



# **Physics is Delusions**

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# Abstract

In the present article nothing is new I just clarify my view that, the false wave-particle duality idea of light leads us to the false wave-particle duality of matter which leads us to the false idea of the reality of matter waves which in turn leads us to the false Schrodinger's wave equation that describes the traveling of such false matter waves.

# Introduction in Understanding Quantum Physics Michael A. Morrison

Quantum Mechanics plays a vital role in a vast array of technological applications, some of which we use every day- e.g. the microchips in the computer on which I am writing this chapter. So, Professor Morrison tells us: Do not doubt the validity of what you will read about quantum mechanics as evidence that we have its applications "the quantum computer" works very well in front of your eyes, i.e., what he wrote must be true [1].

Abo Hamed El Ghazali - A Great Islamic Thinker- said:

"If someone tell me that "three" is more than " ten", with evidence that I turn this stick into a snake or turn this stone into gold and I saw that from him, I never doubt because of him that I know that three is less than ten, and nothing happened to me except Astonishment, but absolutely no any doubt at all about my knowledge (that 3<10).

About Schrodinger's equation: The TDSE for a simple particle of mass m moving in a potential V in three dimensions.

$$\frac{h^2}{2m}\nabla^2\Psi(r,t) + V(r,t)\Psi(r,t) = ih\frac{\partial}{\partial t}\Psi(r,t)$$

The fundamental philosophy of science said that the sole test of the validity of any idea in science, is the experiment [2].

# **Physicists wrote**

It seems that finally we write the desired wave equation, its solution gives the wave function which is associated with the motion of a non-relativistic particle under the influence of forces which is described by the P.E function V [3]. It is evident that mathematics of wave motion could be successfully applied to the problems involving particles and other sub-atomic particles.

# **Physicists wrote**

Schrodinger's equation is the most important and famous equation in physics, which rivals Maxwell equations, it lies in the heart of quantum mechanics and it forms the basis of our understanding of all our universe. Before we discuss the origin of Schrodinger's equation, let us take a quick look at how physicists use such equations. First, they determine the wave function associated with a particle of mass m influenced by forces from Schrodinger's equation as the following.

- a) They specify the potential energy function V(r, t) via the forces acted on the particle.
- b) They solve this equation to find the wave function  $\Psi(\mathbf{r}, \mathbf{t})$ .

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**Copyright@** Mohamed Ashraf Farouk, This article is distributed under the terms of the Creative Commons Attribution 4.0 International License, which permits unrestricted use and redistribution provided that the original author and source are credited. It should be noted that the wave functions are not, in general, real but complex. This need not worry us since we are not using  $\Psi$  to measure any simple physical entity (such as displacement). A complex  $\Psi$  can carry more information about the physics of a problem because its value is always two-fold; it's a real part and an imaginary part as well [4]. Also, it should be noted that, the probability density  $\rho(r, t)$  is a measurable quantity, it should be real positive value number  $\Psi^*(r,t)\Psi(r,t)$  is always real and non-negative. Second, there are several rules by which values of measurable things can be predicted once the wave function associated with the motion of particle has been found. It should be noted that using the wave function does not produce a unique result but probabilities so any result may be probable.

# My comments

Let us now focus on the origin of Schrodinger's equation: Wave mechanics is the name given to a method of interpreting physical phenomena which has provided a fundamental principle that reconcile the conflicting "wave-particle" duality view of both light and matter.

Such wave mechanics is based on the hypothesis, due to DE Broglie that every particle has associated with it a wavelength is inversely proportional to the magnitude of its momentum  $\lambda$ =h/p

By other words Schrodinger thinking was as the following. Since there is a matter wave then there must be a wave equation describing the propagation of such waves.

It should be noted that:

Once the classical picture of a particle has been replaced by de Broglie wave group (packet), then the solution of the problem proceeds by the methods used for any other wave problem i.e., only then the mathematics of waves could be applied to the problem involving particles and subatomic particles. i.e. based on DE Broglie's hypothesis, Schrodinger in 1928 produce his general wave equation Which describes DE Broglie matter waves, which appear to be adequate down to atomic dimension at least [5]. So, let us focus on studying DE Broglie's view.

# **De Broglie**

De Broglie thinking is as the following:

Nature is strikingly symmetrical in many ways.

Our observable universe is composed entirely of light and matter.

Light has a dual wave-particle nature perhaps matter has also.

Since matter was then regarded as being composed of particles, de Broglie's reasoning suggested that one should search for a wavelike behavior for particles. De Broglie assumed that the wavelength of the predicted matter waves was given by the same relationship that held for light photon, which connects the wavelength of light wave with momentum of associated photon P= E/c=hv/c=h/ $\lambda$ 

Since the dual nature of light shows up strikingly in the equation  $P{=}h/\lambda$  and  $E{=}\ hv$ 

Each equation contains within its structure both a particle concept (P,E) and the wave concept wavelength and the frequency. In other words, de Broglie view depending on the symmetry principle:

Photons (particles of light)  $\Leftrightarrow$  light wave

Particles of matter  $\Leftrightarrow$  Matter wave

First let me discuss such claimed symmetry.

What symmetry is that?!

Photons are not like material particles; They are not made of the stuff we associate with things.

Photons moving only in straight lines, it does not affect with the gravitational force as ordinary material particles for example:

A. Photon speed is constant even if its source is moving, material particles do not behave in such a way.

B. The speed of the photons s one of the constants of nature, not like material particle

C. The photon has no rest mass, not like material particles.

D. The photon has no definite size like material particles.

E. he photon energy given by E = hv, not like material particles  $E = \frac{1}{2}mv^2 + P.E$ 

One can say:

De Broglie view originated from studies concentrated on the nature of light, i.e. from the subject of optics, to show that de Broglie view is nothing more than delusion, let us focus our study to the subject of optics [6].

# **Optics**

What is optics?

Optics is the subject study, the nature of light, its behavior and its interaction with matter-optics is constantly changing subject, it is not a complete and finished subject, it is important for us to understand the past as a guide to the future of optics which is divided to three main subjects.

# About geometrical optics

A. One can consider geometrical optics as the oldest branch, it deals with the formation of images by mirrors and lenses, and since lenses and mirrors were known and studied long before light theory was discovered by Huygens in 1690 geometrical optics consider light as rays. The ray is an idealization, it represents an infinitely narrow bean of energy which propagate along straight lines (and obeying Snell's law at interface) [7].

B. From the practical point of view geometrical optics answers most questions about optical instruments extremely well and is much simpler than wave theory could do.

C. Geometrical optics is important when we take no account of the wave properties of light. Also, when the photon energy (using

the quantum theory) is small compared with the energy sensitivity of the equipment.

## My comments

We found that geometrical optics does not represent the actual light nature or light propagation form--why? that is because light has a frequency by its abstract meaning (that is the regular repetition of equal units per time). However, no account of This property when we consider light as just rays. So, the physicists exclude geometrical optics from the theories concerning the light nature because it has not a frequency and also because it could not interpret neither interference not diffraction-beside it couldn't explain the interaction of light with matter, so in my view, the geometrical optics is nothing more than a useful delusion.

# **About Physical Optics**

Physical optics considering light as waves i.e., the formation of the wave theory of light was and is still the basis of physical optics. The wave is continuous spherical surfaces moving with increasing volume. This branch is important when the wavelength of the proposed light waves is comparable to the dimensions of the equipment and when the photon energy (using the quantum theory) is still negligible small compared with the energy sensitivity of the equipment. Physicist wrote that physical optics is concerned with light propagation, reflection, refraction, polarization, interference and diffraction [8]. Since 1690 the time of Huygens'---, 1802 the time of young and 1865 the time of Maxwell (before 1905 Einstein photon assumption) the triumph of the wave theory seemed complete. Young showed that wave theory could interpret the interference and diffraction phenomena, Maxwell showed that optics is a branch of the theory of electromagnetism and that light is electromagnetic waves.

However, physicists found that:

a) It is impossible for most minds to think of waves, without a medium to carry the wave motion. A hypothetical luminous ether must be postulated but its properties does not fit together is weird, much of the same constitution with air but rarer, subtler and move strongly elastic.

b) When light shines on a metal surface, electrons are ejected from the surface. Their ejection is immediately (no delay), randomly (one here, on their), and the kinetic energy of the ejected electrons depends only on the frequency of the incident light, not on the amplitude of the electric field. All these results contradict Maxwell's wave theory i.e., the photoelectric effect belies our well-founded view of the smooth oscillating wave front. Which is uniform everywhere and moving in phase, displeasing electrons by cumulative action of the varying electric field [9].

#### My comment

I clarified in my first article that neither the double-slit pattern could be interpreted using young's wave explanation (since he violates the law of conservation of energy at each point), nor the single-slit pattern is a diffraction wave pattern (for the same reason), also because we are following Huygens's and proposing the existence of the not existing fictious sources. Also, the Maxwell's wave theory of light which is so good at so many phenomena, it could not explain the emission and absorption of light as we saw before, which shows that light does not consists of uniform smooth oscillating wave fronts, (which is the essence of the physical optics) but light energy is distributed discontinuously.

Physical optics in my view is nothing more than a useful delusion.

# **About Quantum Optics**

Quantum optics consider light energy as discontinuously distributed in the form of isolated packets (quanta). Einstein inspired by Planck quantization of black body radiation concluded that light not only emitted and absorbed in separate portions but also propagated in separate quanta (each with energy (hu) which called later "photons". (i.e., he replaced the continuous wave front with a collection of fast-moving tiny corpuscles. Quantum optics is concerned with the interaction of light with subatomic particles for short wavelengths (considering physical optics).

Einstein himself considered such photons as "hopeless mess", no one could imagine how the energy of localized packet depends on non-localized property as the frequency.

# My view

Einstein photon model loses its purpose. The purpose of the model in physics should introduce a visual picture when we cannot see what is happening. However, no one could imagine such photons or their processes. The word "photon" refers to those peculiar aspects of light, that our understanding of it is contrary to the human logic. On my previous work I showed that such photon is nothing more than a contrary descriptive competency and that Einstein made great mistake by considering the photons as the fundamental unit of light, and that light is just a group of photons with its unimaginable "wave-particle" duality-the time has come for this present false view to change and I clarified in my previous work that neither the double-slits pattern is an interference wave pattern nor the single slit pattern is a diffraction wave pattern also I showed that neither photo-electric effect nor Compton effect demonstrate the particle nature of light. There are no photons [10]. So, light has not such claimed dual wave-particle nature, in my view the quantum optics is nothing more than a delusion consequently DE Broglie, made a great mistake by extending the false "waveparticle" view from light to matter, so there are no matter waves. i.e., Schrodinger made a great mistake by formulating wave equation to describe the false DE Broglie matter waves. In my view the wrong photon concept leads us to arguments that are far apart from the correct direction of physical principles (DE Broglie view).

In my view today a lot of physicists spent and waste a lot of effort, time and money of human being to develop a delusion called quantum mechanics theory which originated form invalid induction and invalid deduction for light phenomena today we are in need for a new theory of light to be constructed the time has come to try to unify the three false ideas on one single picture model as Feynman wrote such complete picture was not be available to us from a long time. I tried to create such a complete picture by the laws of introducing my wavy-ray model, which should be tested by further experiments. At least I did not breach the laws of logic.

## **The Delusions**

Some physicists said:

As written in "the quantum physics illusion or reality "page 6, I consider such statement as the heart of the matter.

"We now have two models to describe the nature of light depending on the way we observe it.

If we perform an interference experiment light behaves as a wave.

If we examine the photon electric effect light behaves like a stream of particles."

Those physicists tell us the following:

If we set up an apparatus to measure waves, we will find waves.

If we set up an apparatus to measure particles, we will find particles.

They mean that the used apparatus indicates the nature of light we observe.

#### My view no comments

Some other physicists said:

As far as interchanges of energy are considered light is a quanta or corpuscular phenomena, whereas its laws of propagation, as well as the facts of interference and diffraction are accurately represented by Maxwell's wave equations of electromagnetic field, which postulate a continues wave front. Some other physicists consider light and matter as be a wave or particles in studying physical phenomena depending on the type of experiment or the circumstances these two models manifest themselves differently and consequently one or the other description prevails depending on the properties the model is seeking to explain physicists doing that easily, as if it were a natural way of thinking.

Also, some physicists wrote:

Particles such as electrons, which in a host of phenomena can be treated as mass particles subject to ordinary dynamical laws, have been shown to act in certain circumstances as a wave groupalso all particles at the atomic and subatomic dimensions, can also exhibit a dual "wave-particle" aspect.

Physicists claim that:

The atomic and subatomic particles behaviors are so unlike ordinary object behavior, these things in small scale do not act like the large ordinary objects because it has large DE Broglie's wavelength.

#### My comments

The Physicists split the world into two worlds-the macroscopic world and the microscopic world and that each world has its own

laws-rules and principles in my view the reduction in size does not demand such drastic alteration to the nature of the physical laws -there are two notes:

a) Although in practice we cannot deal with microscopic entities without perturbing the system in unpredictable way -yes -but it still a practical problem not induced from the nature of micro entities.

b) Some physicists talk about that quantum mechanics leads to classical mechanics via the corresponding principle -I challenge them to show me How Schrodinger Equation Could Produce Newton Second Law for Ordinary Objects.

Today for sorry physicists have become familiar with such dual aspects for both light and matter-in mechanics as well as in optics as if it were a natural way of thinking yes, they do not feel any kind of embarrassment.

# About Maxwell's Theory and Mathematical Terrorism

Physics is the base that every field of science depends on. Physicists today claim that all the electric devices are based on one fundamental theory, which is Maxwell's theory of electromagnetism. Let now us discuss Maxwell's theory of electromagnetism:

Physicists wrote: The scope of Maxwell's equation is remarkable, including as it does the fundamental operating principles of all large-scale electromagnetic devices such as: "Radio, television, motors, cyclotrons, microwaves, and electromagnetic spectrum concept."

Maxwell's equations form the basis of all classical electromagnetic phenomena when it combined with the Lorentz force equation and newton's laws of motion, these equations provide a complete description of the whole classical electrodynamics of which charged particles interact with electromagnetic fields.

" $F = q(E + \frac{v}{c} * B)$  this equation gives the force acting on a point charge q in the presence of electromagnetic fields."

The problems of electromagnetics have been divided into two main classes:

one in which the source of charge and current are specified and the resulting E.M fields are calculated.

The second, in which the E.M field is specified and the motion of charged particles and currents are calculated.

Now let me utilize the number of topics in mathematical physics that are often assumed to be well known when one writes down Maxwell's equations and begins to solve specific problems.

## The mathematical tools utilized include

- a) Vectors calculus.
- b) Ordinary differential equations with constant coefficients.
- c) Fourier series.
- d) Laplace transforms.

- e) Partial differential equations.
- f) Legendre polynomials.
- g) Bessel functions.
- h) Green's theorems and green's functions.
- i) Orthonormal expansions.
- j) Spherical harmonics.
- k) Cylindrical and spherical Bessel functions.
- l) Gauss's theorem.
- m) Stocks theorem.

It is evident that despite all these mathematical tools, this manner of handling problems in classical electrodynamics can be of only approximate validity. Also, it should be noted that the complex mathematical tools needed to solve Schrodinger equation are much more complex than those of maxwell equation -so it is naturally as you follow the solutions of many problems in quantum mechanics in the physics text books you found after a complex sophisticated mathematical details that finally they end with the famous statement: The Solution of this Problem Beyond the Scope of this Book.

Also, Maxwell's theory could not interpret the photo-electric effect.

A single fact for which a satisfactory explanation cannot be given by the theory, or which is contrary to a deduction which may reasonably be made from the theory, then it should be discarded or at least radically altered. The light wave theory which forms the basis of physical optics is nothing more than a delusion.

The question now is how such mathematical tools of only approximate validity could enable the scientists to produce such extremely precise technological devices -the answer simply is -they could not.

The scientists spread abroad falsely that they control the motion of the electrons and that they are playing games with it-Now -all i can say i am forced to say that-this is a different story.

# About the Hup

# Heisenberg wrote:

"The uncertainty principle "protects" quantum mechanics if it were possible to measure the position and the momentum simultaneously with great accuracy the quantum mechanics would collapse the hup is the logical tight rope on which we must walk if we want to describe nature successfully."

"No one has ever found (or even thought of a way around the hup, so we must assume that it describes a basic characteristic of nature.

"The complete theory of quantum mechanics which we now use to describe atoms and in fact all matter, depends on the correctness of the hup, our belief in it is reinforced."

If there is a way to "beat" the hup wherever discovered, then

the quantum mechanics would give inconsistent results and would have to be discarded as a valid theory of nature".

"The philosophical consequences of hup in Q. M. would be impossible to predict exactly what would happen in any given circumstance we can predict the odd.

Feynman wrote:

It may be a backward step, but no one has even a way to avoid it."

#### My comments

The HUP is a natural consequence of replacing (representing) the simple motion of a classical particle by the mental picture of de Broglie wave packet -since I showed in my previous articles that there is no duality neither for light nor matter then the natural result is that we have no right for such replacement (representation) so the HUP becomes nothing more than a delusion- also as I clarified before that the uncertainty of the microscopic world is due to the act of measurement i.e. not inherent in the nature of micro entities.

# **About Maxborn**

Maxborn believe in the following:

That the double-slit pattern is an interference wave pattern following "Huygens's -young and Maxwell".

Also, he thought that light is a group of photons following Einstein, so he concludes that the double-slit experiment proved that the identical proposed photons (since all prepared by the same way) hit the screen at different points.

The result is that he found himself forced to replace the classical strict causally idea by probabilistic idea.

He has a weak curiosity; (he didn't ask himself and he did not say one single word about how such proposed photons acquired such property) that its propagation is controlled by such probability wave). He did not ask himself the reason is that such photons behave the way they do, but he concludes SIMPLY that "the same causes do not always produce the same results. He introduced the indeterminacy language to physics.

The result is that "you cannot predict with certainty the outcome of a simple experiment to measure any observable position as ex. All "W.M" can offer is statistical information about the possible results of measurement.

We are unable now to predict what will happen in physics on given physical circumstances.

# About Indeterminacy

According to Maxborn and Heisenberg, we predict only probability.

Indeterminacy is the natural results consequences of W.M. It is not possible to predict exactly what will happen on any given circumstances, that it is the fundamentally impossible to make precise prediction of any given experiment. We can calculate only average statistically, as to what happens. That is because the idea of exact position of a particle is not valid. (For example,) we find an even larger error in the position after collision.

# **My Comments**

The origin of all such ideas is wave-particle dual concept, so if we find out that this concept is not valid, then the whole wave mechanics collapse and become nothing more than delusion. Indeterminacy is not a fact of nature; it is just a natural consequence of the invalid Q.M (Figure 1).



# Figure 1:

A false idea leads to another false idea.

Simply because wrong concept cannot give correct results.

# **Final Words**

I consider the present dual "wave-particle" paradigm of light (and consequently of matter) as the main obstacle (a road black) that prevents us from approaching the actual light propagation form, I am sure that such view will not persist permanently. The time has come to abandon such delusion.

# Conclusion

None of the Three Main Subjects of Optics succeeded in describing the actual nature of light (its propagation form).

The false "wave-particle" duality idea for light leads to the false matter waves idea. Which in turn leads to the false Schrodinger equation describing the propagation of such false waves. There are no uncertainty inherent in the nature of micro entities, no indeterminacy. (the whole quantum philosophy is just a delusion).

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