

Exhibit 14 Foundations

Unless otherwise specified, the words analyzed in this exhibit come from an article authored by the Defendants and owners of Demystifying Science [DS]: Anastasia Bendebury [aka Quinn Garrow] and Michael Shilo DeLay [aka Micky Callahan]. The article is titled:

What Does It Mean For Something To Exist In Physics?

It was originally located at:

<https://demystifyingscience.com/blog/2020/3/12/exist-vs-occur>

Despite being authorized to do so by their server provider — Squarespace, Inc — the Defendants did not reinstate the article in their blog. Plaintiff Bill Gaede alleges that the reason behind this omission was to deprive him of evidence needed for this complaint. Therefore, he uploaded a copy of the DS article at the following link in order to introduce it as evidence in court:

<https://ropehypothesis.com/wp-content/uploads/2021/12/101-demystifyingscience-com-blog-2020-3-12-exist-vs-occur.pdf>

After the Plaintiff served them with a Cease and Desist Notice, the Defendants placed the following note in their ‘exist’ article sometime around April 11, 2021, and notified the Plaintiff of this change:

“the modern scientific failure to establish a unified physical picture of our universe. this is a serious issue ** .”

While the above views are my own, the idea of the abuse of the word “exist” in science was first brought to my attention by Bill Gaede. You can check him out at his YouTube channel here. Blogger Fatfist * also inspired ideas in this post and throughout this channel.

*** Plaintiff’s note: Blogger Fatfist was a member of the original Facebook RSM and bought Plaintiff’s book *Why God Doesn’t Exist* [WGDE] [<https://ropehypothesis.com/book/why-god-doesnt-exist/>]. The Plaintiff authorized him to use material in [his Hubpages site](#) where he references the RSM in his [Follow me here](#) icon. Therefore, Defendants not only belatedly included the reference, but attempted to dilute the attribution by including other sources that in turn obtained the information from Plaintiff’s sites and books.

The Foundations of Physics

The Rope Hypothesis begins by establishing the definitions of the strategic words necessary to provide rational physical interpretations in Physics, specifically to the intangible, invisible agents that mediate universal mechanisms. Therefore, the issues under consideration are unrelated to mathematics and equations. They have to do with the transparent mediators that underlie processes such as gravity and magnetism. The set of definitions specifically includes the terms: *object, distance, location, motion, exist, and concept*.

Defendants Anastasia Bendebury and Michael Shilo DeLay realized that this was a major paradigm shift. These definitions had the potential to explain physical phenomena rationally. They could also be used [*and would be used*] to recruit donors. It is thus that they copied the strategic definitions, not only individually, but as a comprehensive set onto their website pages.

These scientific definitions [henceforth *Foundations*] originate in the first chapter of *Why God Doesn't Exist* [WGDE] [<https://ropehypothesis.com/book/why-god-doesnt-exist/>] and were originally uploaded by Plaintiff to his Internet site in 2008. They have been available to the public and to the Defendants ever since at the following two URLs:

<http://youstupidrelativist.com/05Princip.html>

<https://ropehypothesis.com/foundations-of-physics/> [TRH1]

<https://ropehypothesis.com/foundations-of-physics/physics-is-the-science-of-existence/>
[TRH2]

<https://ropehypothesis.com/foundations-of-physics/what-is-physics/> [TRH3]

<https://ropehypothesis.com/foundations-of-physics/what-is-an-irrational-theory/> [TRH4]

It is to note that not one of the definitions of these words contained in Plaintiff's book matches what mainstream science, philosophy, or the ordinary and scientific dictionaries have defined or use even today.

Nevertheless, a question before the trier of fact is: Why would Defendants Bendebury and DeLay analyze these specific terms if not that they obtained the entire set and the arguments from WGDE copyrighted by the Plaintiff and realized that they would be useful to explain phenomena mechanistically? The articles that the Defendants published in 2018-19 at <https://issuu.com/artofrationalscience> referenced those specific definitions and WGDE.

Note: In case the Defendants delete that site to avoid having it serve as evidence in court, the articles can also be found here:

<https://ropehypothesis.com/wp-content/uploads/2022/02/Exhibit-12-Micky-Articles.pdf>

Object

Mathematical Physics (mainstream, establishment, ordinary speech) in green

object: anything that is visible or tangible.

object: a collection of matter within a defined contiguous boundary...the visible or tangible surface of the object

The see/touch criteria propping up these definitions originates in the widespread belief that experiments will reveal the physical nature/architecture of the invisible, intangible mediators of light, gravity, magnetism, etc.

In contrast, the definition underlying the Rope Model is conceptual and embodies the only universal property all objects have... *object: that which has shape*

Demystifying Science [reuploaded] (2020) blue vs. The Rope Hypothesis (1998) red

“Physics... necessarily begins with existing objects.”

“Object... something with a shape

(Note: modified by the Defendants on April 11, 2021 to read: “An object is a thing with a *surface...*”)

“An object can only be conceived of so long as it has shape”

(Note: modified by the Defendants on April 11, 2021 to read: “An object can only be conceived of so long as it is a thing with a *surface...*”)

object: that which has shape [May 13, 2019 – referencing Gaede, WGDE] p. 4, ref 6

https://issuu.com/artofrationalscience/docs/light_mechanics_and_relay_fe9a44781f2e04

Re-uploaded by Plaintiff at:

<https://ropehypothesis.com/wp-content/uploads/2021/12/Light-Relay.pdf>

in Physics, we cannot avoid defining the word *object*. WGDE p. 14

The word *object* is the most fundamental word of Physics and precedes any concept. Physics is first and foremost the study of objects. WGDE p. 15

object: that which has shape. (syn: finite, thing, something, island, discrete, entity, structure, physical, substance). WGDE p. 13

In order to be a proper subject matter of Physics, the ‘thing’ in question must absolutely have shape. WGDE p. 13

<https://ropehypothesis.com/foundations-of-physics/what-is-an-object/>

Distance/Location

The distance of Mathematical Physics is actually the quantitative *distance-traveled* by ONE object. It is the ‘distance’ embodied in Newton’s 2nd Law: $F = ma...$

*“a numerical measurement of how far apart objects or points are...
The distance from a point A to a point B is sometimes denoted as $|AB|$.”*

In other words, determining ‘*how far apart*’ implies unrolling the measuring tape from A to B and has to do with how much distance the tip of the tape *traveled* from start to finish. The distance of Mathematical Physics is a *dynamic* concept and is expressed in units such as feet or meters.

In contrast, The Rope Hypothesis [TRH2] proposes that for the purposes of Physics [*i.e., physical interpretations, mechanisms*] distance is a *static* concept – *separation, gap* – and has the purpose of providing qualitative physical interpretations.

<https://ropehypothesis.com/foundations-of-physics/physics-is-the-science-of-existence/> [henceforth: TRH2]

<http://youstupidrelativist.com/05Princip.html>

distance: separation between TWO objects

This is the distance we find in the universal gravitational law: $F = G m_1 m_2 / d^2$, two ‘masses’ *separated* in space.

Mathematical Physics (mainstream) does not use the word *location*. Instead, it defines position in mathematical terms: ordered pair of coordinates (x,y)...

“Position or position vector... is a Euclidean vector that represents the position of a point P in space in relation to an arbitrary reference origin O... the straight line segment from O to P. In other words, it is the displacement or translation...”

See also: <http://hyperphysics.phy-astr.gsu.edu/hbase/posit.html#c1>

i.e., The position of Mathematical Physics has to do with motion...

Therefore, these are the notions and definitions of *distance* and *location* [*i.e., position*] that the Defendants learned at their alma mater: Columbia University.

Distance/Location continued...

Demystifying Science [reuploaded] (2020) blue vs. **The Rope Hypothesis (1998) red**

“in order for that object to exist it has to also have *location: a set of static distances to all the other objects in the scene. Without a location an object cannot be said to exist*”

(The Defendants replaced this on April 11, 2021 with: “*in order for that object to exist it has to also have physical place: a set of static distances to all the other objects in the scene.*”)

“Without two or more *locations*, no travel is possible in physics...”

“in physics, a *location* can only mean where an object exists with respect to the other objects...” “location... distances to other objects”

Originally at:

<https://demystifyingscience.com/blog/2020/2/17/demystifying-time-travel>

Plaintiff re-uploaded this article at:

<https://ropehypothesis.com/wp-content/uploads/2021/12/Demystifying-Time-Travel.pdf>

we cannot have *distance, location, or motion* without an object. [WGDE](#) p. 15

distance: the gap or separation that exists between two objects. [WGDE](#) p. 15

location: the set of distances of the object with respect to the remaining matter in the Universe. [WGDE](#) p. 15

distance: separation between two objects. [TRH2](#)

location: the set of distances from one object to all others. [TRH2](#)

Motion

The mathematical definition of motion is “an object *changes* its position”

Motion is mathematically described in terms of displacement, distance, velocity, acceleration, speed, and time.

motion: the action or process of moving or of *changing* place or position; movement.

In other words, the official versions include the synonym ‘*change*’ (i.e., *different from what it would be if left alone*) [i.e., synonym = circular definition] and invokes the quantitative ordered pair ‘position’.

Motion is described in terms of displacement (x), time (t), velocity (v), and acceleration (a).

Demystifying Science [reuploaded] (2020) blue vs. The Rope Hypothesis (1998) red

“In physics, *moving* in-existent objects or even real ideas about is egregiously fallacious. Only existents *move* in physics. And only such objects can ever be regarded to cause *motion*, and hence phenomena.”

“Motion is simply the relocation of some object.”

“Travel, synonymous with change in location”

“Without two or more *locations*, no travel is possible in physics...”

“in physics, a *location* can only mean where an object exists with respect to the other objects...”

The Defendants chose not to reinstate this article after being allowed to do so by Squarespace, Inc. It was originally at:

<https://demystifyingscience.com/blog/2020/2/17/demystifying-time-travel>

Plaintiff re-uploaded this article at:

<https://ropehypothesis.com/wp-content/uploads/2021/12/Demystifying-Time-Travel.pdf>

motion: two or more locations of an object. WGDE p. 15

motion (to move): two or more locations of an object. TRH2

Exist/Existence

Mathematical Physics (mainstream, establishment) in green

1. **exist**: to have actual being [*being = exist (i.e., synonym)*]
2. **existence**: the ability of an entity to interact with physical or mental reality [*reality = exist (i.e., synonym)*]

Demystifying Science [reuploaded] (2020) blue vs. The Rope Hypothesis (1998) red

“The word ‘exist’ is central to many, if not all, scientific discussions”

“We always start with such an object in physics because it is the science that principally deals with the dynamics of existing bodies.”

“reserve the word ‘exist’ for physical objects with definite locations”

“an existing object is a body with a location; that is something with a shape”

in order for that object to exist it has to also have physical place: a set of static distances to all the other objects in the scene.

exist: Physical presence. WGDE p. 460

The physical component invokes an object. The presence part requires a location. All objects must have shape if they wish to be members of the category *object*, but not all objects have location. WGDE p. 460

Physics only explains phenomena related to objects that exist. Physics does not deal with objects that don't exist (e.g., tribar, circle, square, Pegasus, Zeus, Superman, Bugs Bunny). Physics is that branch of Science that deals with existence. Anyone proposing that a given object exists and causes phenomena in the real world has knowingly or unwittingly crossed the line into Physics. Therefore, another sine qua non word that a physicist is required to define is exist. We can thus say that a physicist is also a ‘theorist of existence’. [TRH3]

The second cornerstone of Physics is the word exist. Physics attempts to discover and identify that which exists and to objectively explain actual mechanisms of the world around us. Indeed, the strategic word exist is invoked in practically every paragraph written and in every dissertation given. Therefore, defining exist is neither an option nor a trivial exercise in semantics. Physics demands a rigorous definition of this ubiquitous term. We cannot ‘do Physics’ without it. TRH2

Concept

Mathematical Physics has no definition or cares about the word *concept*.

Demystifying Science [reuploaded] (2020) blue vs. The Rope Hypothesis (1998) red
“math’s... failure to distinguish between *objects and concepts* has evinced endless confusion for science at large, the most prevalent of which concern the well-known logical fallacy of reification,”

(Reworded by DS after April 11, 2021 to read: “*objects and ideas*”)

“All words, and hence all ideas... can be divided into one of two categories: object and concept.”

(DS changed this on April 11 to read: “All words, and hence all ideas... can be divided into one of two categories: objects and ideas.”)

“Mathematics... has no built-in distinction between objects and concepts.”

(Defendants replaced *concepts* with *ideas* after April 11, 2021)

In Physics... we must define the crucial word *object* in such a restrictive way as to exclude abstract concepts. All words in the dictionary are either objects or concepts. WGDE p. 13

Mathematical Physics... has always used abstract concepts in lieu of physical objects. The mathematicians routinely treat abstract concepts – field, time, black holes – as real entities. WGDE p. 14

Irrational explanations include the following elements:

1. converting concepts into physical objects and then pretending to move them around, e.g., TRH4

c. Converting singularity or mass into a physical object and theorizing that these reified concepts have the power to move stars around. TRH4

Mathematical Physics (the 'science' of reification)... (youstupidrelativist.com)

19. Irrational involves any of the following... morphing a concept into an object (reification) <https://youstupidrelativist.com/05Princip.html>

a rational theory of Physics is one that outlaws reification.

<http://www.youstupidrelativist.com/MPrational.html>

Mathematical Physics is a discipline that exclusively studies reification.

<http://www.youstupidrelativist.com/01Math/01Point/02Euclid.html>

Concept (continued...)

[Demystifying Science \[reuploaded\]](#) (2020) blue vs. [The Rope Hypothesis \(1998\)](#) red

“A *concept*... is merely the relationship between one existing object and another or an additional concept.”

(DS replaced the word *concept* with *ideas* on April 11 and reworded the sentence to read: “*Ideas* abstractly link one existing object and another or an additional concept”)

“How can we retain the distinction between object and *concept* at this point in our scientific evolution?” (DS replaced the word *concept* in this sentence with *idea*.)

A concept is a relation between TWO objects. [WGDE](#) p. 15

What distinguishes a concept from an object is that a concept is artificial (man-made) and invokes a minimum of two objects. [WGDE](#) p. 15

concept: A word that embodies or invokes more than one object or location.
(Syn.: *notion, idea, mathematical object, particulars, member of a set*). [WGDE](#) p. 16

all concepts are artificial and traceable to objects. [WGDE](#) p. 13

a concept differs from an object in that it doesn't possess shape [WGDE](#) p. 460

Time

Mathematical Physics (mainstream) in green

“time: the system of those sequential relations that any event has to any other, as past, present, or future; indefinite and continuous duration regarded as that in which events succeed one another.”

“In physics time is operationally defined as "what a clock reads"”

Demystifying Science [reuploaded] (2020) blue vs. **The Rope Hypothesis (1998) red**

“Any two objects in motion can constitute a clock... Time itself is simply the comparison of two regular motions.”

“time is the comparison of some motion with respect to another... motion...”

“time... the relative motion of two bodies”

<https://demystifyingscience.com/blog/2020/2/17/demystifying-time-travel>

Plaintiff uploaded the article at: <https://ropehypothesis.com/wp-content/uploads/2021/12/Demystifying-Time-Travel.pdf>

“Time is Motion With Memory ... We remember where the runner started when we consider her time at the finish line... This test of time only works because we remember the start...in physics,... in laymen’s terms, time is motion and memory”

<https://demystifyingscience.com/blog/the-physical-definition-of-time>

Plaintiff re-uploaded the article to:

<https://ropehypothesis.com/wp-content/uploads/2021/12/What-is-Time.pdf>

Note: The Defendants did not learn any of these definitions in college...

qualitative time (Physics): A qualitative relation established between two locations of an object or between the trajectories of two objects (e.g., before/after, earlier/later, cause/effect). WGDE p. 70

quantitative time (Mathematics): A numerical or quantitative relation established between two motions, one of which is a pre-established standard (e.g., seconds, months, decades). WGDE p. 70

Time requires memory. Time is motion and memory... Time is the comparison of two motions. WGDE p. 70

Life

Mainstream/Biology

Life. There is currently no consensus regarding the definition of life. One popular definition is that organisms are open systems that maintain homeostasis, are composed of cells, have a life cycle, undergo metabolism, can grow, adapt to their environment, respond to stimuli, reproduce and evolve. Other definitions sometimes include non-cellular life forms such as viruses and viroids. Wikipedia

How to define "life" is a sweeping question that affects whole branches of biology, biochemistry, genetics, and ultimately the search for life elsewhere in the universe.

... what answer a biologist might give can differ dramatically from the answer given by a theoretical physicist.

However, some initial agreement is possible. Living things tend to be complex and highly organized. They have the ability to take in energy from the environment and transform it for growth and reproduction. Organisms tend toward homeostasis: an equilibrium of parameters that define their internal environment. Living creatures respond, and their stimulation fosters a reaction-like motion, recoil, and in advanced forms, learning. Life is reproductive, as some kind of copying is needed for evolution to take hold through a population's mutation and natural selection. To grow and develop, living creatures need foremost to be consumers, since growth includes changing biomass, creating new individuals, and the shedding of waste.

To qualify as a living thing, a creature must meet some variation for all these criteria. *Astrobiology Magazine for NASA*

https://www.nasa.gov/vision/universe/starsgalaxies/life%27s_working_definition.html

Life
(continued...)

Demystifying Science (2019)

Life: set of existent objects capable of autonomous motion against gravity

https://issuu.com/artofrationalscience/docs/biophotonics_5e6a926b6408c6

<https://ropehypothesis.com/wp-content/uploads/2021/12/Biophotonics.pdf>

The Rope Hypothesis – WGDE (2000) p. 382

Life is that which has naturally developed self-propelled or proper (Level IV) motion, that is, motion not solely dependent on gravitational forces, chemical reactions or electrostatic or polarized charges. Life is voluntary, anti-gravitational motion.

DNA, proteins, and viruses are active molecules capable only of predictable Level I, II, and III motions. Consequently, they (and anything more basic) do not meet the definition of life.

The cell is the first entity that has the complexity to move of its own free will against gravity.