

Words about the Physics Philosophy

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Abstract

In my previous articles, I showed that light (and consequently matter) does not have a dual “wave - particle” nature - In the present article nothing is new except my discussion for the consequences of applications of such false duality paradigm showing that quantum mechanics is not a valid way of thinking about the universe or about the nature of reality.

Introduction

Quantum Mechanics is a Mathematical formalism on which the dual “wave-particle” nature of microentites is described by schrodinger’s equation [1]. The dual “wave-particle” nature of microentites can be considered as the heart and the soul of quantum physics. We can say that all of the present quantum philosophy is the result of our interpretations for the optical phenomena using the proposed photon (which is the first embodiment for the dual “wave-particle” paradigm) as if it were a real entity.

About light

i.e. today; some physicists explain the different optical phenomena using both the classical description of the light fields as described by Maxwell’s wave theory or using the quantum description of the light fields as discrete localized photons depending on the kind of the problem they are dealing with [2], they are doing that, without any commitment, how does light actually exists in nature [3].

Some other physicists (as written J.D. Jackson, classical electrodynamics) are busy with determining the limits and the range of validity of each description, (whatever, classifying such range of validity according to the energy of the used proposed photons, or classifying it according to the number of the photons involved), i.e. those physicists are busy with answering the question “How” and “When” the quantum Mechanical view of electromagnetic field enter to modify the wave classical consideration of light those physicists said:

a) “When a total number of (Real or virtual) photons is high enough, we do not say a wave is there, but the wave description yields the correct predictions” [3].

So those physicists also conclude that.

b) “It seems that ontological statements about the existence of waves are not so plain as in the case of photons”, i.e., they are believing, or they end up with the reality of photons [3].

My comment: First, so they ignored (it never crossed their mind) that the implicit meaning of their thinking or what they are doing, is that there must be something seriously wrong in both descriptions. And they must look for (discover) the real origin of their failure, which consequently exists in the physical ideas involved (contained) in both theories. In my view both descriptions are failed to represent the real electromagnetic field nature.

About photons

A. Second, two confusion **Richard P. Feynman wrote:**

"I want to emphasize that light comes in this form - particles. It is very important to know that light behaves like particles, especially for those of you who have gone to school, where you were probably told something about light behave like waves. I'm telling you the way it does behave - like particles"* [4].

B. **Richard P. Feynman said:**

"Things on a very small scale behave like nothing you have any direct experience about. They do not behave like particles. They do not behave like cloud or billiard balls. Pr wrights on springs, or like anything you have ever seen""**.

C. **Einstein said:**

"Every physicists think that be know, what a photon is, I spent my life try to find what a photon is, and still, I don't know it".

No comment

D. **Richard Feynman also said:**

"Third, the theory of quantum electrodynamics describes nature as absurd from the point of view of common sense. And it is agreed fully with experiment. So, I hope you can accept nature as she is - absurd""*** [4].

I am saying the battle is not with the common sense as he said but the battle is with logic.

E. **Richard Feynman:**

a. You think I'm going to explain it to you so you can understand it. No, you are not going to be able to understand it. Why ... You see, my physics students don't understand it either. This is because I don't understand it. Nobody does [4].

b. He receives Nobel Prize on a subject he can't understand it. This is the sign of the Intellectual superiority of the modern quantum. physicist (scientists)****.

My view about the proposed photons: The question now is that; Why we cannot imagine the photon with its properties?

Physicists answer: That is because all our mental pictures are based on our experience in the macroscopic world of classical physics - that is why we cannot imagine it.

My comment: The real reason of the absence of the photon picture is not due to lack of imagination, but because the photon is nothing more than a contrary descriptive componency it does not constitute a picture at all.

A. Light and vacuum Page 2 "Constantin Meis";

He wrote;

Our mathematical representation of the light wave - particle nature and its relationship to the vaccum is still incomplete [5].

No comment

B. Light and vaccum page 81 (Constantin Meis)

He wrote;

The concept of complementarity is hardly comprehensive for the human common sense [5].

My comment: Again, the battle is not with the common sense as he said, the battle is with logic.

The Heart of the problem

Both the double - slit and the single - slit patterns are formed spot by spot on the screen - also the energy of ejected electrons on the photo electric effect depends on the light frequency.

So, we got the following dilemma.

There is a frequency but there are no waves. There is a spot but there are no particles. How we solve such puzzle - How we get out from such dilemma.

a. Physicists view: light has dual wave - particle nature "photons" (No picture).

b. My view the solution is My "Wave - ray" model, which can be experimentally verified or falsified (Picture).

Light

There are many things in our thinking about life are dual in Nature {(good and evil), (life and death), (positive and negative), (day and night), (sky and earth), (strong and weak), (heaven and hell) ... etc} so the two poles thinking may easily force us and compelled us subconsciously to attribute to electromagnetic (E.M.) light falsely a dual (wave-particle) nature.

In my view, both of what we called the wave nature and the particle nature of E.M. light is never experienced in our sense impressions. I will try to declare that the duality supposition is merely physicists' expectation projected onto reality, and that idea has not any logical justification. The disaster is that we do not stop there but we made generalization by attributing such view to include all carriers of energy and momentum in nature.

However, I am not expecting too much, I think that the physicists will ignoring and disregarding my warnings. On the grounds that their view is justified by its success of mathematical calculations

* QED the strange theory of light and matter.

** Volume III R.P. Feynman lecture or physics.

*** QED strange theory of light and matter.

**** QED strange theory of light and matter.

using their approximations methods. I tell you, brother's, you got addicted running on the wrong track.

About quantum philosophy

There are no precise deterministic laws in physics, we replace it by probabilistic laws. Instead of the classical deterministic view, we got the undeterministic view and consequently there are no strict causality, (such that one cannot go back track from any particular event to find some where is the dim recesses history its cause), we got instead "the Randomness" concerning any particular event, which means that the universe is unpredictable - also the universe is inherently uncertain (the knowledge accessible to man is limited) - Instead of the classical view of objective universe, we got the subjective universe (because the observer - observed interaction cannot be predictable or reduced to zero) and finally, new role of measurement, Instead of discovering the nature of external reality, it is a way of creating certain aspect of reality [1].

Quantum physicists said that "The dual "wave - particle" nature of quantum entities is the key feature of quantum physics" so it is beyond all of these new ideas.

My comment

All of such quantum philosophy is a natural result of considering the proposed Einstein photon (which is the first embodiment of the

false dual "Wave - particle" property" as the fundamental unit of light in our interpretations of the different optical light phenomena (specially the double - slit experiment with very low intensity such that the proposed photons come one by one) i.e., Fundamental quantum concepts are induced from invalid induction and invalid deduction of light phenomena.

Final words

The quantum mechanics is a collection of postulates and the mathematical tools derived from those postulates - i.e., these postulates underlie the mathematical machinery of quantum mechanisms [1], so if we found out that such quantum postulates are not valid, then we can safely, say that the whole mathematical formalism has not any scientific basis and must sooner or latter will collapse.

a) Our ontological statements are the building blocks of images of the world that guide us in our daily life, the experimenter in his laboratory and the theorist the elaboration of his theories [3].

b) Any way: we must keep in mind that such images of the world are only plausible (probable) and often, incoherently assembled, when used as a heuristic guide: They sometimes leads toward rewarding path - some other times into dead allays [3] such as the photon Einstein, max born and Copenhagen model (Figure 1 & 2).

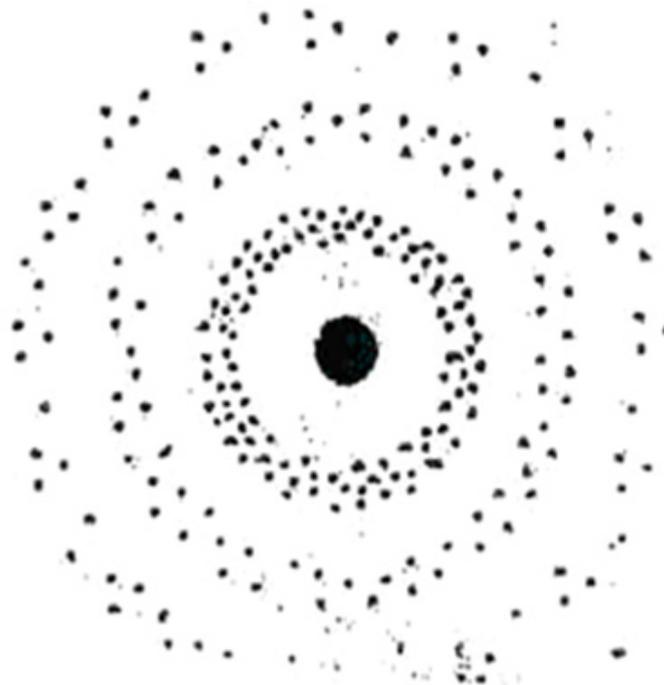


Figure 1: The Copenhagen quantum fictitious model.



Figure 2: The wavy ray model.

The photon concepts

Einstein assumed that light might be constituted by: "Photons or energy quanta each of $(E = h \nu)$ that are localized in points in space, move without dividing and can be absorbed or generated only as a whole" [3], the size of the photon is unknown:

Quite analysis of the photon paradigm

A. Any person whom studied the logical positivism will end up with the following result :

When analyzing any concept he found that the concept must be belong to one of four main types:

1. He found what is "referred to" be the concept is present in reality just as described by the concept and then the concept is meaningful and true.

2. He found what is "referred to" by the concept is present in reality but it is different from the image presented by the concept, then the concept is meaningful but untrue.

3. He found that there is a logical impossibility that the concept to be refer to any of the assets of the world due to the virtue of its verbal composition, it does not carry any meaning at all. i.e., senseless assortments of words.

4. He found that the concept implies a contradiction in what it describes, it has an element that are contradict to one another, consequently, it is also does not refer to anything at all, it just composed of words that has contradictory properties.

B. The photon concept belongs to class "4" it is a point particle (localized), contains energy depend on frequency (non-localized property). So, the photon concept is nothing more than contradictory descriptive componency.

C. The word "Photon" has no significance, no nominatum, no designatum, no denotatum, no referentatum.

The disaster is the thinking that as there is a word in physics it must have a peer in nature.

Physics mistakes

I think that there are two main mistakes in physics:

The first mistake:

a. Instead of rejection Max Born statistical probabilistic view depending on our Natural idea that "the same causes must always produce the same results" which is basic to the whole science. The physicist in contrary goes the opposite way; they modify the natural causality concept, yes they made such drastic alteration in the nature of the philosophy of the whole physical science to be matching with Max Born statistical probabilistic view.

b. Beside I don't know Hume view about the successes of all scientific laws which are merely generalized from inductive reasoning.

The second mistake:

It is well known that;

a. Nature being fundamentally logical (from the human point of view) and casual as evidenced by the very successes of our logical mathematical theories, also the existence of the physical laws imply that the physical world behaves in a coherent fashion from the human point of view.

b. Science is No doubt more strictly logical than any other field of intellectual activity.

c. Logic is indeed an integral and central part of science.

d. The purpose of physics is to map/visualize and articulate the physical interactions processes that facilitate the energy exchange leading to change the evolving universe.

e. However, Dirac wrote:

“No satisfying picture for the photos processes has been given, the main object of physical science is not provision of pictures but formulation of laws.

What are we suppose to do ?

What are we suppose to do ?

Reference: Using the Nature of Light - What is a photo Edited by: CHANDRASEKHAR ROYC HOUDHURI- A.F. KRACKLAVER - KATHERINE CHEATH

a. The purpose of this chapter is to generate scientific doubts in the minds of the readers regarding the current definition of photon by proposing a New Paradigm of thinking for doing science.

b. The physicists wrote: “We are in need for a new scientific epistemology to iteratively keep on refining our “human logics” that has organized all theories and move closer and closer to our goal of mapping the “cosmic logics” that run all the Real interactions processes in our universe”.

c. Those physicists wrote: “Therefore the younger generation should be constantly asking and learning how can we stay focused on discovering actual realities in nature driven by “cosmic logics” Rather than stay limited to inventing realities that are esthetically pleasing to our (Human logics)”.

My comment:

a. When the physicists get despair from imagining the photon or the photon processes. They realize it is impossible to imaging the photon using the human logic, so they come to conclude that.

b. “Our mental pictures are based on our experience in the Macroscopic world of classical physics”.

c. Physicists claimed that the microscopic world educates us something that is completely different from our experience in the Macroscopic word, such as the photon “wave particle” duality.

d. I here them saying we are forced to accept the duality view, we must accept the contradiction, they believe in that. Maturity is the ability to have two contradicting thoughts without feeling the need to choose one over the other. They said, “Science educates the Mind”.

e. i.e., Today, the physicists repeat the same mistake they said our mental logics (our understanding) are based on our experience in the Macroscopic world, and those physicists prefer to look for a new Paradigm of thinking for doing science rather than kick out the photon concept outside the physics, All of this for the sake of Einstein.

f. Finally, I would like to say that “Physicists should always remember that “the human mind who create the science”.

Final comment: Science is a logical construction, it consists of a group of thesis that logically tight, (I mean the premises and its results). The results which we got depends on our used concepts as well as the language we used, to face and to understand the physical phenomena. i.e., our used concepts indicate the nature of our results and also indicate the direction of our thinking. I consider the origin of our strange and unlogical quantum ideas exist in the nature of the photon concepts which is still for sorry our tool to understand the physical light phenomena [6-23].

Conclusion

If we abandon the human logic what will be left for us.

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