

I want to know God's thoughts; the rest are details.
Albert Einstein, 1925

Biological, Quantum, and Gravitational Holomovement: Think Globally, Act Locally

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Abstract

The biological wave-like [holomovement](#) ([April 1984](#)) is compared to the quantum and gravitational holomovement created by the [arrow of Time](#). We need a new theory of quantum gravity and [gravitational radiation](#).

1. Introduction

Many physicists have speculated about the physics of the human brain^[4] from the perspective of [materialism](#) – ‘the brain is the hardware, the mind is the software’ (Fig. 1). This “scientific” approach may lead to very sticky brainwashing religion called [antitheism](#), from which you can never recover.

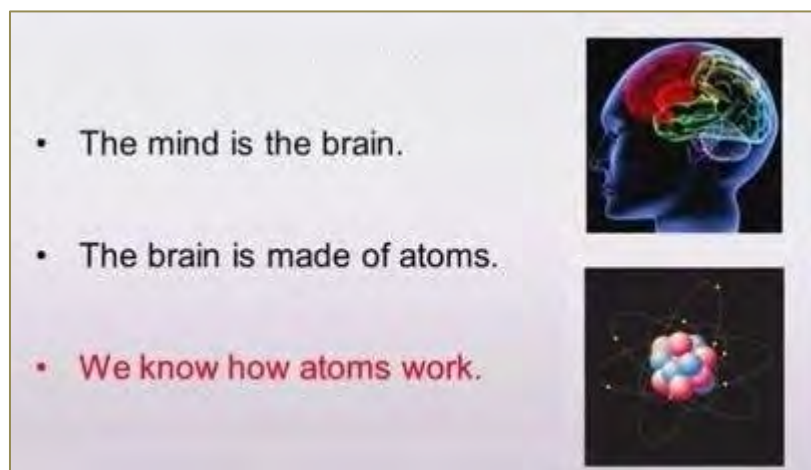


Fig. 1. Notice the absence of [Psychology 101](#).

It is painfully obvious that the physics of “hardware” (Fig. 1) cannot even remotely address the correlation^[5] of all constituents of the human brain.^[4] Besides, the claim “we know how atoms work” is questionable, to say the least, because physicists (Sec. 3) cannot explain even the [quantum vacuum](#).

My approach is different. I collect many indisputable facts from [life science](#) and [psychology](#) to ‘connect the dots’, ensuing also from the [arrow of Time](#) and the doctrine of [trialism](#), and then look at theoretical physics to find out if the theory^{[1],[2],[3],[5]} fits there. Briefly, the ball is now in the court of theoretical physicists, particularly those indulging in GW parapsychology.^[2] So far their response has been quite [muted](#), but let’s hope for the best.

In the next section, I will examine the biological holomovement (Sec. 2). Later I will move to the quantum waves with [complex phase](#) (Sec. 3), which we cannot directly observe,^[3] and will compare them to the gravitational radiation (Sec. 4). Finally, I will argue that in all cases we encounter the phenomenon of universal holomovement along the [arrow of Time](#) (Sec. 5).

2. Biological holomovement

Recall the holomovement of a [school of fish](#). It is *bona fide* example of the rule ‘think globally act locally’ – the collective holistic “thinking” leading to [quasi-local interactions](#) along the [arrow of Time](#). The idea goes back to July 1986 (p. 35 in *Platonic World*^[1]). I tried to test my specific [approach](#) to theoretical physics by suggesting two fundamentally different types of ‘distance’: physical distance between all spacetime points, definable with [spacetime metric](#), and Platonic “distance” between all spacetime points; the latter is always *exactly* zero in the physical world along [null intervals](#).

But what is the “distance” between the Platonic *idea* of a tree and the *idea* of a mountain in your [memory](#)? My effort to answer this question, again in line with my [approach](#) to theoretical physics, came on 21 September 2008: [two modes of spacetime](#) along the [arrow of Time](#) (Sec. 5). The end result is a new dynamics of spacetime itself (p. 19 in GWP^[2]) and an *atemporal* web of [EPR-like correlations](#) in the [global mode of spacetime](#), which leads to [biological holomovement](#): think globally act locally. If true, we can expect to unravel a similar (not identical) holomovement in the quantum world,^[3] exhibited in quantum waves. In both cases, biological and quantum, there is no “agent” that vibrates and send waves, like a vibrating drum sending sound waves (nor universal “drum” emitting photons with [invariant speed](#)).

3. Quantum holomovement

To understand the *complex quantum waves*, consider their *correlations*.

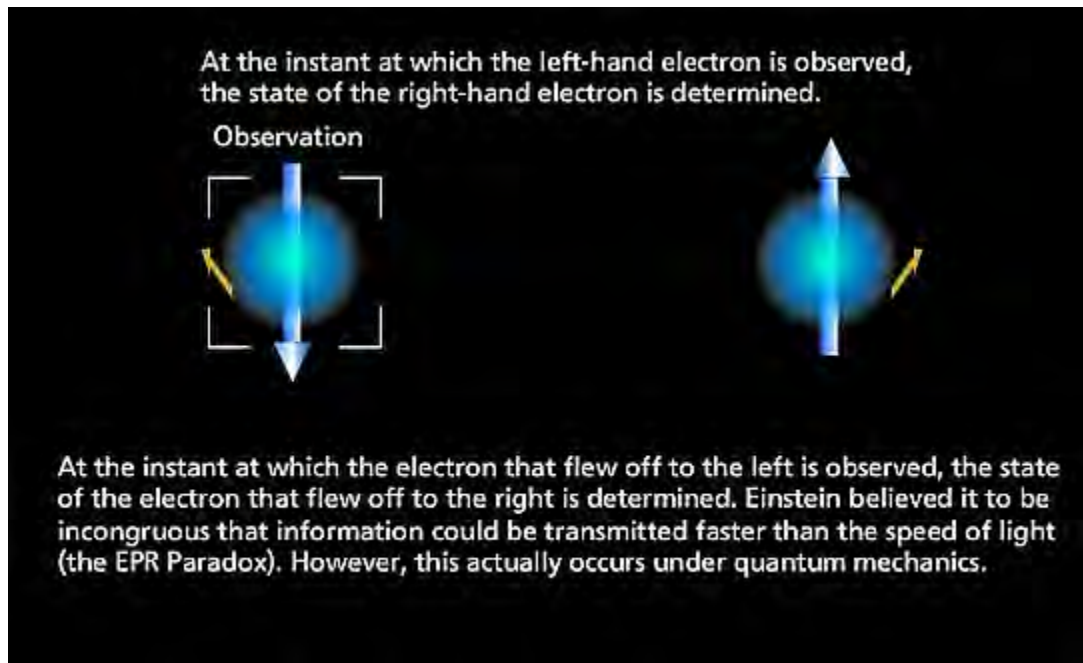


Fig. 2. Explanation by [Henry Stapp](#) and [Mark John Fernee](#).

Information *cannot* be transmitted faster than the speed of light (Fig. 2), which is why I suggested in September 2010 (in the context of my [approach](#)) the so-called PR² (Potential Reality & Proper Relativistic) interpretation of QM, based on Aristotle's *potentia* ([Werner Heisenberg](#)) and the *two modes of spacetime* (Sec. 2) along the *arrow of Time* in the quantum world.^[3] Namely, the *atemporal* correlation (Fig. 2) is performed in the *global mode of spacetime* and *simultaneously* sent^[5] to both entangled electrons, hence their *instantaneous* correlation occurs in line with the *principle of locality*: think globally act *locally*, as "one always takes the real part in the end" ([Chen Ning Yang](#)). Have your cake and eat it. One can explain in a similar way the *instantaneous* inertial reaction forces: read closely p. 17 in GWP.^[2]

4. Gravitational holomovement

Before trying to apply the same ideas to gravitational holomovement, we have to elaborate on 'the real part in the end': the *gravitalized* energy from gravitational radiation (Sec. 4 and pp. 11-12, and p. 19 in GWP^[2]). Forget the fake GWs (*ibid.*, p. 18). The task is non-trivial (MTW p. 467) and requires new *Mathematics*. I am ready to explain everything, *from scratch*.

5. The arrow of Time: Think globally act locally

Please read pp. 5-9 and p. 12 in *Platonic World*^[1] and [Slide 1](#). As I explain on [15 January 2020](#), the potential future exists as Platonic *propensity* – “just in the middle between possibility and reality”, [Werner Heisenberg](#) – and all entangled “fish” ([Sec. 2](#)) experience feedback from their common potential future, thanks to which they proceed to their **next step** in perfect [EPR-like](#) correlations, which leads to pre-established harmony ([Leibniz](#)) exhibited in their holomovement. Ditto to the entangled electrons in [Fig. 2](#). But how about the gravitational holomovement ([Sec. 4](#)) in the cosmos? Well, first we need quantum gravity^[2] to replace all “[dark energy](#)” and “[dark matter](#)” with the two tug-of-war manifestations of gravity, [repulsive and attractive](#). As of today, [the jury is out](#). Curiously enough, some people can [modify gravity](#) and even fly like a ‘[gimbal](#)’, but do they tweak the *rate* of Time ([Bill Unruh](#))? What if Time is *imaginary* variable ([Arthur Eddington](#)), so if *squared* in the [invariant spacetime interval](#) it will obtain negative sign? I personally use modified gravity (pp. 22-29 in *Platonic World*^[1]) to tweak the two tug-of-war manifestations of gravity (p. 6 in [RS.pdf](#)), but still with [very limited](#) success. To paraphrase [AC/DC](#), it’s a very long way to [the top](#).

References

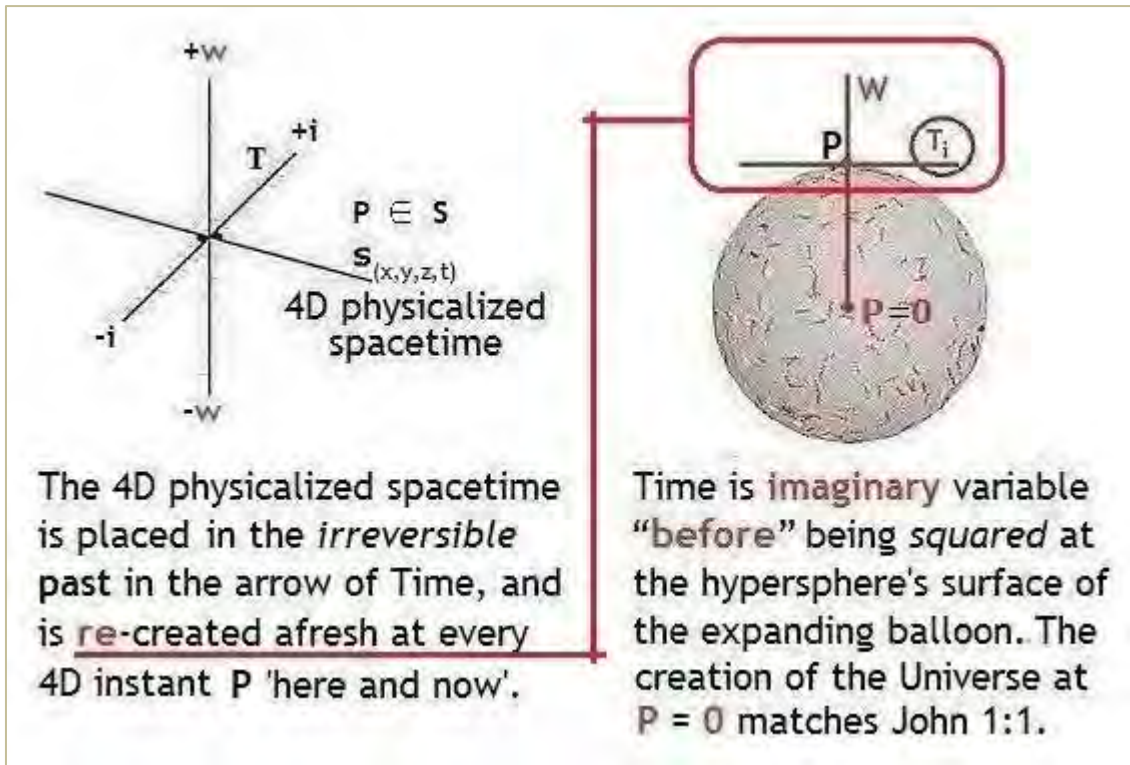
1. D. Chakalov, *Platonic World: The Force of Life, Time and Gravity*. 31 May 2023, 42 pages. <https://chakalov.net/book.pdf>
2. D. Chakalov, Gravitational Wave Parapsychology. 7 July 2023, 20 pages. <https://chakalov.net/GWP.pdf>
3. D. Chakalov, The General Rule $1 + 0 = 1$. 2 May 2023, 6 pages. <https://chakalov.net/rule.pdf>
4. D. Chakalov, Where Does Knowledge Come From? 29 August 2022, 5 pages. <https://chakalov.net/brain.rar>
5. D. Chakalov, The Fifth Force. 15 September 2022, 20 pages. <https://chakalov.net/talk.pdf>

Questions and Answers

Q1. Can you explain your “modified gravity” in simple terms?

A2. Thanks for the question, [Stavros](#). You always hit the nail on the head.

You can modify gravity iff the spacetime *itself* (p. 19 and p. 16 in GWP^[2]) is *evolving* along the arrow of Time (Sec. 2), by passing through the universal Platonic state **P** (also called **Zen**) in the drawing below.



Please click the image from The Fifth Force^[5] below and read the report.

Excerpt from p. 15 in <http://chakalov.net/talk.pdf>

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Perhaps the core idea in Fig. 8 is indeed **very difficult**. Let me try to shed some light on it. Think of the *atemporal* offer wave & confirmation wave (*ibid.*) as “inhaling & exhaling” of the Universe. To quote **David Schiller**, before Zen, mountains are mountains and trees are trees; during Zen, mountains are no longer mountains and trees are not trees; after Zen, mountains are once again mountains and trees once again trees (Fig. 10).

Q₁: [mountains and trees] **Zen** Q₂: [mountains and trees]

Once the gravitational state moves^[5] to the irreversible past, it becomes fact and cannot be modified. We can modify gravity only for the **next step**

along the arrow of Time ([Slide 1](#)). How? By gently tweaking the ‘blue cube’ explained at p. 3 in *The Fifth Force*.^[5] In the doctrine of *trialism*, the ‘blue cube’ is the common source of matter and psyche, called ‘trunk’. Thus, if you manage to modify the Platonic ‘trunk’ (called **Zen** above), you’re done: your **next state** Q_2 will modify gravity with the Fifth Force^[5] and will let you fly like a **gimbal**. Once physicists explain the **gravitational rotation**, we should be able to develop technologies for producing **unlimited electricity** by enhancing and rescaling the low-energy gravitational rotation shown on 23 June 2022 (private video) with a **solar radiometer**. And even **much more** – if I am on **the right track**, of course.

But the current conditions for going public and embarking into this complex program are not at all favorable. The majority of physicists are indulging in GW parapsychology (p. 18 in *GWP*^[2]) and don’t want to reconsider **their GR**, and the reaction to my project could be really nasty – nobody is prepared to retire the current power plants (p. 12 in *Platonic World*^[1]). Even climate activists (Sic!) did not reply to *any* of my messages sent since August 2019.

I’ve been talking to a brick wall for 15 years now, since **21 September 2008**. My video from **15 January 2020** was totally neglected by physicists, while other people called it ‘a show’. Nobody tried to understand gravity (**Q1**).

Instead, people suggest some mythical tachyonic field with an imaginary rest mass, called **Higgs field**, which might decay to one stable Higgs boson, or rather to five (**CERN**). To reconcile these speculations with **current GR**, first they will have to explain why the universe is **larger than a football**. What’s the point of suggesting “Higgs field” with math if you talk bullshit?

Not surpassingly, the talebans at CERN banned my email in November 2015 “**due to phishing attack**” (example [here](#)). You can’t talk with **Russians**.

Q2. Why are you banging your head against a wall?

A2. Because of the **climate change**. Read the last page in *Platonic World*.^[1] The temperatures could rise by **more than 1.5C by 2027**. Not by 2030, as we were told two year ago. We must do everything to eliminate the risk for **climate apocalypse**, for the sake of our children and grandchildren. Time is **running out!**

9 July 2023

Latest update: 14 July 2023, 22:26 GMT