A Remark on how a Consciousness Model and Entanglement can lead us to Quantum Communication

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Abstract

In a recent paper, we describe how a model of quantum communication based on combining consciousness experiment and entanglement can serve as impetus to stop 5G-caused diseases. Therefore, in this paper we will discuss how entanglement can be explained in terms of quantum theory. This short review may be considered as an effort to bring QM into real problem solving, i.e. telecommunication.

Keywords: quantum entanglement, quantum communication, consciousness, Maxwell-Dirac isomorphism.

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Introduction

A growing number of individuals are coming together in many countries

- to attempt to block the current telecoms roll-out of 5G electromagnetic microwave radiation which has proved to be extremely harmful to all sentient life forms, including plant life.¹

¹ A brief explanation here: <u>https://www.5gspaceappeal.org/the-appeal</u>

It would prove invaluable if some method could be found to render the 5G millimetre wave transmissions ineffective. In other words, to block or dissolve their ability to irradiate surrounding matter/life.

Our concern is not to find a way to 'to protect the individual' but to prevent whole areas from being affected by microwaves via the tens of thousands of transmission bases that 5G requires - and from satellite sources.

In this paper, we consider a plausible way to develop quantum communication based on entanglement and consciousness model.

What is quantum entanglement?

In its simplest form the quantum theory's features can be reduced to: (a) wave function description of microscopic entities and (b) entanglement. Entanglement is a key property that makes quantum information theory different from its classical counterpart.[14]

But what is entanglement? Wootter gives one of clearest description:[13]

"In both classical mechanics and quantum mechanics, one can define a pure state to be a state that is as completely specifed as the theory allows. In classical mechanics a pure state might be represented by a point in phase space. In quantum mechanics it is a vector in a complex vector space. Perhaps the most remarkable feature of quantum mechanics, a feature that clearly distinguishes it from classical physics, is this: for any composite system, there exist pure states of the system in which the parts of the system do not have pure states of their own. Such states are called entangled."

According to Scolarici and Solombrino [5]:

The essential difference in the concept of state in classical and quantum mechanics is clearly pointed out by the phenomenon of entanglement, which may occur whenever the product states of a compound quantum system are superposed. Entangled states play a key role in all controversial features of QM; moreover, the recent developments in quantum information theory have shown that entanglement can be considered a concrete physical resource that it is important to identify, quantify and classify.

Nonetheless, they concluded: "our research has pointed out a puzzling situation, in which the same state of a physical system is entangled in CQM, while it seems to be separable in QQM."

While entanglement is usually considered as purely quantum effect, it by no means excludes possibility to describe it in a classical way.

In this regards, from history of QM we learn that there were many efforts to describe QM features in more or less classical picture. For example: Einstein in 1927 presented his version of hidden variable theory of QM, starting from Schrödinger's picture, which seems to influence his later insistence that "*God does not play dice*" philosophy.[6][7]

Efforts have also been made to extend QM to QQM (quaternionic Quantum Mechanics), for instance by Stephen Adler from IAS.[8]

But in recent decades, another route began to appear, what may be called as Maxwell-Dirac isomorphism route, where it can be shown that there is close link between Maxwell equations of classical electromagnetism and Dirac equations of electron. Intuitively, this may suggest that there is one-to-one correspondence between electromagnetic wave and quantum wave function.

Maxwell-Dirac isomorphism through Quaternion algebra

Textbook quantum theory is based on complex numbers of the form a_0+a_1i , with *i* the imaginary unit $i^2 = -1$. It has long been known that an alternative quantum mechanics can be based on the quaternion or hyper-complex numbers of the form $a_0 + a_1i + a_2j + a_3k$, with i,j,k three non-commuting imaginary units.[8]

On the other hand, recognizing that the Maxwell's equations were originally formulated in terms of quaternionic language, some authors investigate formal correspondence between Maxwell and Dirac equations. To name a few who worked on this problem: Kravchenko and Arbab. These authors have arrived to a similar conclusion, although with a different procedures based on Gersten decomposition of Dirac equation.[4]

This MD isomorphism can also be extended further to classical description of boson mass which was usually called Higgs boson[3], so it may be a simpler option compared to scale symmetry theory.

Quaternionic QM and Entanglement

Having convinced ourselves that Maxwell-Dirac isomorphism has sufficient reasoning to consider seriously in order to come up with realistic interpretation of quantum wave function, now let us discuss QQM and entanglement.

Singh & Prabakaran are motivated to examine the geometry of a two qubit quantum state using the formalism of the Hopf map. However, when addressing multiple qubit states, one needs to carefully consider the issue of quantum entanglement. The "quaternions" again come in handy in studying the two qubit state. [10]

In his exposition of Quaternionic Quantum Mechanics, J.P. Singh concluded that [9]:

"Having established the compatibility of the Hopf fibration representation with the conventional theory for unentangled states, let us, now, address the issue of measurability of entanglement in this formalism. In the context, "Wootters' Concurrence" and the related "Entanglement of Formation" constitute well accepted measures of entanglement, particularly so, for pure states.

It follows that any real linear combination of the "magic basis" would result in a fully entangled state with unit concurrence. Conversely, any completely entangled state can be written as a linear combination in the "magic basis" with real components, up to an overall phase factor. In fact, these properties are not unique to a state description in the "magic basis" and hold in any other basis that is obtained from the "magic basis" by an orthogonal transformation..."

Singh & Prabakaran also suggest that this quaternionic QM may be useful for exploring quaternionic computing.[10]

In a rather different way, Najarbashi et al. explored quaternionic Möbius transformations, which can be useful in theoretical physics such as quaternionic quantum mechanics, quantum conformal field theory and quaternionic computations [11]. They found that "As in the case of

two-qubits, both octonionic stereographic projection and Möbius transformation are entanglement sensitive."

Therefore, it shall be clear that entanglement and quantum communication have a sound theoretical basis.

Remark on plausible application of quantum communication

5G initiative is all about the profits and it is based in **greed** and genocidal aims. They don't care about humans, or life in any form. They just care about the vast profits they envision. They don't give a hoot what is good for the populace. They want to make more profits and will do pretty much anything to get them. Now they don't bother with laws and regulations that are designed to protect the public from fraud and abuse. Now they make laws and regulations which are designed to allow them to get away with anything they want to do.

The fascistic psycho-system wants to control the world and views all life as "commodities", to be used, abused, and profited from, in every possible way, then killed, for more profit. What human beings and Life in all forms, needs and wants to survive in comfort and abundance, is ignored as irrelevant to the many death-dealing profit-taking initiatives going on in today's world

The theme, since the late 1990s, and probably starting before that, say in the 1920s and 30s, has been called "murder for profit".

5G is one of many such initiatives. Glyphosate, the multi-pronged poison which kills all life forms exposed to it in a gradual manner, is another example. Genetically Modified Organisms (GMOs), are another world-wide death-dealing initiative.

There are many of them, ranging from toxic food additives to forcing "pharmaceutical" **poisons** onto the public which are purported to be "treatments" approved by the FDA, which is now owned and operated by the sickness industry.

The psychos tried to make a **forced** death-causing inoculation, happen all over the world in the 1990s starting in the USA, through the "auspices" of the World Health Organization (WHO) a subsidiary part of the UN. The plot was discovered and broken up by a combination of concerned and active people, starting in Australia and in Austria, which kept spreading until legal charges were brought against the people and corporations who made and attempted to globally distribute these poisons. Eventually all the death-causing inoculation "doses", were destroyed. I have no news as to what has happened to the various culprits. And that in itself, is not good news.

As another example, more than 350 clinically proved cures for cancer have been discovered and all of them have been eliminated from availability to the general public. One of us (RNB) came up with two 100% effective cures for cancer. Both have seen very little about them conveyed to the general public.

The second cure, which is based on a zero toxicity substance approved by the FDA, OSHA, and the USDA, more than 50 years ago, as a coloring agent and as a harmless food and drug additive, has been seeing false publicly and lies of all kinds, aimed at frightening people away from it, telling people it "causes cancer", when in fact it **cures** cancer. TiO2 food grade powder has an 18 year track record of curing cancer, when the protocol that has been developed for it is followed faithfully.

Most "forms" of cancer are caused by the BX virus, and some by the related BY virus.

This fact was proved in the 1910s by Dr. Royal Rife, who then proceeded to construct an aetherresonant (**not** RF resonance!) apparatus to cure cancer, which proved 100% effective at eliminating all manner of invasive one-celled organisms, including the BX and By viruses. He demonstrated killing a deadly virus which had been cultured in a Petri dish, which dish was placed inside a hermetically sealed metal can, then put into a metal case, then put into a safe which was locked and then placed inside the steel vault of a bank. When he turned on his apparatus, it killed the virus, through all its metal enclosures, at a range of several miles away from the bank vault. (RF can't do any of this.)

He later marketed his Rife Ray Tube, and demonstrated thousands of cures for cancer as several cancer clinics opened and started gaining notice. Rife and his apparatus were destroyed by the AMA and the FDA and made illegal, during the early 1930s.

Politics cannot solve these kinds of problems. The legislatures and governments are owned by fascistic corporate interests, as are the courts, and so on and so forth. It is our hope that the global populace takes 5G as the personal and family death threat that it is and that every human being does everything possible to prevent the proliferation of 5G.

While this is going on, one of us (RNB) have developed several methods for wireless communications that do not use radio waves. If any of these are developed and marketed globally, 5G will rapidly be obsoleted, and one of the major "murder for profit" initiatives will be removed from the system.

The global public deserves to know all of the hundreds of ways the "murder for profit" **industry** is killing people and Life in all forms, both surreptitiously, and by applications of force, and threats of force, and stop them and the armies of psychos making these things happen.

The deviousness of the murder for profit industry goes on and on and the network of like-minded psychos continues to expand. All this "murder for profit" activity needs to be stopped, not just 5G. See our recent paper describing one of plausible way to do quantum communication [1].

Getting 5G, GMOs, and glyphosate stopped, is a good starting point. Eventually we can root out all the other insidious forms of "murder for profit" and get rid of them, as well.

Basic principles of our proposed quantum communication

Our proposed communication method can provide an infinite number of infinite bandwidth communications channels for each user. Communication using this method travels much faster than light. It does not use radio waves and does not need wires. It cannot be monitored nor tracked nor interfered with. It cannot be regulated due to the infinities involved, and due to the fact that it is unmonitorable. Each user benefits personally from the perfect information security provided by quantum communications.

Quantum communication does not harm any form of life, nor the environment, in any way, as quantum events are, and always have been, constantly a part of the Natural Environment. This method is not related to "Q-bits" nor "quantum teleportation" nor "quantum amplification" approaches, in any way. It is based on the Schrödinger equations of Quantum Mechanics. One of the features of the Schrödinger equations is a descriptive prediction of what is called "quantum noise". This is the constant "hiss" that one hears when using an FM radio, and setting the frequency selector in between active broadcast channels. The sound is called "quantum noise" Quantum noise is observable at every location in the infinite volume universe. Quantum noise is the result of non-local Subquantum processes which cause apparently random quantum behaviors in physical systems, particularly those which involve electric, magnetic, or electromagnetic fields.

The situation is described by the quantum observable A of the system.

In Nature we commonly observe a "continuous spectrum" of quantum activity. This is partly described by the position operator Q in quantum mechanics. In the normal continuous spectrum case, the vector can be written as a complex-valued function in the spectrum of Q. For the expectation value of the position operator, one then has the formula. A similar formula holds for the momentum operator P, in systems where momentum has continuous spectrum. When both P and Q operators are involved with thermodynamic systems and electromagnetic systems the situation is considered as a "mixed state".

The situation is described by a positive trace-class operator which is known as the "statistical operator" or the "density matrix".

This boils down to the fact that there is an expectation value in situations which involve quantum noise, which should normally appear as perfect randomity in the quantum system we are observing. Perfect randomity is called 3rd Order randomity and is completely unpredictable.

3rd Order randomity then represents the normal behavior of our quantum system as it interacts with Subquantum entities which are interacting with the system from up to infinity away and with up to an infinite velocity. 3rd Order randomity is the quantum expectation value of all Natural systems, in all locations and at all times.

There are ways to detect and predict quantum noise and the physical changes produced by quantum noise in quantum systems (These methods will not be discussed at this time). When we detect the quantum noise, for example, in the form of "white noise" between radio stations, we expect the quantum spectrum centered on the channel of our receiver to exhibit 3rd Order randomity in both electromagnetic frequency and magnitude domains, in our selected channel. However, environmental factors such as the presence of physical or non-physical forms of Consciousness can act on the 3rd Order randomity so as to bring predictability and order to the stream of random number which our E/M detector array passes on to our discriminator system.

Related to this, it was proved by instrumented experiments in the USA and in France during the 1990s that the Attention, Intentions, and Emotional State of operators of symplectic, complex, and standard electromagnetic transmission facilities, resulted in instantaneous changes in the radiation patterns of the transmission antennas.

Anomalies Research, associated with Princeton University, which proved that consciousness, attention, intention, and emotional states, directly influence quantum systems, contrary to Bell's Theorem, thus proving that quantum physics is incomplete.

All of the above mentioned facts can be useful for developing a working quantum communication device, see for further exposition of our method [14].

Concluding remarks

Despite its enormous practical success, many physicists and philosophers alike agree that the quantum theory is so full of contradictions and paradoxes which are difficult to solve consistently. Even after 90 years, the experts themselves still do not all agree what to make of it. In this paper, we review the most puzzling feature of QM, i.e. entanglement.

In the meantime, the problem of the dangers of 5G creates a potential to develop new solutions of telecommunications, without having to use 5G/RF technologies. In latter sections, we discuss how entanglement and consciousness model can offer a way to develop such a quantum communication technology.

This paper was inspired by an old question: Is there an alternate way to communication beyond RF method?

This is reserved for further investigations.

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