"The Information as Absolute" conception: a couple of applications in philosophy

Sergey V. Shevchenko¹ and Vladimir V. Tokarevsky²

¹ Institute of Physics of NAS of Ukraine, Pr. Nauki, 46, Kiev-28, Ukraine, Scientific explorer, ret.

²Professor ret., Pr. Nauki, 46, Kiev-28, Ukraine

Abstract. In the paper a more detailed consideration in framework of the "The Information as Absolute" conception of two philosophical problems "QM and the observer", and "Has human evolution purpose?" is presented.

1 Quantum mechanics and the observer

In a ResearchGate project "Philosophy of Science" [1] the project's moderator Hossein Najafizadeh suggested to consider relations in the system "Quantum mechanics and an observer". Since this problem isn't trivial and attempts of its solution in framework of the mainstream philosophy failed, what follows from the fact, that till now there exist numerous published mainstream books, papers, etc., which in most cases only describe the problem in framework of a number of, often opposite, philosophical doctrines, schools, etc.; and don't contain some concrete sufficiently grounded inferences, it is a reason to consider the problem above in framework of the "The Information as Absolute" conception [2], [3].

To begin with firstly note, that all ontological and epistemological problems, including the problem in question, in the mainstream philosophy and in other sciences arose from the fact that the main notions/phenomena that are basic in the science, i.e. "Matter" and "Consciousness", are Meta-mainstream- philosophical notions/phenomena that so cannot be properly defined/understandable in the mainstream, both are principally transcendent and so non-cognizable.

Such situation in the mainstream is principally inevitable since even the existence of fundamentally basic in two main mainstream doctrines "Materialism" and

"Idealism" notions/phenomena above is only postulated in the doctrines, and these postulates cannot be proved/disproved inside the mainstream principally; correspondingly fundamentally opposite meanings of them in two main doctrines [and the doctrines themselves, as well, though], equally legitimately co-exist in the philosophy thousands years already.

That holds in the mainstream because of any proof must contain the first and obligatory step "the proof of existence". However all humans' knowledge about the External, i.e. about Matter and Consciousness, principally is based on humans' practice only, all knowledge about the External eventually is principally empirical, when any empirical data cannot prove an existence of anything. From the experimental fact that something exists in a concrete time moment by no means follow that this something will exist in the next time moment; in science – from the fact that n experimental outcomes are in accordance with a theory by no means follow that the (n+1) outcome will be in the accordance also the experimental accordance is only necessary, but non-sufficient condition in this case.

From the principle above there exist only two exclusions: purely consciousnesses abstract products, in science that are some mathematical problems, where the existence problem often is solved by using the word "Let", "Let A is..."; and the "The Information as Absolute" conception, which, in contrast to mathematics, relates to the External. Therefore the conception is based on experiments also, but in this case it is sufficient to detect at one experiment existence of an information as a data, and from this fact immediately follow basic assertion in the conception that any information exists always since cannot be non-existent, and its other substantive primary tenets.

Thus, for example, even the main questions for any scientist, i.e. "What is the Being/Nature?" and "What are the Nature laws and why they exist at all?" haven't answers in the mainstream principally. In the main mainstream philosophical doctrines, and in numerous sub-doctrines; papers, books, etc., written by professional and non-professional (Bohr, Heisenberg, Weizsäcker, etc. in their philosophical works, such as [4], [5], [6]) philosophers the result of considerations of the questions above eventually can be completely reduced to two simple answers:

"The Being is being of Matter and all in the Being, including the laws, is so, because it is so" – in Materialism, and

"The Being is being of Idea/Spirit... i.e., of a Consciousness, and all in the Being, including the laws, is so as a conscious Creator [Idea/Spirit...] established when She/He created Nature".

Both "answers", as that is noted above, are basic, fundamental, postulates in both main mainstream doctrines, and are nothing more then some bare declarations. And so from both evidently follows nothing that could be useful for study Nature. Though, of course, idealistic approach seems as more "useful", but in depth the next question appears – since Creator's design is unknown, so what in Nature exists in the reality? Including – there can be in Nature something else, which makes even discovered by humans Nature laws be having in the reality quite other meaning; so by what reason humans discover indeed real, i.e., Creator's, laws, when it is possible that any discovery is some illusion?

These questions, when being rather abstract for "usual sciences" in the "classic science times" [say, till XX century] became be more and more actual when experiments allowed to study Nature on the quantitatively different scales – at micro energies and sizes values of/at events/interactions and of/at events/interactions at large spatial speeds. So the ontological and epistemological problems for, first of all, physicists, became be rather actual and they attempted to answer. History has repeated - Newton wasn't a physicist, he was natural philosopher because of in his time there wasn't a science "physics"; the physics was one or three main branches of the philosophy.

The next point that turns out to be important in this case is that the transcendence in the mainstream of both notions/phenomena above excludes, besides, any rational attempts to discern – what is material and what is conscious and so, further, what is objective and subjective at the study of Nature.

Thus there wasn't some surprising in that the great physicists, as Bohr, Heisenberg, and a number of others, at their attempts to find some fundamental base for the new physics, could not obtain some rational explanations of the fundamental difference

between objects, events and processes in Matter in classical and quantum physics (QM and CM)), first of all answers on why:

- in QM, in contrast to CM, all processes are stochastic; at that they rather seriously believed that an "observer", when makes a measurement of some quantum objects sates, affect somehow on the measurement results some cat is simultaneously dead and alive till an observer makes the observation, every measurement, when made by an observer, is accompanied always by some perturbation of measured physical parameter, etc; and
- in QM's scales mathematical presentation/description of the objective reality becomes be much more important comparing with CM. The "quite understandable/measurable" in CM parameters of material objects, i.e. the energy, the momentum, and the angular momentum in QM obtain a new physical meaning they become first of all some operators, which "actively act" on the particles wavefunctions, and only in some selected cases become be some parameters that have concrete values (eigenalues) as that is in CM always.

It seems rather interesting that the first point, though was (and is) widely discussed, remains in the mainstream be essentially non-understandable, when this situation in this case is principally, *fundamentally natural* – since *any change*, when any interaction, motion, etc. is always a change certainly, *is logically self-inconsistent notion/phenomenon*. Therefore there cannot be infinitesimal changes at all fundamentally – this fact was rigorously proven by Zeno 2500 years ago: if infinitesimal changes of position in space [and, of course, not only at changing of a spatial position – if any parameter's values of at least pair of any objects are changing in the objects with different rates, then, if an object with larger rate starts the changing later then the other one, and if infinitesimal changes are possible, then the first object's parameter's value never will exceed corresponding value of the other object] are possible, then the logics directly and unambiguously prohibits Achilles to overtake a turtle.

All Meta-mainstream notions/phenomena above, including the notion/phenomenon "Change", and the answers on the Meta- questions above can be properly defined/understandable/obtained only the "The Information as Absolute" conception [3], where it is rigorously proven that all what exists in our Universe and outside is/are *only* some informational patterns/systems of the patterns that are

elements of the absolutely fundamental and absolutely infinite "Information" Set; the systems "Matter" and "Consciousness" are only some infinitesimal comparing with the Set informational sub-Sets. And, besides – in the conception it is shown that: (i) - these systems are fundamentally different, and (ii) - they both *objectively* exist *simultaneously* and practically [Matter completely independently, at least relating to the human's consciousness; here we don't consider other consciousnesses, for example – possible Matter's Creator] *independently* on each other.

Including the answer on the question "how Achilles overtakes a turtle" seems as rather clear in the conception – when the distance between runners becomes be essentially small, the information about their positions becomes be uncertain, "illogical". Thus QM postulate about principal stochasticity of processes in uninterruptedly changing Matter, where every object/system changes always, isn't something principally new, all new what in the reality in this case QM makes – it establishes quantitative estimation of this inevitably existent uncertainty, i.e. the Heisenberg uncertainties relation, which [estimation] is valid only in given concrete informational system "Matter".

Outside Matter in the Set [excluding possible Matter's versions that are based on identical sets of fundamental for these systems rules and links] this uncertainty value doesn't valid. For example human's consciousness is also uninterruptedly changing system, including, e.g., when a next thought appear this event must be accompanied by some uncertainty, but we don't know seems any parameter that quantitatively characterizes events and processes in the consciousness. Including we even don't know – what is the consciousness's spacetime, besides, of course, that this spacetime must have the "true time" dimension. For some more common concrete sub-Set, if it exists and so Matter is some sub-set of this sub-Set, the corresponding uncertainty relations are lesser, or, by another words, in such system the corresponding "QM" effects become be essential on lesser scales then in Matter.

Eventually, i.e. in the Set, which contains all concrete sub-Sets, the uncertainty of everything is equal to zero – but not only because of in the absolutely infinite Set infinitesimal changes rather probably become be possible. The uncertainty vanishes also since all/everything what exist and changes in the Set had happened and is happening always "simultaneously", "in every time moment in always" or "in absolutely infinite time interval". Thus all/every objects and processes in every of all existent in the Set absolutely infinite number of dynamical systems change in

complete accordance with unique scenarios; where all/every parameters of the objects and processes objectively always exist and always are "known" absolutely exactly. Though, again, inside every non-absolutely infinite dynamical object/system every parameter of every change become be uncertain at some parameters' microscales.

So what would be indeed a fundamental puzzle, that would be situation if the quantum mechanics was non-existent. Why this simple fact was unknown for even a number of great physicists and a huge number of mainstream philosophers? The history seems don't know an answer, when, for example, Schrödinger even had peculiar interest in Antic philosophy [7]. It seems that for the physicists in early years of QM (and for many of them now, though), the fact that when going into Matter's scales deeper and deeper no "rigid fundamental", i.e. some "primary Matter's non-dividable bricks" appear and the results are only a next information that differs from the information known before, was indeed a puzzle. Which, nonetheless, is solved simply – there are indeed only informational patterns, "words and sentences" and nothing else; but these words and sentences can be, and in Matter are, rigid enough, so humans, e.g., can build houses, drive cars, etc. on them; when houses, cars, etc. are some "words and sentences" also.

Besides of the common problems above, in QM there are some peculiar problems, including the problem of measurements of properties and parameters that characterize objects and processes on the microscales. In Prof. Najafizadeh of Bohr's [4] quotation that is as

"...Heisenberg wondered what would happen if a microscopic particle like an electron was to be viewed in a microscope... The more precisely one is to measure the place, the more energy-efficient gamma rays are needed, and the speed of the particle will be determined inaccurately. And this relationship is also reversed: the more accurately the speed is measured, the more blurred the place..."

After it is known that human's consciousness and material objects are practically quite different informational patterns/systems and the consciousness so doesn't interact practically with Matter outside human's body directly [i.e., besides the case when she interacts with practically material brain, but using some forces that don't exist in Matter], and on the contrary – material objects don't interact directly with the consciousness, it becomes be clear that at human's measurements there is no something/somebody in Matter, what/who specially impedes for humans to measure

some parameters of material objects/systems, here above - of particles positions and their speeds/ momentums. In the quotation above purely natural process is described, the interaction of gamma-photons and particles are quite the same in any cases, independently on – they were caused by an observer's actions or happened without observers.

Besides – quantum effects were studied in classic physics long before the appearance of QM – for example quite quantum interfering of light photons at interaction with "old classical" diffraction grating are studied seems 200 years already; and the light diffraction in this case by any means don't differ from light diffraction when the light is reflected from a oil slick on a quite natural paddle's surface.

At that (more see [8]) all/every particles in Matter are also some 4D "waves" in the 4D sub-spacetime of Matter's [5]4D absolute Euclidian spacetime, which move in this sub-spacetime with 4D speeds having identical absolute values be equal to the standard speed of light. I.e. usual [i.e. having rest masses] "particles-waves" don't differ fundamentally from "photons-waves", the unique difference – photons move in the 4D sub-spacetime in 3D space only and so move always with absolute spatial speed be equal to standard speed of light, when the rest masses particles, when be 4D waves, are "3D spatial waves" if move in the 3D space; the particles de Broglie waves doesn't differ principally from photons' waves.

The next QM puzzle, which is mentioned above, relates to the "qualitative" increasing of applicability of mathematics in QM comparing with the classic physics. Here "qualitative" is in quotes since in the reality no critical changes in relations physics/mathematics here has happened – the quite effective applicability of mathematics in classic physics is quite equally non-understandable in the mainstream comparing with its quite effective applicability in QM. But indeed, historically this problem begun actively discussed as the "QM problem".

This problem is a next Meta-mainstream problem and so cannot be solved in the mainstream, but is rather simple in the "The Information as Absolute" conception. The solution includes [and the QM measurements problem above as well, though] two main points: (i) – for its solution is necessary clearly define and discern

notions/phenomena "Matter/ material" and Consciousness/conscious"; and (ii) – after solving (i) is necessary clearly to understand relations in the system observer/ material objects, i.e. the problem objective/subjective.

Every object in the system "Consciousness", i.e. every self-aware and having capability to analyze obtained information informational system/ "program" "human's consciousness" exists and processes the information about the external material objects/evens/processes objectively, separately and independently on these material phenomena. But, since the material phenomena are some informational patterns are built/organized the same absolutely fundamental basing on Rules/Possibilities/Quantities from the "Logos" set [3] as the system "consciousness" is built/organized, for the consciousness there are no fundamental obstacles to cognize really, objectively and adequately existent informational links and rules that really and objectively act in the phenomena above, analyzing information that she obtains when some controlled by the consciousness material tools interact with material objects, be governed at that, of course, by material links and laws. Firstly the material sensors of the practically material body were used by the consciousness, further more and more sophisticated instruments.

The "decoded" links and rules that act in concrete material informational systems doesn't mean that the human's descriptions and inferences are literally adequate to the links and rules in the systems. Masses M and m be placed on a distance r don't say each other something as "move to me with acceleration that is in accordance with the formula $F = \frac{GMm}{r^2}$ ". And Heisenberg in a quoted by Prof. Najafizadeh in [1] passage

"...but into the transparent clarity of a mathematics that no longer describes the behavior of the elementary particles but only our knowledge of this behavior.."

is correct, though not completely. The discovered by humans links and laws aren't only our knowledge at description of the behavior of the elementary particles, these indeed objectively accompany real processes in Matter, and, though they don't act directly, they, when be decoded by a consciousness, are, nonetheless, some "adequate translations" of informational objects/processes that proceed in Matter using some unknown language.

And in this case QM again isn't some exclusion from other human's knowledge. In complex informational systems, as Matter is, there exist a huge number of concrete logically limited and singled out from the main system specific sub-systems, which are organized and built basing on some other then common fundamental Matter's links and laws. In science corresponding examples are well known – chemistry is, first of all, "physics of outer electronic shells", but it cannot be reduced to physics completely and so, e.g., appeared and developed well before the electron was discovered; classical physics laws system indeed differs from QM, etc. Moreover, there are many other sciences, for example – the science "Culinary", which in Matter is also a physics of outer electronic shells, but it has own specific links and laws that dictate how a food must be cooked to be indeed a food, and these links and laws by any means don't differ principally from any physic link/law.

Both – real objectively existent material informational structures, which can be "rigid enough", and subjective descriptions of these structures, exist absolutely objectively; in physics – as Matter's always principally true combinations of some logical rules and links that exist and change in the absolute Matter's spacetime; and as combinations of logical rules and links that exist and change in both, in Matter's spacetime and in non-material human's consciousness' spacetime; being, at that, objectively adequate to corresponding Matter's structures; or inadequate, fantastic, simply false, nonetheless existent quite objectively in the consciousness' spacetime only.

2 Has human evolution a purpose?

This problem is discussed in other ResearchGate project "Is human evolution has a purpose?" [9]. For a rational answer on this question is necessary to define/understand previously – what is the notion/phenomenon "life"? What is human, first of all – what is the notion/phenomenon "human's consciousness?".

However the answers on the questions above evidently require, as that is in the Sec. 1 problem, answering before on more common basic ontological questions – "What is the Being and why in the Being two seems different systems of objects exist, i.e. "Matter" and "Consciousness"?

Since neither materialistic nor idealistic doctrines and numerous sects inside these doctrines principally cannot prove own or at least disprove opposite doctrine, every of the doctrines is nothing more then some faiths in the truth of the postulates above.

There exist rather concrete answers in existent religions: the Being, including humans, is created by, and It evolves under governing by some very mighty Creator; what, of course, doesn't differ essentially from idealistic postulates, the unique difference – religions' true believers directly claim about the transcendence of the Being, non-cognoscibility of Creator's design, etc. when philosophical doctrines' true believers claim that they rationally study the Being, though that is, again, principally incorrect, both main mainstream doctrines and their sub-doctrines are only some secular religions.

And, as that is pointed put above, the rational understanding of what the Metamainstream-philosophical notions/phenomena "Consciousness" [including "high level" consciousnesses as "Ideas", "Spirits", etc.] "life", "human", "Time", "Space" are, principally cannot be rationally elaborated inside the mainstream, they can be – and are - rationally understandable in the "The Information as Absolute" conception only.

Relating to this project's problem more concretely – it seems as quite logical that, when considering the "human's evolution purpose", it is necessary to consider the "evolution" of the life on Earth *as a whole*, discovering at that that the life doesn't evolve, it *develops* as the clearly seen trend "*more and more outside Matter*" – from simplest primary biostructures a few billions of years ago, which were, in fact, rather complex, but, nonetheless, practically totally material chemical compounds, to multicellular organism "human's body", which, though remains be practically a material structure be constituted from chemical compounds, is, also, a residence of purely non-material system "human's consciousness" now.

This trend seems as well confirmed, indeed, in the life history all appearing essentially new living species had, as a rule, more and more developed brains, so that the living beings became be capable to make more actions at providing better conditions for their existence. At that the number of situations in the living beings environment, in which the being's behavior became more and more adequate to the situations, increases with complication of the beings' structures. In many cases the increasing is a result of increasing of the number of practically material "automatic" the beings' reactions in standard, in certain sense, i.e. often repeating, situations, in

accordance with a number of purely material algorithms that are "written" in the beings' bodies as chains of specific chemical reactions that start after specific impacts on the bodies [the bodies' neurosystems]. Such algorithms indeed can be, and very probably indeed are, mostly created in the bodies as the result of selection, and storing in the bodies as the algorithms, of adequate/useful accidental [eventually chemical] bodies reactions on the impacts. But besides the standards developed living beings evidently adequately react on some non-standard impacts, when the adequate behavior requires non-automatic, i.e. non-material actions, i.e. planning of the behavior and the behavior's corrections at executing of the plans.

Such non-material actions don't require some "self-awareness", though; that is possible also as some analogue of the instinctive behavior, when non-material processing of the information about the environment starts "automatically" as a reaction on an external impact or internal chemical signals, for example – "the body is hungry". Nonetheless it seems evident that even at absence of the self-awareness that is qualitative step in the development of the life.

For humans it is unknown practically to what extent such "non-material" living beings' behavior is "non-self-aware", but results of observations, first of all of the mammals, seems show that they have some the self-awareness and clearly select themselves ["social mammals" are "consciously" aware also about members of some groups] in the environment. The next fact, which follow from the observations seems rather clearly, indicates that the extent of the self-awareness and the number of processed adequately by living beings non-standard situations' types increase with complication of the beings' brains, the most developed in this relation living being is the mammal "homo sapiens sapiens".

From the consideration above seems as rather plausible to suggest that the observed life development on Earth wasn't accidental, that was a controlled process. Besides it is well known that even accidental appearance and rather long existence of first complex biostructures in rather aggressive chemical environment on Earth few billions years ago is practically improbable. The next suggestion [3] seems as rather plausible also: the recent humans' consciousnesses can be a developed versions of the same non-material program, which had appeared on Earth a few billions years ago and further, governing the living beings evolutions, created a stable residence that allow to realize a lot of' non-material capabilities/functions.

Here is necessary to point out that all/every informational patterns/systems of patterns always exist in the Set when being constantly connected and interacting by some informational links and impacts with all/every of other of absolutely infinite "number" of elements in the Set [3]. Thus some informational pattern/system can be stable only if it is organized and changes basing on some primary logical statements and links that contain exclusively true information. In our Universe such informational system is the system Matter, which exists and changes rather stably in a number of billions of years already.

The system/program "human's consciousness" isn't material, just therefore it is self-aware and is capable to process/produce "concisely" uncertain and false information. Correspondingly on the one hand thus the consciousness is constantly impacted by such information in the Set, on another hand – her capability at processing the information isn't infinite, and so it is possible, when some information can damage the program. Thus in the Set the program "consciousness" can exist in some simplest, as some analogue with computer [when the consciousness seems indeed operates as some analogue of computer], "BIOS state", only; therefore for her stable existence and more effective operation is necessary to have a stable residence, and the human's body just is the such residence.

The human's consciousness operates rather effectively, providing for human's body the best conditions for existence comparing with any other living being. But from the trend above it seems as quite reasonable to suggest that this trend hasn't finished in the human's consciousness stage. The consciousness will continue to develop, and will to do that, in normal conditions, in the same direction "more and more out Matter" as an expansion in the Set. Correspondingly, if this suggestion is true, then the answer on this Section's problem is: it seems as very probable that fundamental purpose of recent human's life is to make this development optimal.

So the problem, which indeed exists, isn't as "what is the human's life purpose", it is as "what should be optimal humans' and humans' societies' actions aimed at developing of human's consciousness recent version into next version", which will be, with a great probability, "more non-material" and will have more possibilities at accessing new regions in the Set.

And it seems as rather probable that the observed natural trend "more and more out Matter" should be revealed in corresponding optimal development "literally", in that humans' real behavior should be lesser and lesser determined by practically material humans' body – when now practically all human's actions have the purpose to provide for the body better food, comfort, male/female, etc.

At that the technological progress seems can provide yet now a social system when sufficient volume of everyday needs can be produced if a human will work a few hours in a day; soon, because of intensive robotics, a few hours in a week, if the unlimited now consumption will be consciously limited by indeed necessities. That will provide for humans more free own time, which they could spent on a spiritual development, which, in turn, if that is possible, rather probably will result in further qualitative transformation of the informational system "consciousness" into a new version.

Corresponding society cannot be capitalism or Marx's "scientific communism", because of unlimited consumption is the main social driver equally in both social systems. Though it is possible a variant when some such system exist, but some separate humans will develop their own consciousnesses without relations to the society.

On the another hand now a possibility that the recent human's consciousness version is the last/final one cannot be excluded – and it is claimed as correct in most of religions, where it is postulated that the purpose of every human's life is a "unification with a [non-material essence] God[s]", etc. Nonetheless the main points above that relate to humans optimal behavior remains be practically the same in this case also.

To above seem is worthwhile to add a few additional points.

First of all – in the "The Information as Absolute" conception it is proven that every self-aware informational system "a human's consciousness" – in everyday practice of most people "human's soul", exists always/forever, "in absolutely long time interval" in every her state. Every human's consciousness is fundamentally immortal; at least as some informational pattern in the Set, where any/every

informational patterns exist always since logically cannot be non-existent. But in the conception the other type of "immortality" is suggested [is discussed above] – every consciousness has a potential to develop/realize her capabilities dependently on external conditions in the Set, so, for example, recent humans' consciousnesses can be developed versions of the same non-material program's clones, which appeared on Earth a few billions years ago every human is a few billions of years old, at least on Earth. After human's body death the consciousness loses the stable residence and occurs in the always changing non-material external in the Set, where her capabilities again seems become be limited up to a "BIOS" state; but the consciousness is, nonetheless, capable, if be placed in a next body, in some time restore its normal state - as that is postulated, for example, in Buddhism.

That can be in certain sense a reason for some consciousnesses to freeze the existent state, which is governed practically by material body's needs and which provide a number of very positive emotions, i.e. consciousness's states, when some of the needs are well satisfied, instead of attempt to move on possible way "from a bacterium into God(s)".

However in such cases a consciousness that voluntarily agreed to be a slave of his body and think at that that she makes such choice freely should understand also that, again: everything in the Set had happened, and, simultaneously, is happening always.

Thus some dynamic informational systems that exist in the "always happening" mode in non-absolutely infinite temporal intervals in the Set, including the all/every consciousnesses, simply absolutely infinite number of times act in the same uninterruptedly repeating movies. In the reality *there is no* some "free will", all objects, including humans in the concrete "our Universe" movie's running, are nothing more then some pappies that always act in accordance with always existent and infinite times repeating identically unique scenario.

That above seems as rather disappointing, nonetheless this fact has – as everything in the informational systems – a positive moment also: from it follows that when somebody works hardly wanting to provide his/her material body better conditions; at that stealing, killing, etc. – in the reality that is nothing more then some vanity, which,

besides, impedes for his/her consciousness to develop in the correct and rather optimistic way.

Or, what is more correctly, though, indicates rather surely that this consciousness doesn't follow the natural way of her development ...

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