A Comparison of Neo-Darwinian Evolution, Third Way Evolution, and Intelligent Design

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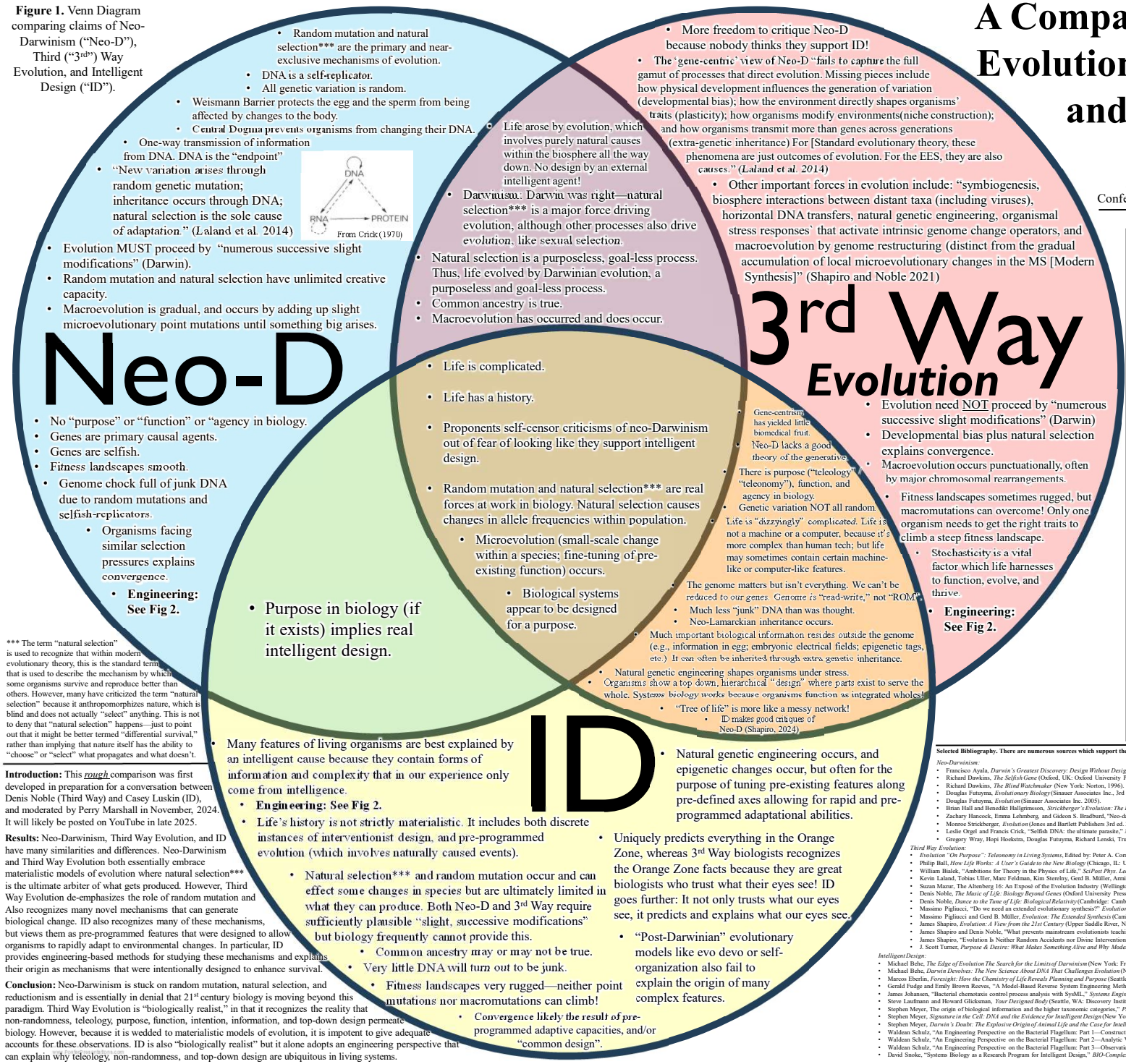
Figure 1. Venn Diagram comparing claims of Neo-Darwinism ("Neo-D"), Third ("3rd") Way Evolution, and Intelligent Design ("ID").



*** The term "natural selection" is used to recognize that within modern evolutionary theory, this is the standard term that is used to describe the mechanism by which some organisms survive and reproduce better than others. However, many have criticized the term "natural selection" because it anthropomorphizes nature, which is blind and does not actually "select" anything. This is not to deny that "natural selection" happens—just to point out that it might be better termed "differential survival," rather than implying that nature itself has the ability to "choose" or "select" what propagates and what doesn't.

Introduction: This *rough* comparison was first developed in preparation for a conversation between Denis Noble (Third Way) and Casey Luskin (ID), and moderated by Perry Marshall in November, 2024. It will likely be posted on YouTube in late 2025.

Results: Neo-Darwinism, Third Way Evolution, and ID have many similarities and differences. Neo-Darwinism and Third Way Evolution both essentially embrace materialistic models of evolution where natural selection*** is the ultimate arbiter of what gets produced. However, Third Way Evolution de-emphasizes the role of random mutation and Also recognizes many novel mechanisms that can generate biological change. ID also recognizes many of these mechanisms, but views them as pre-programmed features that were designed to allow organisms to rapidly adapt to environmental changes. In particular, ID provides engineering-based methods for studying these mechanisms and explains their origin as mechanisms that were intentionally designed to enhance survival.

Conclusion: Neo-Darwinism is stuck on random mutation, natural selection, and reductionism and is essentially in denial that 21st century biology is moving beyond this paradigm. Third Way Evolution is "biologically realist," in that it recognizes the reality that non-randomness, teleology, purpose, function, intention, information, and top-down design permeate biology. However, because it is wedded to materialistic models of evolution, it is impotent to give adequate accounts for these observations. ID is also "biologically realist" but it alone adopts an engineering perspective that can explain why teleology, non-randomness, and top-down design are ubiquitous in living systems.

Figure 2: Special Focus: Comparison of Engineering in Biology

Neo-Darwinism	Third Way Evolution	Intelligent Design / Engineering
A. Systems Biology, Systems Engineering, & Hierarchical, Top-Down Design.		
Everything evolves from the "bottom up" in a reductionistic manner. Denies that "top-down" design exists; Neo-D cannot comprehend the utility of systems biology or systems engineering.	Embraces hierarchical, top-down, design in living systems and the utility of systems biology. However, Third Way Evolution struggles to explain why top-down design is ubiquitous or why systems biology is so successful.	Embraces hierarchical, top-down, design in living systems and the utility of systems biology and systems engineering. Because intelligent design is a goal-directed process, ID easily accounts for why these methods work so well.
B. Prevalence of Function / Information Within Biology.		
Generally assumes non-functionality as a null hypothesis. Failed to predict mass functionality for junk DNA; struggles to explain biological information, especially information outside the genome.	Embraces functionality throughout biology and the presence of functional information inside and outside of the genome. But in many cases struggles to explain why this information exists.	Embraces functionality throughout biology and the presence of functional information inside and outside of the genome. Because information comes from a mind, ID predicts / explains why this exists.
C. Natural Genetic Engineering ("NGE").		
Basically minimizes the importance of NGE. In fact, Neo-Darwinism believes NGE is largely unnecessary because standard mechanisms of random mutation and natural selection have unlimited creative capacity in all cases.	Deserves much credit for having discovered NGE and embraces the idea that mutations can be more targeted. Often thinks NGE has great explanatory power, from building new body plans to building molecular machines. But does the data show this? Does not try to explain the origin of NGE mechanisms.	Embraces NGE as a novel discovery which shows organisms are pre-programmed to rapidly respond and adapt to environmental changes. ID is open to following the evidence where it leads regarding the explanatory power of NGE, but finds no evidence yet that NGE can produce new body plans or a flagellum. However, ID predicts NGE allows organisms to modulate or fine-tune traits upon pre-defined axes and within pre-defined limits to rapidly respond to environmental cues and changes. ID also notes that NGE mechanisms likely originate through design.
D. Phenotypic Plasticity ("PP").		
Minimizes the importance of PP because it overemphasizes the importance of organisms adapting to the environment through random mutation and natural selection.	Acknowledges that PP is important and that organisms have the internal ability to adapt to the environment in preprogrammed ways. Generally does not seek to explain origin of PP.	Accepts that organisms have the internal ability to adapt to the environment in preprogrammed ways. Explains PP through engineering principles that represent designed mechanisms of adaptation.

Selected Bibliography. There are numerous sources which support these points, but here are a few selected ones:

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