

MACROMICRO THE QUANTUM PSYCHOPHYSICAL VIEW OF PSYCHOANALYSIS¹

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SUMMARY

This paper demonstrates some results from seven years of research and provides information about nature collected from quantum physics and psychoanalysis. Some basic concepts of quantum physics are given in a more simplified form for a better understanding.

It presents the human atom level as an energy structure which has been called a human energy field. It also suggests the idea that there is, in fact, no distinction between the psychic and the body. The body is psychic and the psychic is the body, the macromicro. Hence it offers a new view for psychosomatic patients.

Based on research of the energy potential contained in the human atom structure, the writer introduces the id in the quantum context of energy, the ego as the projection of the macrocosmic level (the body) at the microcosmic level (the psychic) and vice-versa. Moreover, as the macromicro is the same thing, the ego is defined as the universe of an individual's projections, and the superego the result of the interaction between two human energy fields.

Introducing the resonance concept demonstrates communication between human relationships and explains the mother-infant and analytical relationships.

Finally, a clinical example is given to demonstrate the new concepts presented - the macromicro, human energy field and resonance.

I - INTRODUCTION

This is not a paper on physics because physics does not aim to study the psychological. This is a paper on psychoanalysis in order to understand the human being within the world of psychic energy.

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As the human being is capable of dreaming and experiencing electromagnetic waves (which to a layperson can be understood as transporting energy at the speed of light), we can include some information gained from the study of physics on nature to broaden our knowledge of psychoanalysis. Inasmuch as man is a particle of nature itself, it is foreseeable from what has been learned about nature that humanity would be repeating nature's patterns.

II - MACROMICRO

Quantum physics emerged this century to demonstrate that mankind is limited by its own feelings.

Until last century, physicists believed that they were able to know exactly everything about physical phenomena of nature. It was all just a matter of gaining knowledge while mankind evolved. At the end of last century, however, classical physics knowledge was not sufficient to explain several natural phenomena. Theory provided results contrary to those obtained from experience. Quantum physics emerges to demonstrate, among other things, that there is something undefinable between humanity and nature. Quantum physics emerges to demonstrate that, however advanced mankind is in its knowledge of nature, it will always be faced with the undefinable as a condition of nature itself.

Matter in our universe is divided in two levels for study purposes - the macrocosmic and microcosmic levels. The macrocosmic level represents, in a simplified form, the level reached by our feelings, the level of our perception, our every day world, while the microcosmic level represents, in an equally simplified form, the level beyond our feelings, the unimaginable, the level beyond our perception, the world of atomic structure - inside the atom.

The macrocosmic level is studied in physics known as classical physics which began with Galileo and Newton as a scientific structure. The microcosmic level is studied in physics known as quantum physics and studied by Heisenberg and Schrodinger this

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century. Classical physics is a part of physics based on determinism, on the accuracy of cause and effect of physical phenomena. Quantum physics is a part of physics based on non-determinism, on the inaccuracy of cause and effect of physical phenomena.

We can divide physics in three major referentials. Whenever we are dealing with physics we must situate ourselves explicitly or implicitly with which referential we are working. If we are working on the referential of classical physics, we are at the macrocosmic and deterministic level; if we are using the referential of quantum physics, we are at the microcosmic and non-deterministic level, that is, ruled by the principle of uncertainty; while a third referential, which can be inserted in the context of both the macrocosmic and microcosmic levels. This is the referential of the theory of relativity demonstrated by physics, the speed referential.

Einstein's Restricted Relativity theory deals with bodies at high speeds. The theory of relativity foresees time and space as a space-time continuum. If a body has the speed of light (300,000 km/s) as a referential, this body will present the relativistic effects. Einstein confirmed that an observer at a speed referential near zero (our every day speed), watching another observer at a speed referential near to that of the speed of light (the speed limit of our universe), will perceive dilated time, increased mass and contracted space. At the speed of light the mass increases, time dilates and space contracts. These are the relativistic effects.

When we intend to study inside the atom, for the simple reason that we need light in order to see, which is a limitation imposed by our sense of sight, the light, through something known as the Compton effect, deviates the electron from its original position at a displacement of the size of the atom's diameter. Thus, even with the most powerful microscope ever created, there will always be the need for light and, therefore, there will always be the need for the light and, therefore, there will always be a deviation caused by light of the electron in its orbit inside the atom. This is the Principle of Uncertainty. Eisberg (1974) explains:

"Therefore, the Principle of Uncertainty is to do with the measurement process in itself, and expresses the fact of there always being an indeterminable interaction between the observer and the observable".

An explanation is required at this point. We must take care not to confuse the above mentioned interaction between the observer and observed with the subjectivity notion of psychoanalysis. In physics we are always dealing with measurements. Non-determination presented by quantum physics is because it cannot be accurately measured. Everything that can be checked is a probabilistic measurement. Or rather, in the above example, it will be impossible to give the electron's exact position inside the atom because of the Compton phenomenon,

Quantum mechanics as Eisberg explained (1974),

"...confronts the interactions between subject and observer as the fundamental reality. It uses the language of processes and physical relationships instead of qualities and physical properties. It rejects as meaningless and useless the notion that behind the universe of our perception is hidden an objective world governed by causality; instead, it is restricted to the description of relationships between perceptions".

Another important aspect of quantum physics, which we think cannot be omitted in this paper, was the Heisenberg defense of the quantum theory against the accusation of the determinist physicist that nature could not be probabilistic. There is, also, a famous phrase attributed to Einstein which says: "God would not play dice with nature!" Eisberg (1974) quotes the defense of the Principle of Uncertainty in Heisenberg's own words:

"We do not suppose that the quantum theory, contrary to the classical theory, is essentially a statistical theory in the sense that only statistical conclusions can be obtained from exact data... In formulating the causal law, "if we know the present exactly, we can foresee the future" what is wrong is not the conclusion but the premise. We cannot, because of a question of principle, know the present in every detail".

Quantum physics nowadays has become a consensus among all scientists. Today mankind knows there are limits and that non-determination is a reality. Yet as Eisberg explained (1974),

“Although all physicists agree that the quantum theory works in the sense that it foresees results in excellent agreement with experience, there is a growing controversy in relation to its philosophical fundamentals.”

The structure of all existing matter in our universe is constituted by atoms. Atoms which have in them an enormous energy potential, so much so, for instance, that they can bring about the destruction caused by the atomic bomb.

This explanation of physics is so far only a superficial outline in order to give a layperson a fairly simplified version of some basic facts about physics to be able to understand the rest of this paper.

A human being, in structure, is also made up of atoms. We have not yet had the opportunity of confirming some study on the consequences on mankind of his atom structure, a structure which has atoms with as great an energy potential as any existing atom.

Studies on man’s structure always start from cells at the macrocosmic level. If everything in existence consists of atoms, it can be no different with cells. In their structure, cells consist of atoms. We think that quantum energy in the living being forms an energy structure.

The quantum world is a world, we may say, of energy. In Asimov’s words (1973),

“In the 19th century, scientists thought that matter and energy were two completely different things... Later, it was found that matter was made up of particles (atoms), while energy often consisted of waves... In 1905, Albert Einstein demonstrated that mass is a form of extremely concentrated energy, and there could be a reciprocal conservation between mass and energy... During the twenties it was evident that particles and waves could not be mentioned as if they were two separate things. What we commonly think of as particles behave in some aspects like waves and, in their turn, what we think of as waves behave in some aspects as

particles. Thus, we can, for example, refer to "electron waves" and "light particles", or "photons".

If our senses were prepared to come in direct contact with the quantum world, we would perceive the energy. It is interesting to imagine that, if it were the contrary, if our senses were ready only to come in direct contact with microcosmic level, the unattainable would be the macrocosmic level. We would know, for example, how to explain the heart pumps the blood into the arteries, since we would not see blood, arteries or heart but energy. The world would not be perceived as a material but energetic world.

If we turn to my paper "The Possibility of Relativistic Unconscious" (1991), we can see that psychic electromagnetic waves exist, demonstrated by studies about dreams. In that paper it was shown that where form exists, there is colour and where colour exists, there are electromagnetic waves. It was also shown that when dreaming - which always has colour and form, our eyes - the only receivers of electromagnetic waves in our organism - move as they capture the electromagnetic waves emanating from the dreams. With a more in-depth study of the above aspects we conclude that dreams are electromagnetic waves interacting with the memory and thus, as stated in the above mentioned paper,

"assuming that dreams are produced by the memory interacting with electromagnetic waves, we reach the conclusion that the human being is able to emit electromagnetic waves... Only in the future will we know where the psychic electromagnetic wave band would be in the electromagnetic spectrum. However, it is a fact that the psychic phenomenon affects the band of electromagnetic waves visible while dreaming and this is enough for us to know that psychism is processed at the speed of light in the form of an electromagnetic wave".

If we think of the potential of energy contained in an individual atom, we may very well reformulate the question of the individual emitting electromagnetic waves during the dreaming process. As the electromagnetic waves are a periodical energy-carrying phenomenon and if we are able to detect them in dreams, we may think that, as the

quantum world is a world of energy when we dream, we would be processing this aspect of our structure. Dreaming itself would be the real experience of the human quantum level. So we move on to the notion of experimenting a field. The human quantum level in our view would, by its own structure, imply a vast field.

Thus, the psychologist is, in our opinion, the experienced expression of the quantum level of human matter. And if there is so much living energy, a field is formed which we can call a human energy field.

The notion of cause and effect, in our opinion, has been confusing studies on man's understanding with regard to the psychic and body. We cannot think of the psychic as an effect or cause of the body, nor can we think of the body as an effect or cause of the psychic. The idea of corporal-psychic unity is also an idea that causes confusion understanding the human being. Unity, in this case, would imply two things that became one. It is as if the psychic and body were merged to become one. This also, in our opinion, is a mistake. For example, classical physics is not a result of quantum physics or vice-versa, quantum physics is not a result of classical physics and much less both physics forming one unit. Nor are the psychic and the body consequences of each other nor do they form a unit. For instance, in physics we study the phenomena of matter when they are presented to us at the microcosmic level with the knowledge of quantum physics and at a macrocosmic level with the knowledge of classical physics, because of a simple impossibility of our perception, man is matter which if presented to us at a microcosmic level is psychic and if presented at a macrocosmic level is biological. Or rather, in our view, the human being is living matter biologically expressed at a macrocosmic level and psychically expressed at a microcosmic level. We can, therefore, say that the psychic and the body are aspects of the same thing. From our viewpoint, there is, in fact, no distinction between the psychic and the body. The psychic is the body and the body the psychic. It is all a matter of possibility and impossibility of our perception.

This quantum view of mankind would explain the structural dynamics of psychoanalysis.

- The id would be in the quantum context - like energy.
- The ego, as in Freud's words (1923):

øThe ego is first and foremost a corporal ego; it is not just a superficial entity but in itself the superficial projection... (or even)... in the ultimate analysis the ego derives from the body sensations, mainly those originating from the body surface. It can thus be regarded as a mental projection of the body surface, in addition to, as we see above, representing the surfaces of the mental apparatusø.

We can now say that the ego would be the projection of the macrocosmic level (the body) at the microcosmic level (the psychic) and vice-versa; that is, the projection of the microcosmic level (the psychic) at the macrocosmic level (the body). And, as the macromicro is really the same thing, the ego would be the universe of the individualø projections. Moreover, we can also conclude that the representations would be the results of the egoø projections.

- The superego would be the result of the interaction between two human energy fields.
- The self, the whole person, would be the ego-id-superego, psychic/body together, the macromicro itself.

According to one aspect of the field theory, a model which we will use hereinbelow, a particle cannot interfere in another particle. Interference is by field. One particle A interferes in the field of another particle B which then undergoes the interferences of its own interfered field. As Landau explains:

øWe can describe the interaction of particles by appealing to the notion of a field of forces. So, instead of saying that such a particle acts on another, we can say that it creates a field; any other particle found in this field will be submitted to a certain force. In classical mechanics, the field is none other than a means of describing the phenomenon of interaction between particles. In relativity, on the contrary, knowing that the propagation speed is finite (having the speed of light as a speed limit in our universe), the state of things essentially changes. The forces which act at any given moment on a certain particle are not defined by the position of particles which are present at that moment. It is only at the end of a certain lapse of time that the variation of the position of one of the particles has an effect on the others. This means that the field becomes an intrinsic physical reality. We cannot

speak of a direct interaction of particles located at a certain distance from each other. Interactions can occur at any given moment only between neighbouring points of space (immediate action). We must, thereby, mention a particle interacting with the field and the subsequent interaction of the field with the second particle.

In my paper entitled "The Possibility of Relativistic Unconscious" (1991), we could also show the effect of resonance and probable consequences of this on individuals.

A simple resonance experiment: a guitar and a tuning fork...; the guitar is placed vertically to the tuning fork so that the strings are parallel to it; a thread is placed on each guitar string; the tuning fork strikes a note; result: it is found that the guitar string corresponding to the note played on the tuning fork vibrated without anyone touching it. This is easily seen because the thread on the other notes do not move. Interpretation of the experiment: when we play the note on the tuning fork a wave with a certain frequency was emitted, a transfer of energy which, on meeting the guitar string at the same emission capacity of the same frequency, made it resound, be in resonance with the frequency emitted by the tuning fork.

If we go back to resonance and the idea of the energy field we may think that human relationships are processed at a field and resonance level.

Mother-infant relationships initially, while the infant is still in the mother's womb, would form a single energy field. At birth, this energy field starts to gradually differentiate in as much as the infant would still be included in the mother's energy field and the mother in the infant's energy field. Thus, from the resonance that, in our view, generates the ego projections, the infant would make its first identifications and the mother, also through resonance, would be able to understand what the infant is feeling. The idea of field and resonance in our viewpoint would explain non-verbal communication.

Another aspect, which the notion of macromicro, human energy field and resonance would explain, would be the pathology of psychosomatic patients.

When a surgeon is touching the body of his patient, he would also be touching the psychic. When an analyst is touching the psychic of his/her patient, he/she would also be touching the body. In fact, in our opinion, every psychosomatic patient is macromicro. For it the body and the psychic are the same thing, there could be no such thing as a patient ill only in body or in the psychic. We would then have a new understanding of *mens sana in corpore sano*.

Moreover, when we are interacting with our patients, because of our field, we would be interfering in the field of our patients. This interference received by our patients would cause resonance in their own structure, making resonance possible and, therefore, undergoing psychic mutation.

With the notion of an energy field and resonance, we can confirm the idea that the presence of the analyst is active and resonant and the idea that we can remain neutral is only valid at a macrocosmic level since we do not have direct access to our energy field at a microcosmic level. This would explain why *such a good* analyst was *no good* with *such a good* patient. The double would not have worked. The resonance occurring from the interaction of their energy fields would have made it impossible to develop the analytical work.

Lastly, we shall demonstrate an example of macromicro, human energy field and resonance in a case study.

The Patient is a fairly sensitive teenager.

P. was talking a lot during the session about his difficulty with changes. As he was talking I suddenly began to feel unwell. I felt sick, out of breath and dizzy. I could no longer hear him. P. did not notice anything because he was not looking at me during the session. Until...

P - An image is now coming to my mind. It's as if I'm in the middle of an enormous river, being carried somewhere by the water.

After P. had spoken I suddenly felt better. I said to him:

_ I can imagine how you feel, so tiny in such a large river.

P - I'm dizzy, quite dizzy, I can neither hear or see you.

I answered:

_ That's how you feel: dizzy, lost.

P. did not hear me. He was really feeling unwell. Meanwhile I noticed that that P. was feeling was just the same as, if not identical to, how I had felt a few minutes before.

At that moment I analyzed myself and perceived that the feeling took me back to the experience I had had in my own personal analysis with regard to my birth. When I thought P. was better I asked him:

— Are you feeling better now?

P — Yes. Just a headache.

Based on what I had felt and P's story, I said:

— I am thinking about your birth. A large river leading to the unknown. Isn't that what it's like when we're being born. The waters break, a river, flowing goodness knows where.

P — Yes, perhaps.

I added.

— Your suffering in the incubator, all alone. I think that you are reliving this here.

As soon as I spoke,

P — Incredible! It's all gone! Incredible! Even my headache's gone!

By applying the experience described in the case study above to the concepts of the human energy field, resonance and macromicro, we notice that:

1. Both the patient and myself expressed ourselves in the macromicro. With the psychic experience the body also expressed itself. Both my patient and myself felt unwell.
2. There were two energy fields interacting, that of my patient and my own.
3. In my patient's story something present in his energy field interfered with my own energy field and made the personal experience of my own's birth resound in my person.
4. After the emotional macromicro experience of my birth, my energy field interfered, transferring energy to my patient's energy field. This energy transferred from my energy field to that of my patient made macromicro experiences resound in the same frequency. The patient felt just as unwell as I had done. The only other thing different from my own experience was that, after feeling unwell, he had a headache which I did not have.
5. Given the symbolic understanding of what was happening we could determine the resonance effect.

The above is an extreme example of resonance, macromicro and the energy field, but it serves to clearly illustrate the new concepts. We are constantly interacting with our patients and, in our opinion, only when we obtain resonance, even if expressed more discretely than the above clinical example, are we capable of insight and psychic changes.

III - CONCLUSION

This study is so complex that we can never hope to cover it all in one paper. We know that the aspects of knowledge of nature integrated in this paper to the psychologist's understanding still need further in-depth research. These have been seven years of research and we feel that a whole life will still not be enough to go beyond even the first steps.

The purpose of this paper was to try and demonstrate new ways arising from knowledge acquired in our century and which contribute greatly towards a scientific aspect in psychoanalysis and cannot, therefore, be cast aside from our studies.

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