

Letter to Alan I. LESHNER, scientific director of the magazine "Science" and of the AAAS, proposing his support to answer some of the questions posed by this magazine, well understood that in some In cases the question is even wrongly formulated, as explained in the 5 pages attached to the letter "Some reflections on the 125 questions gathered by "Science".

CORREOS RR244877303ES
CIF: A83052407 - OFICINA: 0834001 - VILASSAR DE MAR

REMITENTE/REMITENT
D. Carlos UDINA i COBO NIF

DESTINATARIO/DESTINATARI
D. Alan I. LESHNER ("Science", "AAAS")
C/ 1200 New York Avenue, NW n° piso
Población Washington, DC 20005 pis
C.P. DC 20005 Prov. París USA (Estados Unidos)

Carta Certificada
Fecha: 31/05/2006 Aviso de recibo:
Peso: 159 gr.
Hora: 12:17
Importe: 8,19 €

MODALIDAD CLASE
☐ Carta ☐ Paquete Postal
☐ Sacas M ☐ Paquete Azul

☐ Urgente
☐ Aviso de Recibo
☐ Aviso de rehuba

REEMBOLSO/REEMBORSAMENT
☐ Reembolso/Reemborsament
☐ Asegurada/Assegurada

IMPORT/IMPORT
Euros
Euros

Vasform, S.L. - 2005/C

Alan I. LESHNER, PhD.

Science Executive Publisher. Chief executive officer of American Association for the Advancement of Science.
1200 New York Avenue, NW;
Washington, DC 20005

I have read Your interview in Barcelona ("La Vanguardia" 2006-03-21, section "la contra"), which I am attaching to You. I have also read the 25 (and the 125) high-priority questions for "Science" (number 309-5731, July 2005).

If You were to return to Barcelona, I would like to explain to You –by means of some friend who could translate our conversation– some of these pending questions:

"What is the Biological Basis of Consciousness?", "Why do we dream?", "Why are there critical periods for language learning?", "Is morality hardwired into the brain?", "How much of personality is genetic?", "What gave rise to modern human behaviour?", "What are the roots of human culture?", "What are the evolutionary roots of language and music?", ... "What Genetic Changes Made Us Uniquely Human?" or even better, like the "general Theory of the operation of the human mind, and in concrete as we were able to think and to speak", and perhaps even "What Determines Species Diversity?".

I could answer some of these questions with as much detail as your time would allow to me. In addition I would add to other two questions, frequently expressed by scientists:

"Does a 'Wisdom Nature' exist?, and in this case, how is it transferred?" and "Why can we make mathematic?".

To my understanding, this last question is previous to the most specific questions of "Clay Mathematics Institute" (except the question of "Standard model").

It is not difficult to explain all these questions with my work on the "mathematical representation and computer simulation of cognitive processes", but it can be difficult to realize that some of these questions are wrongly raised (this is the reason why some ambiguities must be clarified previously). Indeed, these ambiguous errors have made it difficult to find the solution to these questions.

Also, in order to understand these questions it is required to previously and unequivocally fix some new concepts. Even more so, it requires reviewing two disciplines, Semiology and Semantic, which are nowadays doubtful of being considered scientific, in order to start an "intrinsic Semiology", applicable to the language but also applicable to genetics, pedagogy, mathematical one..., and an "intrinsic Semantic", the nexus of Mathematic and Psychology.

Luckily, these questions can be ordered so that once the first one is understood, it is easier to understand the next one, and so on.

I can still say more: 10 years ago, after starting to solve these previous questions about our mind, when imparting a course about the "Hygiene and Radioprotection against the ionizing radiations", I thought again about the following questions of Physics that I had to forget after my studies of Physics (everything in life cannot be done, or at least, not all at the same time):

"Can the Laws of Physics Be Unified?", "What is the nature of gravity?", "Why is time different from other dimensions?" (or even better "Why is time different from other material dimensions?"), "Are there smaller building blocks than quarks?" (or even better, "Quarks are border/ confines/ boundary?"), "What powers quasars?", "What is the nature of black holes?", ...,

and for that reason, I elaborated well founded hypothesis that –if it were minimally right– it would help to focus better the future study of these last questions of the Physics.

So as to get people's attention, perhaps I should be more skilful and I should say that I can explain only a little bit about each of them. But I am not selling anything, I dislike marketing and I don't care about beliefs or opinions, I only have interest in knowledge. I think, and speak on what I know. That what I discover is what I want to explain to who has interest in it.

Therefore I write to you; because your unusual criteria and attitudes have pushed me to do so:

"Love more the truth than yourself", "In a scientist the curiosity must weigh plus than the ego"

I know that they are unusual because, for example, about 5 years ago, in this same section of "la contra" of "La Vanguardia", a scientist-publisher like You but more local, from Madrid, said that the most important three questions for him were:

"The way As the 4 forces can be unified?"; "Why the mathematic are adapted to nature or vice versa?" and "Does a general theory of an operation of the 'brain' exist?".

I wrote to him saying him that if he would return to Barcelona I could explain the answer in detail to the two last ones. Simultaneously, I commented some long contradictions of his manifestations to him that were necessary to clarify, so that he could understand my explanation. I did not receive any answer.

Along these last four years –through diverse discoveries and Nobel prizes– I have seen how my hypothesis on the physics also gained force. Therefore, a year and a half ago I wrote to a Nobel prize of physics, also interviewed shortly before in "la contra" of "La Vanguardia". I took advantage of the fact that he was also interested on the two last questions of the "brain". I said that I could answer the questions on the "brain", correcting respectfully his affirmations (briefly; that "Psyche" and "Brain" are not the same, a very typical confusion), and requested his aid –by its ample knowledge on quantum physics– to find some quantum phenomenon that reinforced my physical hypothesis on the "Unification of the 4 forces". He did not answer to me, but a half year later, in "El País", another newspaper, from Madrid, another Nobel prize of physics exposed an inexplicable phenomenon for him, but on the contrary, !it could be explained with my hypothesis! In addition, requested:

"... another type of theory that now we cannot even yet imagine"

in order to obtain the unification of the "4 forces". So I wrote an "e-mail" to him that I have attached to You –so as to not repeat it in this letter– and where I also talk about Nobel prize mentioned earlier.

These days I am translating into French –seeing I can it translate it myself with my wife– a writing text that deals with all these questions jointly, those of psyche and those of the physics, so as to publish it. I had thought, as a second phase, to translate it to the English because of its world-wide hearing, but I will need to pay a good specialized translator for it. Another problem is to know the way to write it and for whom, whether several related articles, or a book...

If it was possible to make contact –on my behalf as much as possible– and if You and your journal "Science" were interested in my work, it would be very easy for You to translate it, and that would solve one big trouble.

Ten years ago I already tried to publish –without success– my first discoveries on the mind. It was in local scientific magazines, of well-known colleagues of mine, in both Catalan (my habitual language) and Castilian (what it is called incorrectly "Spanish"). They just believe it was impossible that such a proper person, simultaneously "unknown" in the scientist elite and on working on their own, could have the answer to so many questions. I haven't tried it again, but in its place, I established computable criteria for computer, which basing on one of my own discoveries (the "intrinsic and exact conceptual system") would allow to improve the work of the Censors of the scientific magazines, and it even would avoid ridiculous situations like the one of the magazine "Social Text" before the clever trap of SOKAL and BRICKMONT. The problem is that this intrinsic analysis of the knowledge contributed by these articles would put in evidence that the most of the articles say the same than others, except for formal differences. The volume of scientific Literature could be divided by five or ten, and many publishers and censors would be left unemployed.

In these years I have elaborated progressively my work, so that it can be understood better, and it can be spread and applied. I also asked for diverse Registries and a request of Patent as the best way to safeguard my authorship (nowadays the recent MONTAIGNY ↔ GALLO case is well known; but it has required almost 100 years to know the POINCARÉ/ LORENTZ/ MARIC, and de PRETTO, ↔ EINSTEIN case, etc.).

In the following pages I have attached some reflections about some problems that exist and which complicated the understanding of all these questions. These reflections require humility, curiosity and the critical sense that You declare. I also have attached to You him "e-mail" to the Nobel prize I already commented.

I am at Your disposition for what it may be. Very sincerely,

SOME REFLECTIONS ON THE 125 QUESTIONS GATHERED BY "SCIENCE"

Absurdity

For years all theories have failed to explain certain questions, such as the 125 gathered by Science for its 125 anniversary. Due to this failure, it makes sense to miss

"... another kind of theory that we cannot imagine".

But the problem is that, contrary to that, there is no curiosity, nor criticism, nor the logical effort to understand something that must certainly be new, something initially not imaginable. ¿How is it?

Linguistics

For instance, regarding to human language, in 2000 I established contact with a famous USA university through a Hispanic doctor. I was at once surprised by his linguistic criteria –summarising, CHOMSKY theories– because they are completely mad. Not because I think it, but because as any total, partial or camouflaged creationism (as the Theory of Humane Cultural Revolution from 40 000 years ago), they are in flagrant contradiction with the unquestionable theory of Darwinian evolution. Some other of his referents –like GAZZANIGA, DEACON, and so on– said even contradictory things in themselves, reducible to absurd. When I exposed that to him, our contact was lost. Besides, afterwards, CHOMSKY himself did go back on his hypothesis. But they go on investing remarkable resources in promises that are never reached ("universal languages", etc.).

But before a phenomenon so recent as human language, firstly we must define "What is life?".

Very summarised, life is a complex system of systems. That is, a system whose elements are at the same time systems of the kind (+M, -S), all that is controlled and get reproduced trough other complex system of the kind (+M, +S), to which in some cases (superior and average multicelled animal) another complex system of the kind (-M, +S) is added. These frameworks can be described through various well-known mathematical structures, such as some I will mention later.

For this reason, what should come first is clearly to distinguish the different kinds of systems:

- a) (+M, -S), like all "Traditional material systems" of Physics, of Chemistry...
- b) (+M, +S), the "Symbolic systems to material support", like the ones of genetic information, known only from 50 years ago;
- c) (-M, +S), the "Symbolic systems to symbolic support", like languages (even the recent computer languages) or the psyche structures, scientifically first treated by FREUD 100 years ago;

* +M: material; -M: virtual; -S: non-symbolic/ non-interpretable; +S: symbolic/ interpretable.

This is important because, though hundreds of scientific magazines have appeared during the last 50 years on the systems (+M, +S) of genetics and the systems (-M, +S) on language, computer and the incorrectly called "Artificial Intelligence", there is no enough conscience of this basic difference.

¿Brain or Psyche? We have to solve the "versatility" first.

Any theory on the "mind" –and much more about the culture, music and morality–, to be valid, should first explain the versatility of neurological function. That is: in the last centuries, "Brain" and "Intelligence" have been perversely by religion, politics and even by so-called scientists. Not too far away we have Nazi racism (among other kind of brutalities, they even measure mind volumes!). Even closer we have the times black racism, aboriginal racism and/or intellectual sexism (limitations of the "weak" sex). Not long ago they kept looking for something like an "odorous" specific substance which circulated through the nerves, another "visual", another "olfactive", etc. Today we know that through nerves –all the same– only signs circulate, that are processed in some parts of the brain. We also know that neurones are not specialised to process only certain signs and nor other: they treat and reconstruct without distinction phenomena as different as any sensation (images, sounds...), any resulting perception, as well as the derived answers, be them psycho-motor or feelings, and finally, also conscience and thought (including knowledge and human language).

We also know that in a child with brain paralysis, if the affected zone –which is like a giant short-circuit– is extirpated on time, with a patient reeducation, he/ she gets to see, hear, move and think like any other child

with all his/her brain. !Even with only half a brain! (for example, Jody MILLER in "National Geographic", june 1995; the "blind vision" of the Monkey of N. HUMPHREY in "Nature"; the best recordings of Otto KLEMPERER; the banned G. DOMAN; ...). So, what is the usefulness of looking for places of the brain performing certain functions? It is obvious that they must be done in some place of brain and not in the heart, as was previously thought, but this is secondary, because, if needed, any process can be processed in other part of the brain. It is much more important "how" than "when".

To explain this extraordinary versatility, biochemistry is not sufficient, as would any other kind of exclusively material system (+M, -S), but also the systems (+M, +S) are not sufficient because though they allow the duplicity property, they do not allow the characteristic of "versatility". Systems (-M, +S) should be introduced, that is, those of the "psyche", and everything begins to be understood. I clarify that psyche is not the "Spirit". I don't know what Spirit is, and I am not interested in it, because I do not need it. It is not part of the existent, and so it is not part of science and its knowledge.

FREUD's geniality was not marking limits to his own discipline, Medicine (schizophrenia is with no doubt somatic, but neurosis, paranoia and/or perverse psychopathies are not!). His geniality was to put limits to all traditional science, to exclusively "material" science, introducing and scientifically treating the first known systems (-M, +S), those of the psyche, even before that systems (+M, +S), such as genetics, were known. Such geniality is the reason why his contribution has not yet been digested nor understood.

Telepathy

Amongst the more important 125 questions, I miss "Telepathy", or maybe among the first 25. It is an extraordinary phenomenon, its nature so unknown as unquestionable its existence. Besides, I myself –I suppose like Yourself– have lived it personally so many times that simple chance coincidence nor probabilism cannot explain it. What is clear is that it will not be explained by biochemistry but –undoubtedly– by some system (-M, +S), maybe transmitted by an electromagnetical medium.

The "Human revolution" 40 000 years ago

Genetically effects of natural radioactivity (one of my first employments was in this scope) are enough to contribute to all mutations required by Darwinism. There is no need of a singular "divine lightning" 40 000 years ago, to produce a "miraculous" mutation to make man "different". With the mentioned systems (-M, +S), with versatility, semiologic compatibility and other objective characteristics, it is possible to understand by totally natural processes that our actual psyche thinks or talks, as well as the one from half million years ago or more. The consequence of such de-mythification of human species is that, besides, we are not so different from any other species. But many people are not ready to accept that even if it could be demonstrated.

Human species is "unique" in the same interpretation that make "unique" any other species, nothing more. We can only say, that is true, that we are the species that more levels of the kind (-M, +S) has structured. That is to say that it has the more complex psyche. But, because for this, it is the more fragile species. If we add 5 plants to a building of 50 plants without strengthening it, or even worse, with some materials of the lowers plants, ¿won't it be much more fragile? By this, the stupidity* exists, that is an exclusive characteristic of the human species.

* Defined as the absurd/ incorrectly use of the thought to repress cognitive feelings of structural levels more basic, feelings –like the intuition or the "common sense" call– that make possible the thought.

What Determines Species Diversity?

Few years ago, a recent Nobel prize of physics said in an interview in "El País":

"we do not understand systems like the human body, we do not understand Biology, which is probably the most complex of the implementations of the systems of solid state".

It is necessary to thank for its sincerity, but with the algebraic duality ("star operator"), with the (+M, +S) symbolic systems, with the structuring of tissues of the body (that is a paradigm of the "exact algebraic Succession"), with the "Transference of methodological elements" in the protein "technology", etc., etc., etc., everything is perfectly understood.

The diversification of the species can be better understood if:

- the constructive methodologies of the human body are previously understood; as well
- who is a "Complexement", who is a "productive Complexement" and an "epijective" one, and
- the many "Symbolic structural levels" where –due to these "complexements"– the genetic code and the proteins are organized.

The universal rule of the alternation of the processes of Complexement must be also added: the "expansion (productive Complexement) \leftrightarrow compression (epijective Complexement)".

By all this, the diversification of the species (what it is a "productive Complexement") is compensated with the Darwinian phenomenon of the natural selection (what it is a "epijective Complexement"). It happens like in fundamental theorems, for example the fundamental theorem of the mathematical calculation, or theorem of STOKES: it is obvious if their previous knowledge are defined correctly.

The "Simbiogenesis" of Lynn MARGULIS.

You surely know the peregrination of this lady –luckily already famous today– trough fourteen scientific journals, until obtaining the publication of her hypothesis of the "Simbiogenesis". It is much more than a hypothesis, it is a "evolutionary Interaction" necessary to explain the process of complexement of the biological structures (in which, from the simples procariotes cells the compounds eucariotes cells are formed, like a simple mathematical operation). It is something as obvious as many others "evolutionary Interactions". For example, like the valence orbitals of the atoms –the most unstable– ones are indeed the only agents who structure all the molecular level, and consequently the great part of the present matter of the universe. Equally, also, as with the graviton or the boson happened shortly before.

By something analogous, but much more recent, BOOLE was far a better psychologist than a mathematician*: the "algebra" by which he is so famous, is much less important than to understand the "union", the "complement" and the "intersection" like three basic faculties, its most important contribution. These three operations are the three "virtual evolutionary Interactions", who allow to structure the first levels of the thought and the language (the deceptive appearance of the "blossom" of the language in a two-year-old child). Fifteen years later without these innate faculties we could not define nor understand the concept of "algebra", which belongs to a very superior level within the structures that the human thought constructs progressively. Union, complement and intersection are innate faculties of the child, whereas the BOOLE algebra is a complex concept, nonsensitive, elaborated by the adult man. What is more important, a basic faculty, or only one of the very much concepts that we can construct with this faculty?

* One of the many ambiguities that are necessary to clarify before being able to explain, for example, "Why are there critical periods for language learning". Another mistake is that we cannot construct exact concepts. On the contrary, with the "exact and intrinsic Conceptual system" it is possible –and necessary– to define concepts exactly, like the numbers are, even like "Imprinting", "Culture", "Intuition" and "Intelligence".

Going back to the interactions, if it already was difficult to publish the simbiogenesis (still today many people reject it), it is understandable that it is difficult to publish in a scientific journal, of physics, of chemistry, of biology, of mathematic, or of psychology, a concept like the "evolutionary Interaction", that generalises the simbiogenesis and other analogous phenomena of other disciplines, already mentioned. By this, 7 years ago I thought it was opportune to explain it in a letter to lady MARGULIS, in Castilian/ Spanish (because she uses also this language). I also said to her that it was possible to explain the existence of the "Wisdom of the nature" –which she also defends– in whole detail. The understanding of this "Wisdom of the nature" requires another previous phenomenon, the "Transference of methodological elements between different structural levels", where a very important role play the protein. She did not answer to me. I also sent "e-mails" to her intimate collaborator. He answered, but requesting me not to write such long "e-mails" because it took them too much time to read them, and in addition they, collapsed their computer (!!??). I still keep that answer.

By the way, with the previously explained things it is also possible to understand "why we are able to make mathematic". And that the mathematic have very little creation of the human mind. It almost always recycling: we apply our methodologies of structuring of our diverse component systems (physiological, immunological, ...) to what we want to solve. But, this application is possible only if there are semiological-compatible formulations with them. An example of compatibility, easy to explain and to understand, is the positional numerical systems (binary,..., octal,..., decimal,...), which have been basic in the "blossomg" and development of all science and technology of the last centuries.

Prions.

The following paragraph does not say much here, separately, but in its original context it is understood better and it shows a new perspective for this one and other analogous problems (protein...):

"Still more, the Proteins are a third point, in the middle of the "first" and "second point", and suspiciously aligned again with them. In the last years, many of the granted Nobel prizes (more ahead I mention some of them*) correspond to discoveries that are indeed in this line and consequently they confirm it.

* G. BLOBEL; R. AXEL; L. BUCK; ...

Today it is known (1999 A. RUIZ, UA Barcelona) that the apparently useless DNA sequences, called "Transposons" silenciate/ inhibit the action of another DNA (like the inverse element of an algebraic group, like a wave of inverse amplitude to those of another wave, and that annuls it). The "Transmissible spongiform encephalopathies" or "Prion diseases" are due to genetic and/ or protein polysemic processes, during the reading* of the Prions in the "user" (also called "incubator" or "hosting"), with the additional coincidence** that they affect the transmissionability of the psychic information (synaptic alterations). Everything aims at the same place, the symbolic-interpretative and informative character of the life, perspective that would avoid the too habitual surprises of the geneticists in front the new discoveries. On the contrary, it would help to know what one is looking for and to understand the found things."

* An ancestral and precarious attempt of cultural communication, in parallel way.

** "God raises them and they alone join themselves", a Castilian saying that is equivalent to "Birds of a feather, flock together".

The Big-bang about 15 000 Million Years ago: an origin or a simple transit more?

Also it animates me that You speak of:

"before the Big-Bang",

because in much people, its unconsciousness deceive them and they associate an important origin to the "Big-Bang". A "origin" conceals a divine action, although disguised, and this is not science.

There are motives to think that the "4 forces" cannot be unified in our well-known universe (R^4). Neither with the present hypotheses ("Standard model"..., "superStrings"), nor with exclusively analytical mathematical processes ("reNormalizations"...). It has been a waste the time. It is necessary:

"... another type of theory that we cannot imagine now."

perhaps we can start to imagine this theory with my hypothesis. It is holistic and by this motive, interdisciplinary.

How they are unified? Obviously I do not know it, nor I have sufficient knowledge to try it, I only have some intuitions to focus it. The Big-bang is a simple transit of something previous that already existed and continues existing. For ten years I have been calling it "pre-material Phenomenology" and it is here where many things can be unified. Besides the "4 forces-fields" (which are strictly 2), the energy and the information are also unified (as the energy and the matter are related in our material universe by the formula of de PRETTO/ EINSTEIN). A "pre-material" information (or "quantum" or "entropic" or how it is wanted to call) that reappears 11 000 million years later (that is to say, approximately 4 000 million years ago) with the appearance of the life. This information reappears when the matter is able to produce a support –the wavy and modulateable* molecule of the ARN/DNA– that is semiologic-compatible with the support of the original pre-material information. An information that would as well explain many other things –until today incomprehensible– of the quantum behaviour, like the indeterminismus. An information that would add a semiological perspective to the study of the quantum mechanics, perhaps a "Semiologic algebra"**, consequence of the study of the "inexplicable"/ "rare" phenomena that I asked for to the first Nobel prize, already mentioned. An information that precedes to the matter and moves it from the centre of the conception of the universe.

* By means of the four "discreet" values that suppose the four bases: "A" Alanin, "C" Citosin, "G" Guanin, "O" or "T" Uracil or Timin, analog to a simple code or quaternary numerical system.

** The initially cited "intrinsic Semiology & Mathematic", applied to Quantum mechanics.

Interdisciplinary, Censors and Formalities.

As I said in the letter, often the articles of the specialized scientific journals –to my understand– are a "collage" of other articles, like new linear combinations of the same, like a "Permuted index" of contents.

By this, your journal's interdisciplinary and the high value that You give to this integrated perspective also encouraged me.

But, however, I would like to make the two latest reflections:

- If You would erase the head of my letter, replace it by the title "Some reflections on the 125 questions gathered by Science" to join all the text, correct some formal issues of the text and send it like one more of the 12 000 original articles that Your journal receives every year, it is possible that it would not surpass nor the first filter of Your own Censors. But –also to my understanding– in this letter and reflections there is no less interesting information that the information of anybody of the 800 articles that its journal selects and publishes every year.

- Also I could write to You –with a previous translation– a "Research article", or a "Report", or a "Technical comment". For example:

- about "What is the Biological Basis of Consciousness?", but the article would be very brief because the question, expressed this way, does not admit any answer. First, it is necessary to express it without making apriorities (because in this case the direct base is not biological, and still less quantum, as PENROSE does affirm). We should ask only "How operates the Consciousness?", and later explaining it; or

- demonstrate that we cannot "Travel through the time" (because it infringes the principles about the entropy, but also other principles not recognized as such, which are need to be explained before).

By this the reader would not understand it, unless these previous knowledge would be explained to him, that would take much more than an "article", a "report" or a "comment", perhaps everything a book.

It would like to be able to translate You more reflections (on "Quarks"..., "Black holes", Quasars"...), but I cannot and I believe that this will be enough in order for You to obtain Your own conclusions.

I only can add/ attach to You, also in English, an informative leaf that I did about five years ago for a software manufacturer "5GT (=5th Generation Tool) A tool to navigate through knowledge, classify it and retrieve it". The drawings and the brief explanation on the informative leaf already indicate which way the methodological transference and the compatibility take, which today allows us to manage the numerical amounts.

CUC 2006-04-08; Translated by **Dolors UDINA & Lars UDINA & Leticia SOULTAN**