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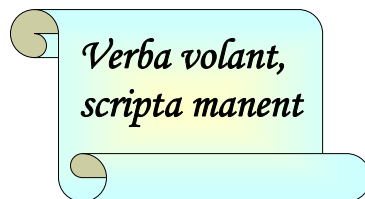
# НОВОСТИ МЕДИКО-БИОЛОГИЧЕСКИХ НАУК

# NEWS OF BIOMEDICAL SCIENCES

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MANUEL S. MORALES

## WHO IS TELLING THE TRUTH, NATURE OR MAN?

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As physical beings, we cannot act in violation of the laws that govern our existence. As findings show, the same holds true for elementary particles. The discovery of Albert Einstein's nonlocal hidden variables, via unambiguous empirical evidence, has confirmed the construct of the mechanics of *how* an act comes into being an act. Since these origin variables do not have scale or locality, they are universal to both microscopic and macroscopic domains. Therefore, we can use these variables to test in real life, or safely as a thought experiment, if the logic of placing cause second to effect, as practiced in scientific methodology, is true of Nature or not.

*Key words:* nonlocal hidden variables, direct selection, indirect selection, first cause, second cause, concussion, collision

I recently saw the movie titled “Concussion”. It featured actor Will Smith playing the role of Dr. Bennet Omalu who published research revealing the dangers of playing football in connection with the degenerative brain disease he called chronic traumatic encephalopathy, or CTE. [1] In the movie a battle was played out between the validity of his research and the efforts of the National Football League (NFL) to discount the merits of his findings. One postulate was repeatedly made poignantly clear by Dr. Omalu in that his findings could only lead to “one truth”, and as such, the NFL should “tell the truth” that repeated concussions obtained by playing football leads to brain damage. In an NPR radio interview Dr. Bennet Omalu stated, “*If you do not accept the truth, because there can only be one truth, you will have problem.*” If practitioners of the art of science are going to “tell the truth” and insist that others do the same as conveyed in the movie, science also needs to be about the truth which can only be absolute and thus complete if truth be told. However, if the belief of one truth is not reflective of Nature, then for man to proclaim otherwise crosses the line between integrity and hypocrisy unless of course our opinions do indeed supersede the nature of our reality. Therefore, if the opinion of one truth is indeed indicative of Nature, then it can be physically tested in *real life*.

Based on unambiguous empirical evidence I have obtained from conducting a twelve-year experiment, the assertion of one truth does not coincide with the evidence. Since the experimental findings are not ambiguous, see Tables 1–3, they are not subject to opinions, including my own. In essence, the construct of the experiment established cause prior to effect which prohibits experimenter’s bias. In order to have absolute truth there can be no bias whatsoever and it must be all inclusive. In other words, speculation or statistical inference gained by repetitive results cannot pose as a substitute for the truth. This means that the cause of effects, such as CTE, needs to be singular and thus complete in order for Dr. Omalu’s findings to be of “one truth”. Herein lies the problem of using effects as a substitute for cause. The logic of effects causing effects, which I call second cause logic by placing cause second to effect, is a violation of temporal precedence yet is fundamental to the current methodologies and theories of the art of science. As the findings from my experiment have revealed there are two, and only two, origin variables that cause the existence of effects in Nature. This means that without taking into account both *necessary* variables, second cause logic is incomplete and therefore flawed because it is based on omitted-variable bias (ignorance of *two* origin variables) which leads to false-positive conclusions as exhibited in the “A Flawed Scientific Method” illustrations.

You do not need to have a PhD or to be a college or even high school graduate to understand the folly of using incomplete knowledge (effects) as a substitute for knowledge (cause and effects). For

example, the scientific method is based on the logic of causality being effectual. It uses prediction of effects (guess) in order to obtain empirical evidence to substantiate its theories (another guess). This method of investigation is akin to assuming that only burglars (e.g., the effect of a concussion) cause break-ins (e.g., the effect of CTE), i.e., effect causing effect. So let us apply second cause logic as used in science and apply it to a crime scene investigation to test for validity of such methodology. For example, you come home after a weekend holiday and find that your front door has been forced open. You call the police to launch an investigation to find out who violated your domicile. They arrest a known burglar living next door who couldn't account for his whereabouts at the time of the break-in. He even has a few of your belongings - things that you forgot you loaned to him - and BINGO, case solved! Later, you find out that a family member, who had been drinking heavily that weekend, had broken into your house, realized that he was at the wrong house and decided to go to his home without telling you of what he did.

**Table 1.** Direct Selection Results

| Cause – Choice Event |                     |                     | Effect – Chance State |                        |
|----------------------|---------------------|---------------------|-----------------------|------------------------|
| Season               | <i>X Choice – a</i> | <i>Y Chance – b</i> | <i>X Choice – c</i>   | <i>Y Chance – d</i>    |
| 2000                 | + STL Fans          | – STL Team          | –                     | –                      |
| 2001                 | + MIA Fans          | – MIA Team          | –                     | –                      |
| 2002                 | + BUF Fans          | – BUF Team          | –                     | –                      |
| 2003                 | + BUF Fans          | – BUF Team          | –                     | –                      |
| 2004                 | + MIN Fans          | – MIN Team          | –                     | –                      |
| 2005                 | + MIN Fans          | – MIN Team          | –                     | –                      |
| 2006                 | + MIN Fans          | – MIN Team          | –                     | –                      |
| <b>2007</b>          | <b>+ NYG Fans</b>   | <b>+ NYG Team</b>   | <b>+ SB Victory</b>   | <b>+ Art Completed</b> |
| 2008                 | + PHI Fans          | – PHI Team          | –                     | –                      |
| 2009                 | + MIN Fans          | – MIN Team          | –                     | –                      |
| 2010                 | + CHI Fans          | – CHI Team          | –                     | –                      |
| 2011                 | + SF Fans           | – SF Team           | –                     | –                      |

\* – Without the simultaneous pairing of an act (*X Choice*) with its potential (*Y Chance*) a selection event did not take place.

**Table 2.** Indirect Selection Results

| Cause – Choice Event |                     |                     | Effect – Chance State |                     |
|----------------------|---------------------|---------------------|-----------------------|---------------------|
| Season               | <i>X Choice – a</i> | <i>Y Chance – b</i> | <i>X Choice – c</i>   | <i>Y Chance – d</i> |
| 2009                 | – NOS Fans          | + NOS Team          | – SB Victory          | + Art Completed     |
| 2010                 | – PIT Fans          | + PIT Team          | – SB Loss             | – Art Not Completed |
| 2011                 | – NYG Fans          | + NYG Team**        | – SB Victory          | + Art Not Completed |

\*\* – The simultaneous pairing of an act (*X Choice*) with its potential (*Y Chance*) did take place. However, the billboard artwork was not completed due to the NYG refusal of the billboard gift.

***Without knowledge of cause you can only make assumptions.*** Case in point, in a peer-reviewed fundamental physics journal article titled, “Assumed Higgs Boson Discovery Proved Einstein Right”, [2] I revealed an omission error in the empirical methodology of conducting elementary particle collision experiments. Without knowledge of which selection variables caused which particle collision effect, which in turn caused the product decay effects used for the famed discovery of the Higgs boson, a.k.a. the God particle, all you can have is an assumption, not a discovery, regardless of replication.

Anyone can easily confirm for themselves, via a keyword search, if scientific documents that are searchable online (including the Higgs boson discovery articles [3, 4]) make mention of both nonlocal hidden variables of “direct selection” and “indirect selection” which are necessary to conduct scientific research. If both keyword phrases are included, then a second keyword phrase search of “direct selection experiment” and “indirect selection experiment” or “direct selection method” and “indirect selection method” will help to further distinguish if both selection variables were accounted for in research investigations. This keyword search requires no expertise in science and so everyone with internet access from grade school children to research professionals from all over the world can find out for themselves if scientific research is or is not based on an omission error. When the methodology of investigation used in science is incomplete by not accounting for these two necessary variables, then its discoveries are

incomplete. As stated earlier, second cause logic is ignorant of first cause which leads to omitted-variable bias resulting in obtaining false-positive conclusions. So when I speak of first cause in my findings, [5] I literally mean cause *preceding* effect.

**Table 3.** Unknown Selection

| Season      | Cause                   | Effect   |          |
|-------------|-------------------------|----------|----------|
|             | SB Team with most votes | Win      | Lose     |
| 2000        | NYG                     | –        | X        |
| 2001        | STL                     | –        | X        |
| 2002        | OAK                     | –        | X        |
| 2003        | CAR                     | –        | X        |
| 2004        | PHI                     | –        | X        |
| 2005        | PIT                     | X        | –        |
| 2006        | CHI                     | –        | X        |
| <b>2007</b> | <b>NYG*</b>             | <b>X</b> | <b>–</b> |
| 2008        | AZ                      | X        | –        |
| 2009        | STL                     | X        | –        |
| 2010        | PIT                     | –        | X        |
| 2011        | NYG                     | <b>X</b> | <b>–</b> |

\* – If we had conducted only indirect selection events for the entire 12 year span of the experiment there would have been 12 out of 12 indirect selection events which would have hidden knowledge of the direct selection variable thereby producing false positive data.

Perhaps by now you are wondering where I get off saying that the art of science is a flawed practice, and how do art, football, and science have anything to do with each other? Technically speaking, art is about insight, not about the tools or methods used to obtain or express such insight. Furthermore, art is not about academic degrees obtained by paying to study a particular field of interest for recognition of formal study. More importantly, the art of science does not mean opinions from such learned individuals supersede reality. Our physical existence has but one arbitrator and that is Nature itself. Only Nature has the final say on what it is and what it is not. This basic understanding led me to conduct the twelve-year Tempt Destiny (TD) experiment.

Back in the day, I had a unique opportunity to create artwork reproduced as billboards to support the NY Giants Super Bowl XXI and Super Bowl XXV quests. Each time I did this they went on to win the Super Bowl. A decade later, this legacy served as the basis and construct for the TD experiment which was conducted from 2000–2012 at TemptDestiny.com. At the web site football fans voted for their team, directly and indirectly, to be on a billboard supporting their team’s Super Bowl quest.

The results from this experiment revealed what Albert Einstein referred to as hidden variables. [6] Einstein believed that these hidden variables existed locally, i.e., in a position or site where something can be observed or measured. As the findings show, he was correct about there being hidden variables (something we are not accounting for) that would give us a complete description of reality. However, he was incorrect as to where to find them, e.g., nonlocal hidden variables. As the public can verify for themselves via the keyword search, science fails to factor the nonlocal acts of selection that we all use to exist as being causal of the effects of its experiments or theories since they are hidden from our perception of reality. This situation is understandable if we think of the acts of selection as a cognitive function of our physical reality instead of a mechanical necessity for our existence. If the logic of something that exists causes something else to exist, i.e., effect causing effect, is indeed correct and thus reflective of reality, then each and every one of us can test the integrity of such logic for ourselves, for none of us can violate the laws that govern our existence as exemplified via the Final Selection Thought Experiment. This means that anyone can easily validate or refute my findings without having an academic degree or any formal education. Please note, the thought experiment was designed for those who have the capacity to think it through to its logical conclusion, but also allows for those who lack such capacity to conduct the experiment in *real life* (not recommended) if one insists that his or her opinions supersede Nature itself.

***Final Selection Thought Experiment:***

**H<sub>0</sub>** – If the two acts of selection are not necessary for your existence then you can safely conduct

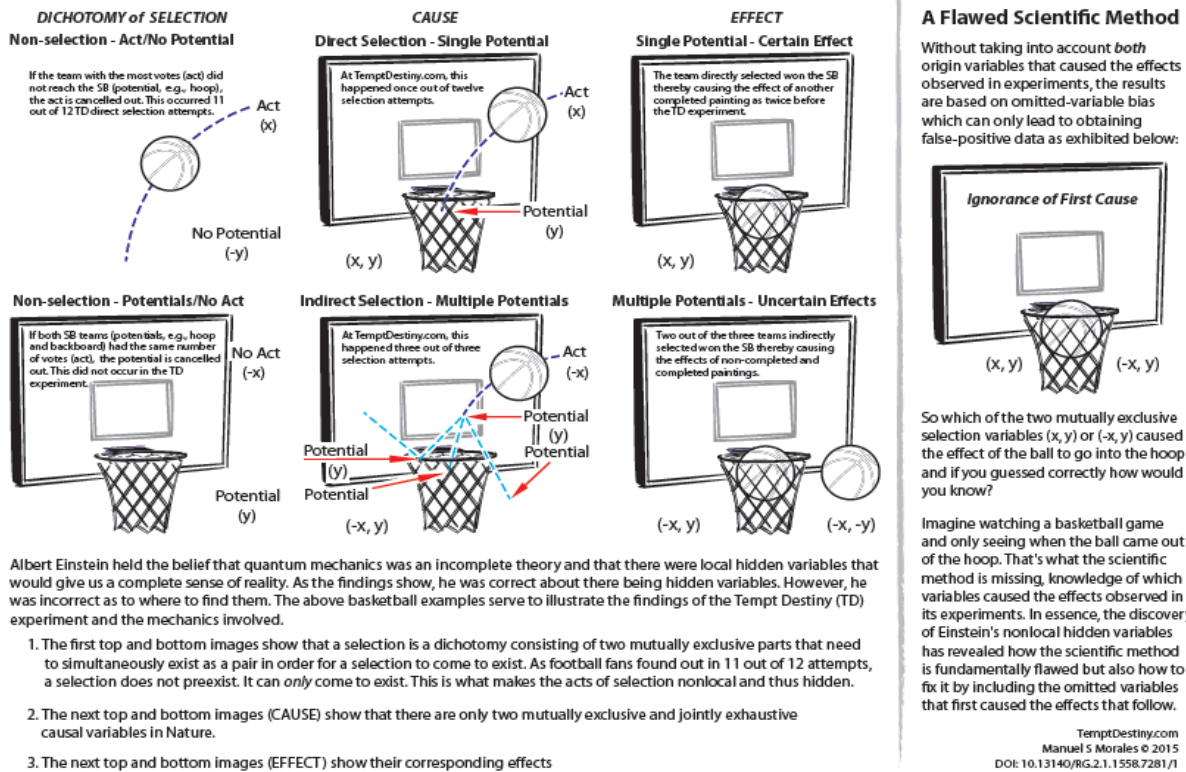
the Final Selection Thought Experiment in real life and continue your existence.

**H<sub>a</sub>** – If the two acts of selection are necessary for your existence then you cannot conduct the Final Selection Thought Experiment in real life in order to continue your existence.

Let's say that one morning upon awakening you find yourself absent of the ability to choose, e.g., completely paralyzed. This means you cannot choose to move your body whatsoever. You cannot choose to take in any fluids. You cannot choose to take in any nourishment. You cannot choose to relieve yourself, et cetera. Nor can you have others indirectly choose for you. The outcome is absolute. The effect of a physical system without the capacity to directly select is certain death.

The assumption that selection is some sort of option, a freedom of will, is unsubstantiated by the fact that this predetermined mechanism we call choice is how energy works, which is a fundamental necessity, not a metaphysical option of our physical existence. In other words, when the two origin variables of direct and indirect selection *come to exist* (cause), energy exists (effect), for they are one and the same (cause and effect). As the mechanics show, if the *effect* of cognition were *causal* of the *effect* of selection then each and everyone of us could continue our physical existence without these two origin variables, such is not the case.

This brings me back to the question at hand, who is telling the truth, Nature or man? As alluded to earlier, there is a common connection between fundamental physics and concussions caused by playing football. Simply put, both use collisions to cause effects. Technically, the sport of football is a collision experiment which uses human beings to cause effects. A collider is a tool used to conduct particle collision experiments which uses elementary particles to cause effects. The effect of CTE is assumed to be caused by concussions → which are caused by the effect of a collision → which are caused by the acts of direct and indirect selection. The effect of particle decay products → are caused by the effect of a collision → which are caused by the acts of direct and indirect selection. Without a selection being made you do not have the effect of a collision and all that follows. As the thought experiment and the unambiguous empirical evidence obtained by the TD experiment show, we cannot act in violation of the two laws that govern our existence because the same holds true for elementary particles without which we would not exist (figure).



**Figure.** Mechanics of The Two Acts of Selection



***We act the same as elementary particles, yet, they do not have a brain. What does that tell us?*** In light of all that has transpired, I find it an ironic twist that the TD experiment would not have taken place if it was not for the collision experiment we call football. Regardless, if we use the existence (*effect*) of elementary particles or human beings to *cause* the existence (*effect*) of a collision, it is necessary for the two mutually exclusive and jointly exhaustive acts of selection to first take place. Since the acts of selection are nonlocal variables, these mechanisms are not influenced by scale or locality, e.g., microscopic or macroscopic domains, and since they cannot physically exist in order to be acts they cannot exist in time. This is how energy evolves from one state of existence to another, what I call Choice/Chance Mechanics (CCM). [7]

During my research, I maintained the naive hope that perhaps my findings would be of benefit to science and humanity by understanding Nature on its terms in order to advance from effectual science to causal science. Instead of imposing our perspective of how we wish to perceive reality (second cause), we could be working with Nature by placing in its proper order, and thus taking into account, the two variables that cause effects (first cause). By including everything, that is to say existence (effect) and non-existence (cause), as a composite of two ordered pair dichotomies consisting of two mutually exclusive and jointly exhaustive origin functions, i.e., direct and indirect acts of selection, preceding and thus causing two determined states of existence, i.e., certainty and uncertainty, the findings show that Einstein's notion of a "Theory of Everything" is not a theory after all. There is a metaphor that comes to mind about discovering truth by building on previous discoveries: "Dwarfs standing on the shoulders of giants". If not a single one of the "giants" who have come before were not able to conduct the Final Selection Thought Experiment in real life and then continue their existence, then there is something *fundamentally* missing from previous discoveries. Perhaps it is time for us to change our effectual thinking [8, 9] to suite the nature of our causal reality. If not, then we need to demand that Nature conforms to our opinions of it. Which approach do you think is correct?

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#### КТО ГОВОРИТ ПРАВДУ, ПРИРОДА ИЛИ ЧЕЛОВЕК?

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В статье изложена оригинальная точка зрения автора о механизмах сервоконтроля двигательной функции. Гипотеза автора представлена в повествовательной форме, что облегчает восприятие сложной тематики читателям разного профессионального уровня.

**Ключевые слова:** нелокальные скрытые переменные, прямой выбор, косвенный отбор, первая причина, вторая причина, сотрясение мозга, столкновение.