

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.

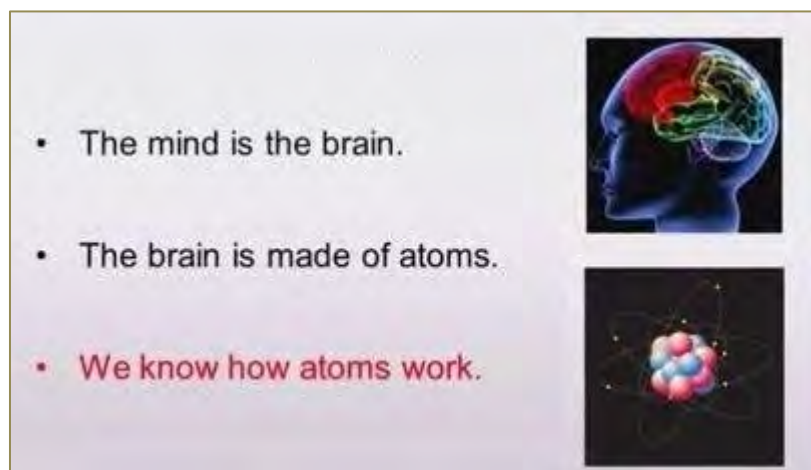


Fig. 1. Notice the absence of [Psychology 101](#).

It is painfully obvious that physics of the “hardware” (Fig. 1) cannot even remotely address the correlation 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 one 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 external “agent” that vibrates and send waves, like a vibrating drum sending sound waves in the air.

3. Quantum holomovement

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

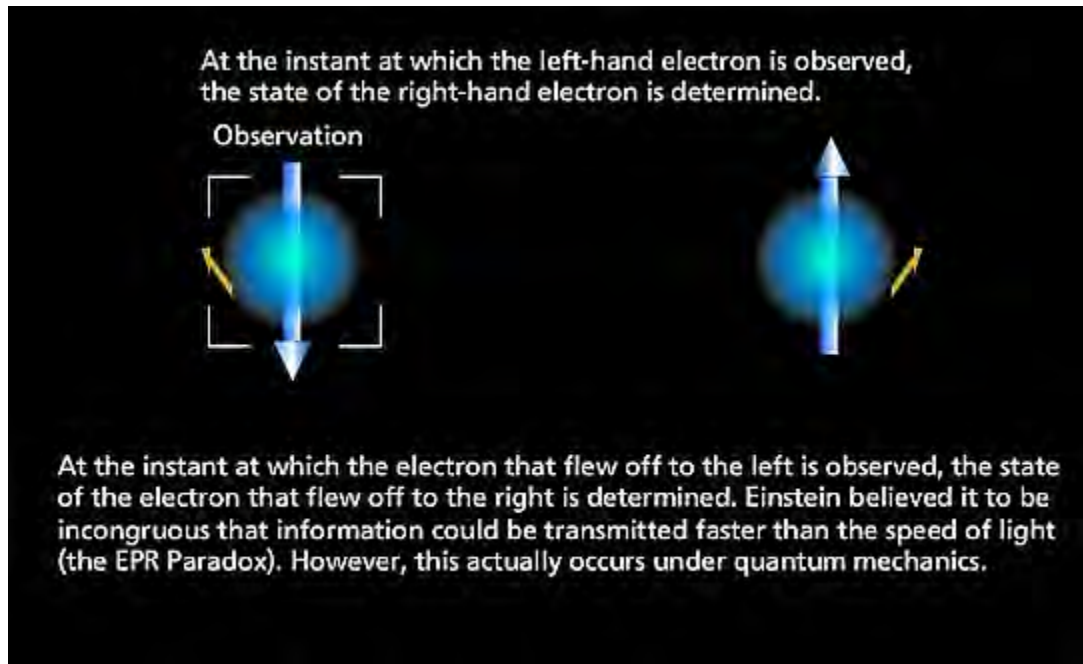


Fig. 2. Explanation by [Henry Stapp](#) and [Mark John Fernee](#).

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 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.

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). I stand ready to explain it to all interested individuals, if any.

5. The arrow of Time

Please read pp. 5-9 in *Platonic World*^[1] and [Slide 1](#). Details upon request.

References

1. D. Chakalov, *Platonic World: The Force of Life, Time and Gravity*. 31 May 2023, 42 pages. <https://chakalov.net/book.pdf>
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5. D. Chakalov, Über die Geschwindigkeit von Licht und Zeit. 31 December 2022, 27 pages. <https://chakalov.net/Newton.pdf>

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