation cannot produce a new species

Creating a New Species Through Small Changes

What are the chances of creating a new species through evolution? (from *Not By Chance!* by Dr. Lee Spetner). The calculation:

- 1. The chance of getting a mutation**
- 2. What fraction of mutations have a selective advantage?**
- 3. How many replications are there in each step of the chain of cumulative selection?**
- 4. How many steps are needed to achieve a new species?**

Calculation Values

Values taken from evolutionary studies

- 1. Mean mutation rate for animals = 1 per 10 billion**
- 2. Selection value = 0.1%**
- 3. # births per step = 50 million**
- 4. # steps for new species = 500**

Calculation Results

- ▶ **Chance that adaptive mutation will occur = 1/600**
 - ▶ **Specific change in specific nucleotide = (mutation rate * # births) / 3**
(as there are 4 kinds of nucleotides)
- ▶ **Chance that mutation will survive = 1/500**
 - ▶ **Spread to take over the population**
- ▶ **Chance that mutation will appear & survive = 1/600 x 1/500 = 1/300,000 (about the chance of 18 coin flips coming up all heads)**
- ▶ **Chance of 500 steps occurring = 1/300,000 multiplied by itself 500 times = $2.7 * 10^{-2739}$**
- ▶ **This is orders of magnitude smaller than the chance of picking a particular atom out of the entire universe! (which has about 10^{80} atoms)**
- ▶ **Conclusion: The evolutionary scenario is mathematically IMPOSSIBLE**



The Evolutionist Best Response

Cumulative selection

The Blind Watchmaker

- ▶ **Richard Dawkins makes the claim that “cumulative selection” is the source of information creation in evolution**
- ▶ **Page 44: “In cumulative selection ... the results of one sieving process are fed into a subsequent sieving. The end product of one generation of selection is the starting point for the next generation of selection, and so on for many generations.”**

Dawkins's example:

Initial sequence:

WDLMNLT DTJBKWIRZREZLMQCO P

Predetermined target sentence:

METHINKS IT IS LIKE A WEASEL

First test:

Gen. 01 WDLMNLT DTJBKWIRZREZLMQCO P

Gen. 02 WDLTMNLT DTJBSWIRZREZLMQLO P

Gen. 10 MDLDMNLS ITJISWHRZREZ MECS P

Gen. 20 MELDINLS IT ISWPRKE Z WECSEL

Gen. 30 METHINGS IT ISWLIKE B WECSEL

Gen. 40 METHINKS IT IS LIKE I WEASEL

Gen. 43 METHINKS IT IS LIKE A WEASEL

Dawkins's example:

Initial sequence:

WDLMNLT DTJBKWIRZREZLMQCO P

Predetermined target sentence:

METHINKS IT IS LIKE A WEASEL

Second test:

Gen. 01 Y YVMQKZPFJXWVHGLAWFVCHHQXYOPY

Gen. 10 Y YVMQKSPFTXWSHLIKEFV HQYSPY

Gen. 20 YETHINKSPITXISHLIKEFA WOYSEY

Gen. 30 METHINKS IT ISSLIKE A WEFSEY

Gen. 40 METHINKS IT ISBLIKE A WEASES

Gen. 50 METHINKS IT ISJLIKE A WEASEO

Gen. 60 METHINKS IT IS LIKE A WEASEP

Gen. 64 METHINKS IT IS LIKE A WEASEL

Gitt's Response to Dawkins

- ▶ **Page 102: “Dawkins selects a target sentence and his entire program is designed towards this goal. This game can be played with any random initial sequence and the goal will always be reached, because the programming is fixed. Even the number of letters is given in advance. It is obvious that no information is generated, on the contrary, it has been predetermined.”**

Why “Cumulative Selection” Doesn’t Work

- ▶ The existence of a reproducing life form (the initial string) is assumed, but it takes much information to get to this point
 - ▶ The claimed evolutionary mechanism of mutation followed by natural selection only operates after a reproducing life form exists
- ▶ The target sentence has been predetermined
 - ▶ Evolution has no predetermined target in mind
- ▶ There is no selective advantage in just a letter being in the correct position
 - ▶ Real selection operates at the level of the entire organism, and not at the level of an individual letter
 - ▶ A partial feature does not provide increased survival benefit, but is a hindrance
- ▶ Letters in the correct position are just as likely to be mutated (changed to a different letter)
- ▶ Information is much more than just letters in the right spot – it must be recognized and used for a purpose
 - ▶ Having a correct DNA sequence is useless without the complex processes that read and understand the DNA to build the proteins and other components of life

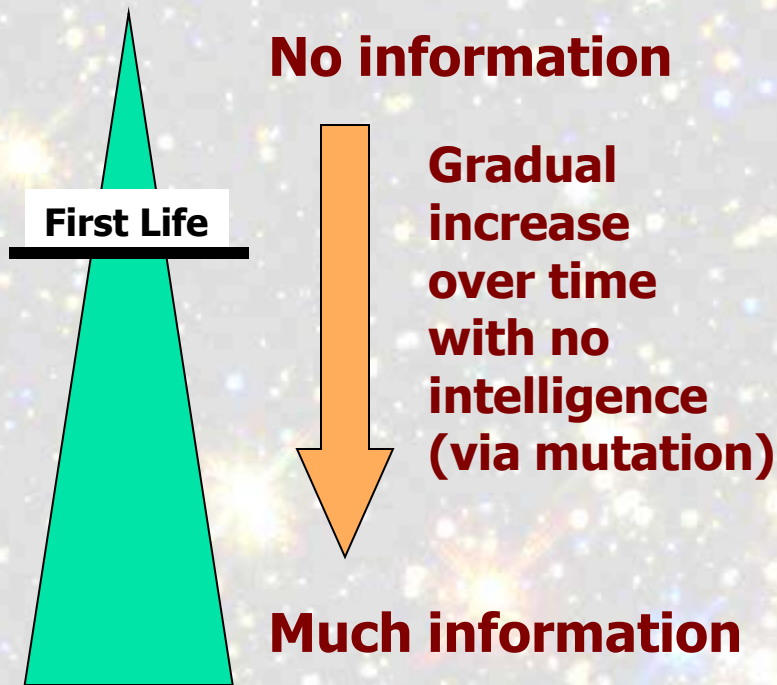


The Biblical view of information

God created living things at the beginning

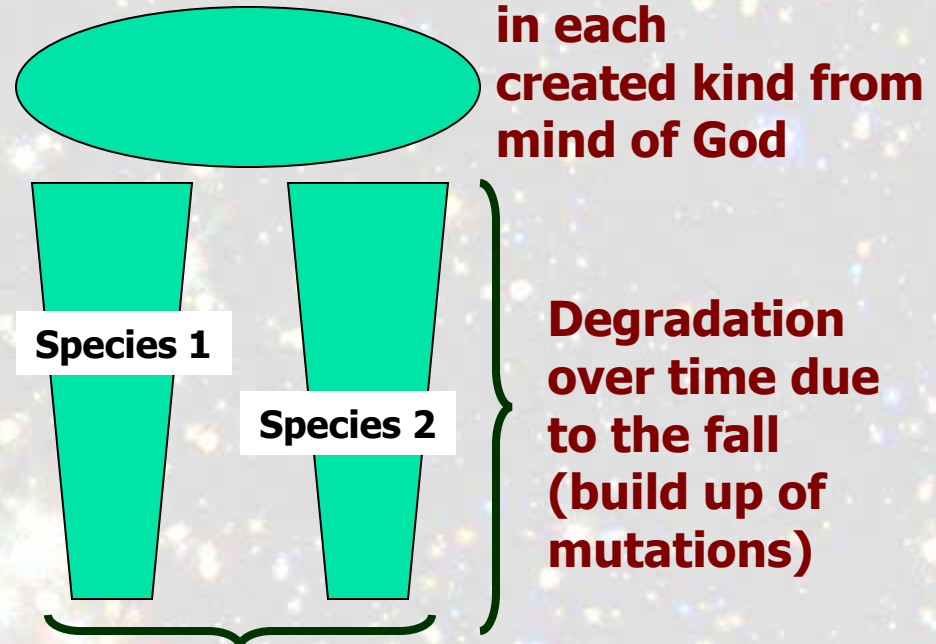
Evolutionary vs. Creation Views of Information

Evolutionary View



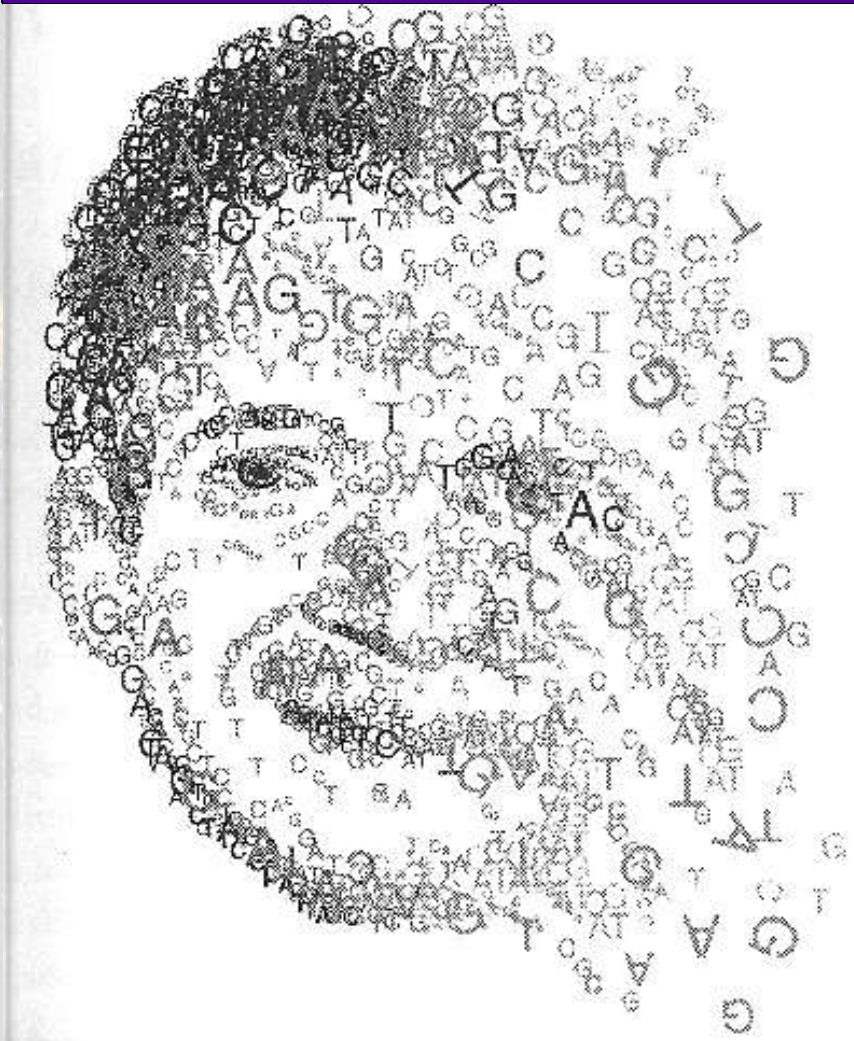
Note: mutation / natural selection only operates after the first replicating life form exists

Creation View

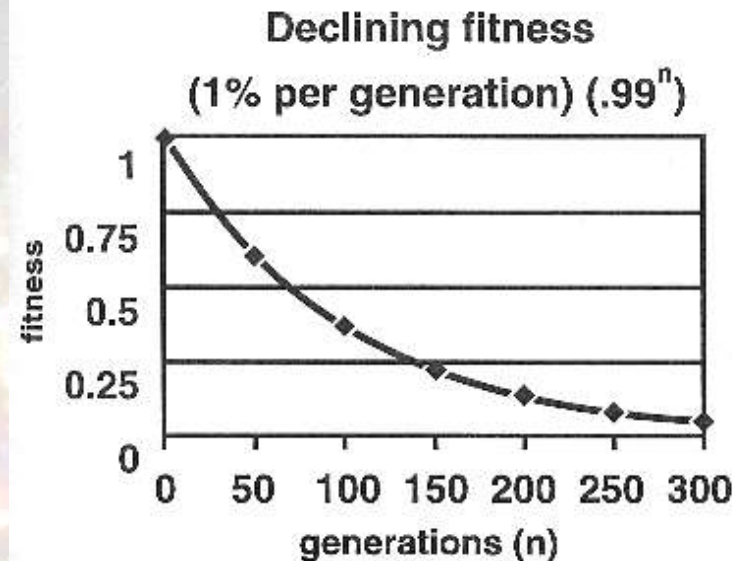


Kind diversifies into species due to environmental differences expressing different subsets of existing information

The Sad Truth



The human genome is degenerating, as each person accumulates a minimum of 100 point mutations per generation. There is nothing man can do to halt it. It is biologically inevitable. It is why species go extinct.



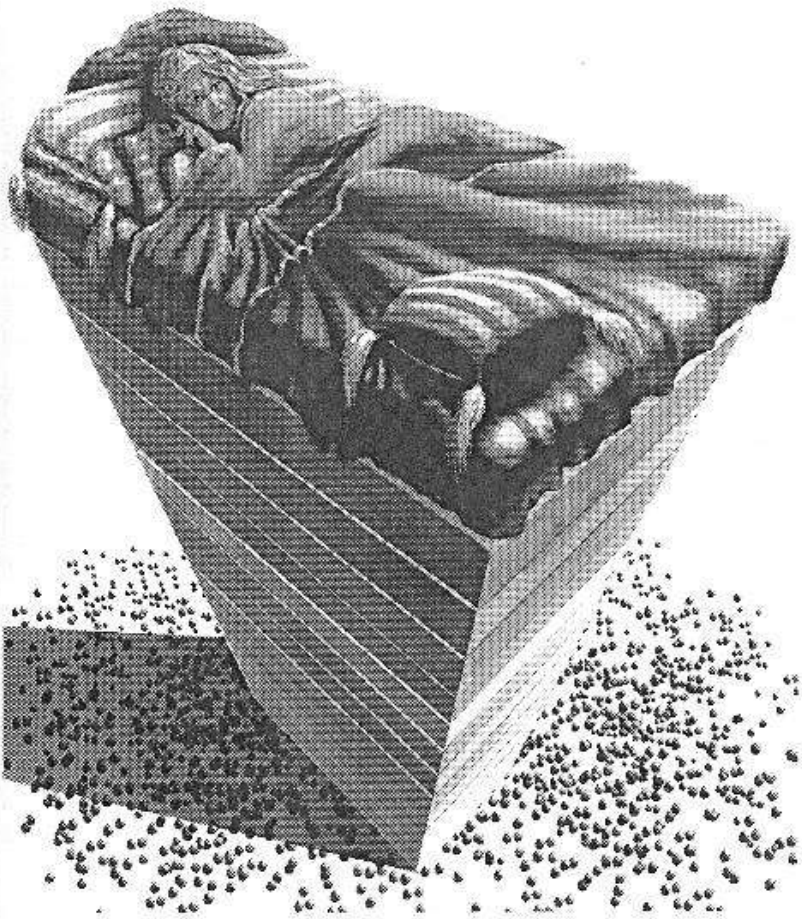
Why are we *Degenerating*?

- ▶ **A typical bad mutation (loss of one nucleotide) reduces information by only one/three-billionth – making it “near-neutral” and invisible to natural selection**
 - ▶ **Normally we can only measure biological effects that change fitness by about 10%**
 - ▶ **Near-neutrals represent 90-99% of all mutations**
- ▶ **The build-up of these bad mutations leads to decline in biological fitness**
- ▶ **In summary:**
 - ▶ **Worst mutations are selected away**
 - ▶ **Near-neutral mutations accumulate unhindered**
 - ▶ **Minor mutations accumulate at intermediate rates**

Why Selection Can't Solve the Degeneration

- ▶ **Preventing individuals from reproducing is the only mechanism whereby natural selection can slow down genetic decline**
- ▶ **But since every person has many mutations, there is no “good” person to select**

The Princess and the Nucleotide Paradox



- ▶ Selection occurs at the level of the individual (the Princess)
- ▶ But natural selection must recognize billions of individual nucleotide effects on the molecular level (the peas)
- ▶ There is vast gulf of nested organizational levels (at least 12) between the Princess and the peas (the mattresses)
- ▶ Self-correcting mechanisms also exist at every level
- ▶ Just as these mattresses shield the Princess from the effects of the peas, the organizational levels and self-correction shield natural selection from effects of individual nucleotide mutations

Isolated DNA Changes are Insufficient

- ▶ **Compare mutations in the nucleotides of DNA with random changes to the letters of a book**
- ▶ **Can you improve a book by changing the letters in it at random?**
- ▶ **Must accept or reject all changes as a unit (as the changes are happening to one book)**
- ▶ **And yet this type of process is supposed to have actually written the book in the first place!**



If the human genome is degenerating, there must have been a time was it was perfect.

The Bible describes this as the Garden of Eden, when the creation was perfect.

But man disobeyed God and God Himself cursed the creation, setting in motion the decay that is now seen.

But There is Hope!



The Bible also describes a future time when the creation will be restored, and all those that have trusted in Jesus as their savior will live with God forever.

Jesus said:

**"I tell you the truth, whoever hears my word and believes Him who sent me has eternal life and will not be condemned; He has crossed over from death to life."
(John 5:24)**

This free gift is yours to accept, even today!

Summary: Several Lines of Reasoning Show the Information Problem is Insurmountable

- 1. Information is a mental concept not a physical concept – information comes only from a mind**
- 2. Intelligent design: physical causes cannot do the work of intelligent causes**
- 3. Mutation/selection cannot produce a net gain in information, nor even stop the gradual but certain degradation of existing genetic information**
 - Why? Most mutations are nearly-neutral in effect and are therefore immune to selection, and are accumulating and decreasing biological fitness**
 - Beneficial mutations are rare and are vastly outnumbered by bad mutations**
- 4. Mathematics shows that mutation cannot produce a new species**

**Evolutionary genetic theory has no
theoretical support and is an
indefensible scientific model**