

Homeopathy: Critical examination of the opponents' attitudes and strategies, in the light of this field evolution and new research data.

Concerning homeopathy, we have a large specialized literature on the subject, proving its dynamism.

In parallel, emerge as numerous as precise attacks, which, to our knowledge, have never been sufficiently built in a claimed and exhaustive way. That's what motivates this article.

The subject is not easy, considering the polemics it draws since its debut in the medicine.

It's surprising to see the violence it awakes when tackled in the medias. However it is real.

The first and main reason that can be enounced is the inadequacy of this medicine, to the whole current scientific criteria; and it makes especially hard its own evaluation. We need to emphasize that homeopathy is before all, born of the clinical and therapists' observations. In addition, these doctors were not very concerned at the beginning, by the scientific principles or laws.

Indeed, the polemic is frequent; but if one's offensive position is not very convenient for the other's point of view understanding, it may be beneficial. It's only a question of level.

Besides the passionate debates, it may be interesting to refine the perception of each part's arguments. That's a positive aspect, present in many fields: political, applied or not sciences, religions, etc.

Regarding homeopathy, the mainly apparent confrontations, observed in debates and in many publications, are clearly tinged with violence and intolerance, which accuracy and tenacity are questionable. It can be observed in both camps: we fight for or against homeopathy. That 's why the terms "opponents" and "defenders" seem quite appropriate.

The second reflection time, usually following a polemic appears to be the most benefic; that's the one we choose to adopt here.

After the fights, we can, by reading attentively the published texts, examine more peacefully the points of view and thoughts expressed during the confrontations.

Exposing, in the most accurate way, both arguments, allowing each one to express his opinion according to his own sensibility and convictions, is for us indispensable. Nevertheless, it only can be done after an objective examination of all the available data. That's our aim.

I- Opponents and Defenders

For a better understanding, we must define before all the two fighting parties. On one hand:

The Opponents

They can be divided into two categories:

Those who reject homeopathy in a visceral and simplistic way, without a good knowledge and doing it in a systematic manner, far from any rationality. Moreover, we may ask why.

Those, more scarce, who have made the effort to comprehend it well, before truly booing homeopathy, with a strength driving us to wonder the intimate reason for that passion, if not that virulence.

The first group is not interesting for us, as they belong to what's called today in politics 'populism': i.e. thinkers opposing simple analysis and argumentations, even simplistic, about complex problems. Unfortunately, we cannot hide and deplore that famous and eminent scientists belong to that group.

The second group allows a true ideas debate and their argumentation is relevant; on the contrary, they deserve our wide attention.

Homeopathy does not match all the criteria, officially admitted as the "dogmas" of the scientific and medical actual thought, based on a mechanistic approach, as we will see later.

The opponents' position and argumentations perfectly suit these criteria: they benefit from an excellent audience in the scientific and medical fields and in the media. It can be easily understood.

The Defenders:

When the ticklish homeopathy subject is tackled in the media, the homeopathic doctors, the first to be concerned, are logically sometimes invited to participate to the debates. So they will be questioned on homeopathy and its practice.

However, when discussing about the homeopathy efficiency proofs, they are obliged to answer to questions often exceeding their skills... A therapist is not an experimented scientist in Research and is not trained to contradict another scientist with selected arguments. It becomes more and more obvious. Even if they share the same interests, their approach and their thinking modes are totally different. The doctor's field, even if he is pharmacologist, other specialized in research, is the medicine, which is the art of curing, and it differs from the scientist's, skilled in clinical and experimental research. Even if a doctor is aware of the last experimental data, he doesn't speak the same language: that's a first source of confusion.

That's why when interviewed, the doctor, even if well experimented, voluntarily stays within his expertise field, avoiding the traps and the polemics they provoke. Sometimes, and in an unjustified manner, he lets even think that there's no possible argument to oppose, which is totally false.

Research in modern homeopathy, conducted by Colleges members and independent researchers, is quite recent. It starts only to be popularized among the medical community.

The 1940-1950 years have seen the first works in laboratory experimental research; but we can talk of a truly organized research, involving numerous Colleges laboratories only after the end of the 70s.

Clinical research got coordinated quite at the same period and is nowadays in complete evolution.

An international dimension was already acquired at the GIRI first meeting with researchers coming from France, England, Israel and Australia.

Today, the GIRI meeting is held each year in a different country and is also present for each Monaco International Talks. Until now, more than 200 researchers, coming from 25 countries, have presented their works.

In 2011, over 400 people attended the annual meeting, in September, in Brazil.

The research world becomes structured, as illustrated by numerous European organizations like the ECH (European Committee for Homeopathy) or by the Elsevier (scientific editor) review with its « Homeopathy » reading committee.

Almost all the articles and publications quoted in this article, or used as a basis for our thinking, can be found on both sites and in one publication:

www.giriweb.com

<http://www.homeopathyeurope.org/>

« Homeopathy »

The journal of the faculty of homeopathy

Elsevier scientific publisher Ltd

The Boulevard

Langton Lane

Kidlington

Oxford OX5 1GB

(http://www.elsevier.com/wps/find/journaldescription.cws_home/623042/description#description)

Please ask for some articles: Emma Steel, e.steel@elsevier.com

All this, remains, as we do admit, too badly known by the homeopaths themselves, which is regrettable but understandable. It deals with fundamental and experimental research, a quite complex subject for practitioners who cannot be on the edge of every theme, nor every new event worldwide.

It is obvious that this over-specialized research needs spokesmen, capable of adapted pedagogy and chosen for their skills, in order to be able to answer and face the opponents attacking from all fronts.

However, as done in the past, we do not plan to let speak a researcher, having worked on a specific project and who will be only capable of explaining his activity. This would lead to the opposite position to the one above exposed: the lack of knowledge in homeopathy practice by a scientist.

This function can only be given to someone capable of presenting an overall view of all the research years, of denouncing the pseudo-scientific approaches, of defining the more and more elaborated structuration of the substances high dilutions pharmacology, with strong bases in homeopathy... Indeed, that's not easy at all.

We must also admit that debating on that kind of subjects does not provoke enthusiasm in the media, except when creating the "BUZZ" by spectacular eventual polemics. It may quickly seem too complicated, and induce a decrease in the audience rate...

Another way must be found to avoid these genders confusions consisting in organizing a face to face between people whose speeches cannot converge; the ones having the diary practice of their field, the others arguing with theoretical data, intellectual speculations more or less founded or "ideological" points of view. This never leads to the real understanding of the true issue and never gives any coherent answer to the questions.

An explanation must be given due to all the progresses already done.

Avoiding any media expression on a so complex problem, even more if directed to a specialized audience, does not mean that we should let the opponents regularly enouncing that there's no serious work done on homeopathy, even more without an accurate and informed opposition.

That's what leads us today to clarify these confusions at different levels.

II-The different attacks against homeopathy

Elementary attacks

Due to a reflexive primary reject, the first argument usually consists in denouncing the absence of any molecule from the initial active principle, in the highest homeopathy dilutions.

Numerous scientists and opponents claim loudly what they consider as obvious. They even argue, "Something from the Age of Enlightenment still subsists today"...

The reflexive second argument is to repeat without failure that there's no conclusive work to validate homeopathy and to insist heavily on the fact that homeopathic laboratories sponsor a great number of studies, which lowers their credibility!

The homeopaths and researchers implicated at that level only seek for some tolerance and respect for their work and their observations.

Wasn't the Age of Enlightenment characterized by a remarkable mind opening?

For the arts, this famous century was the transition between classical and neo classical periods, and for the music from the baroque to the classical period. Did we leave behind the "Enlightenment" with Duchamp, Picasso or the jazz? Indeed, some people think so!

The homeopaths, the clinicians, the pharmacists have been observing for 2 centuries the homeopathy effectiveness on their patients; the specialized colleges researchers note some perceptible effects, far from the molecule presence. There is no doubt allowed.

Is the spirit of mind opening, of tolerance, of dogmas renunciation, which characterized the Age of Enlightenment, betrayed when various disturbing observations are done and presented in the world?

To avoid any kind of intolerance, all we need is to accept what numerous orthodox scientists and sociologists demand: the acceptance of new paradigms i.e. by taking into account new thought matrices.

Let's quote on that subject the call in a book of 2003 (Belin publisher, *Repenser la science*) by Helga Novotny from the Ecole Polytechnique, Michael Gibbons, general secretary of the Association of the Commonwealth Colleges and Peter Scott, vice-chancellor of Kingston University:

« ...We think that there is another solution. A new epistemology is necessary, more moderated and sociologically more sensible, capable of integrating the "soft" individual, social and cultural visions of the science as well as the "hard" substance of its knowledge. Inside the enlarged environment that we call "agora", where the science will live the future, a science without links and self organized tries to discover invariable laws and to accumulate knowledge. This science will have to be completed, even replaced by a new kind of science, deeply contextualized, socially strong and epistemologically eclectic. »

More than two centuries of homeopathy should be considered as a sign of credibility on a medical point of view (evidences based medicine). It's not enough for some opponents who do not hesitate to contradict themselves when quoting Sydenham, Trousseau and William Osler in a book on placebo effect (Aulas, Placebo, book-e-book, 2009):

« *Hurry up and take this new medicine as long as it works* ».

However:

In some countries like Brazil, the medicine based on evidence (of its effectiveness) is not a problem. The number of scientific works, publications and posters presented at the 2011 GIRI meeting was extensive over one year (more than 80). This dynamics together with the recent works published in Europe and in the USA, **induces an evolution in the substances high dilutions studies, far beyond the homeopathy approach; we will be back to it later.**

We must underline that these works are done in a college context, and not an industrial one. They are usually not sponsored by any homeopathic drugs industry... Some of them are published in cancer and immunology reviews in spite of the difficulties to be accepted. Anyway, is it surprising for a homeopathy laboratory to sponsor researches? Isn't it the same from the whole Drugs industry? Who else can do so, apart from the colleges, when funds are so difficult to obtain? Can we, can you?

Far beyond the Avogadro number that, according to the molecular weight, represents almost a 9/12 CH dilution (Centesimal Hahnemanian method), there's really no molecule in the dilution. However, does that mean that the molecule did not modify the solvent, leaving some information carried by the solvent?

Nowadays, taking the publications for basis, many scientists think that a “print” remains.

We must better widespread their works in order to counter the second trite remark i.e. the lack of scientific evaluation. That's an important subject we will develop this entire article long.

Without any polemical spirit, let's get away from too peremptory assertions coming from an elementary thought and a bad knowledge of hundreds of researches, high quality works and experiments.

Don't forget that **the main obstacle is the currently admitted science limits, which is mechanist**, since Descartes imposed his ideas, even if it allowed some great progress.

We must remind that Descartes enounced the principles of a new quantitative physics in reaction to Aristotle's qualitative one; similarly with the mechanist biology principles to counter the Aristotelian animism.

A great specialist of Descartes noted (PAUL MAZLIAK, Descartes, DE LA SCIENCE UNIVERSELLE À LA BIOLOGIE, January 2005 Coéd. Adapt/Vuibert, 216p):

« However, even if considered as one of the modern science fathers, Descartes among his numerous works faced personal nonsuccess. The reason is now well known. From the scholastic middle age philosophy, Descartes inherited the ‘system spirit’ and the desire of an universal explanation for the nature phenomena. That's why the philosopher proposed mechanical explanations, sometimes hazardous, in all the physics fields: static, dynamic, hydrostatic, gravity, magnetism, etc. He also sought to apply the same principles and the same mechanical laws to biology. The modern science is much more partitioned; many specific properties of the material, differing from the sole “spreading” are now considered by the physicians; the modern biology uses some organization properties of the material (chemical links, macromolecules, cellular structure) much more complex than what knew Descartes. The contemporary scientist is much less ambitious than the 17th century

philosopher and the dream of a “mathesis” (universal mathematical science) was abandoned ».

It's important to go farther to understand the logic of the opponents and contestants of the Hahnemanian vision.

Attacks on the theory and research studies

Apart from the two above arguments proposing to eradicate homeopathy, i.e. the molecule absence in some administered doses and the lack of scientific works, other critics are done more in depth.

They attack and argument on the homeopathy proper theory and criticize some analyzed works: no new remedies, stagnant medical support and repertories, observed date impossible to check...

Obviously, these critics emanate from opponents who have a deep knowledge of homeopathy. We already talk about their interest. It's worthwhile to carefully examine their analysis, as they are sometimes founded.

They even go farther in their critics:

For them, **homeopathy could be confined to a doctor's theory elaborated more than two centuries ago**: the practitioners only match the symptoms associated with some remedies to the patient's ones. By so, **they only refer to the observations and conclusions of the theory founder** or of his own students.

Even if we may consider this critic as occasionally beneficial, it must be appreciated at its true value:

Like in any other fields and due to the human breadth, we can find some homeopathy “integrists”, but no more nor less than elsewhere.

Reducing modern homeopathy to that caricature is a falsehood.

New remedies are presented each year, as for example during the meetings of the International Homeopathic Medical League ((LMHI), with the corresponding pathogenesis (studies on a healthy person).

A medicament stems from the fundamental research: “the thymuline” is a neuropeptide playing a regulating role at a cerebral level as discovered in the 70s.

It is proven that, when correctly prescribed, it has stimulating properties in some immune deficiencies. Professor Madeleine Bastide, a famous immunologist, discovered these properties and published on that subject, revealing at the same time a new class of homeopathic remedies: the endogen molecules. These molecules, already present in our organism, may play a regulating role at homeopathic dilutions.

It's logical and justified to say that medical subjects and repertories of remedies need to be modernized. It only can be done in a skilled manner as they sometimes report some surprising patients' words: these sentences, when transcribed faithfully, offer some important clues for the prescription.

Too many books copy at least partially the oldest observations, which deserve to be actualized or at least explained, even if it's not without some inconvenient. False interpretations and misunderstanding of the primitive meaning are a problematic risk that cannot be neglected, and to which repetition is preferred. The subject is ticklish but deserves

to be examined in order on one hand to be faithful to the words reported in the medical subjects and on the other hand to remove some old-fashioned terms...

The simple copy of the remedies profiles, in order to publish complete books, usually leads to uninteresting compilations. That reinforces the opponents' credibility.

Once admitted this weakness, we must make known the existent and modern evolution of homeopathic remedies knowledge.

Some medical specializations have strongly evolved since homeopathy discovery, and it's the most obvious in psychiatry:

It was impossible at Hahnemann's time.

Some actual subjects as ADHD (Attention Deficit Hyperactivity Disorder) are the subjects of the most recent clinical observations, as well as the side effects of Isotretinoin (Roaccutane®) widely used for the acne treatment; (Dr Geneviève Ziegel, « *De l'Hyperactivité aux nouvelles pathologies* », Ed. Homeopsy, 2011; « *Le bilan des connaissances et recherches* », Editions des Entretiens de Monaco, 2010).

Significant overlaps deserve to be declared, as they contradict the categorical and detailed assessments of the opponents: they refer to the lack of legibility of the pathogenesis i.e. the remedies effects on a healthy person, then prescribed to patients with the same symptoms.

It is true that some old pathogenesis studies may include too many observational elements, now difficult to verify.

However, on that subject, it's easy to emphasize numerous recent pertinent observations.

To illustrate this, let's take three examples.

All we need is comparing what is observed in the homeopathic fields with the side effects observations of some modern drugs, as presented in the Vidal.

- Haloperidol (1957) (Haldol®):

Early dyskinesia (torticollis, etc.) and late ones (Parkinson), anxiety, mood variation, depression, agitation, vertigos, insomnia, headaches, confusion, hypotension, tachycardia, nausea, vomiting, appetite loss, impotency, amenorrhea, temperature deregulation, constipation, sight troubles, mouth dryness, urinary retention.

- Chlorpromazine (1952) (Largactil®)

Bradycardia, children cognitive delay, orthostatic hypotension, constipation, prostatic hypertrophy in aged people.

-Phenobarbital (Discovered in 1902, medical use after 1930) (Gardéнал®):

Drowsiness, difficult wake-up, spelling difficulties, mood troubles, light to strong cutaneous reactions, hepatic troubles, acetonuria;

These observations give a new perspective to the homeopathic fundamental principles, i.e. the similitude and the pathogenesis.

Does the observation of the medicaments side effects, as analyzed, match with the modern homeopaths who enrich the medical subject? Thanks to these three examples, anyone can observe the obvious correlation between the homeopathic remedy study and the side effects!

Modern homeopathy is actually under construction and it needs to be said.

In a logical way, nobody should be surprised as it's a link between homeopathic and classical approaches! They are perfectly compatible and that reinforces what we have always defended in the International Monaco Talks: the dialogue between the different medicines. An efficient constructive exchange is possible only if we leave apart all the polemics to observe and analyze before hastily concluding and closing the chapter and by so the communication. We have checked it in Monaco for 25 years...

The main critics in homeopathy research

Different fields:

First of all, the importance of the «placebo effect»

The «placebo effect» is present in any medicine specializations.

Very often, by compliance, some doctors, who don't believe in homeopathic remedies, accept to prescribe them as a placebo-medicine, and for so capable of relieving patients.

The «placebo effect» exists everywhere and is admitted by everyone.

Finding it in homeopathy is logical.

However, nobody can say for sure that the homeopathy role is limited to a «placebo effect»; it won't be admitted by any homeopathy practitioner and even less by any homeopathic veterinary, considering the obtained healings. The patients can be easily influenced and gullible but to a limit...

Does ignoring how an approach works mean that it acts as a placebo?

Please note that **all the homeopathy studies**, whether epidemiologic, clinical or experimental research **take into account the “placebo effect”**.

We are in the 20th century and the protocols are as strict for homeopathy as for the different approaches, in research in general and in medicine in particular.

To support their critics, the opponents were obliged to refine their arguments...

Even before talking about research, the specified arguments question:

In his book on placebo, where he rightly separates the “placebo effect” and the “effect of the placebo”, Doctor Jean Jacques Aulas, psychiatrist and pharmacologist, denies that these effects correspond to 35% of the patients' improvement, as it is only an average.

In a 1955 study, quoted by this same author, and not particularly dealing with homeopathy (*Das Placeboproblem*, Haas, Fink, Härtfelder), this improvement can even reach 60% of the studied cases in various diseases such as pain, cold, hypertension and dyspeptic disorders, with a 80% in case of light anxiety...

Why cannot we admit a priori this result even if quite old?

We must accept that all the pathologies are far from equal in front of the “placebo effect”.

Furthermore, we must admit that **these rates are conclusive as well as for the conventional medicine as for homeopathy**.

If we add to the “placebo effect” the recognized “self-healing” process, what role does remain for the medicament pharmacological activity whether allopathic or homeopathic?

This study is disturbing as it deals with treatments for various pathologies. Using its conclusions as a weapon against the sole homeopathy is a partial attitude.

Moreover, it is intellectually and scientifically quite questionable.

We will easily understand that discrediting the treatment effectiveness may lower the credibility of any defender, whatever the medicine; in that case, of each consumers' group, ready to support homeopathy.

We must remind that few months ago in United Kingdom, and now in Belgium, consumers' associations were compelled to strongly but successfully sustain homeopathy against their government. The parliamentarians used the same disparagement arguments as the ones presented in this article, assertions also taken up by some aggressive and mocking opponents during street marches.

Moreover, we have always admitted that the "placebo effect" may sometimes be effective to relieve anxiety, sleeping troubles or depression under special conditions and only if they are very moderate and coupled with a psychological help. By contrast, it has no action in serious pathologies like septicemias or cancers. In those cases, homeopathy seems helpful, as it implies a reaction from the organism, if still possible.

Nevertheless, a 2009 publication on the effects on some homeopathy remedies **as major treatment in lung cancer** called my attention. Furthermore, it was not on the sole improvement of chemotherapy side effects.

This work was conducted in 2009, by a famous cancerologist, Moshe Frenkel, in the Oncology Department of Texas College, **and without any funds from the homeopathy drugs industry...** (<http://www.moshefrenkelmd.com>)

The obtained results **prove a quite identical effectiveness between the most classical remedy used in chemotherapy for this pathology and the homeopathic treatments.**

We are not clearly selling hope... The author himself is waiting to have his results confirmed by other teams!

Coming back to this paragraph theme, there is usually no "placebo effect" in cancerology, so what should we think of such studies? Who knows what will reveal clinical and experimental researches in homeopathy?

Dealing with the notion of « placebo effect » and "effect of a placebo"...

Let's quote first a 2011 publication.

Always used by J.J. Aulas in the same book about Placebo, this time he refers to a work published in the *New England Journal of Medicine*.

In this work, once again, not specifically oriented towards homeopathy, the authors, not worried about eventual polemics, claim that there are too scarce proofs, allowing to think that placebos have strong clinical effects. They conclude that it is not justified to use placebos.

Who do we believe? The one quoting the 1959 publication? Or the other with the more recent one?

However, the latest could reinforce the position of all the homeopathy defenders, either practitioners or consumers associations.

For the clinical research, it is possible to accept the reserves of this study and even the notion of the effect **of a placebo**.

In that case, why should we limit the impact on the sole homeopathy works? Even if it seems to concern all the clinical researches.

Let's note, by honesty, that Dr Aulas' book is oriented toward the "placebo effect" in medicine and in a general way. His attacks have been targeted for more than 25 years against the **sole homeopathy**. In addition, so on in some extracts of his manual.

The placebo dose, seemingly identical to a remedy known as effective, has certainly a greater impact than a hidden placebo effect. At that level, there is nothing to distinguish a homeopathy clinical essay from any other clinical test. For us, there's an evidence: in all the modern clinical tests, is the "placebo effect" taken into account?

The dominating ideology underlines that a caring, explicative and reassuring behavior from the doctor induces a placebo response much more important than an unsympathetic and reserved, even unconfident, practitioner. Once again, do all the homeopaths meet the caring and warmth criteria differing from all the other doctors supposed to be cold and distant? Obviously, this is not convincing...

The homeopath pays more attention to the patient's symptoms and to the way he expresses his illness than to its sole diagnostic: the doctor-patient relation is somewhat different. Even in this context, during clinical essays conducted according to the homeopathy principles, if the therapist doesn't know whether he is giving a placebo or a remedy, can he truly influence the patient's behavior?

Homeopathy problem for the animal

For a long time, one of the homeopathy defenders' arguments has been the presumed absence of the "placebo effect" with the animal, whereas the homeopathy effectiveness is as important as for humans.

The opponents, often consulted on that argument, pretend now that it exists.

We can quote first Pavlov and coll. 's works.

It has been demonstrated that his canines became familiar with different other factors than the ones conceived by the experiment authors to induce the animals' expected reactions. It's a well-known subject among the animals' physiologists. We can only validate this affirmation. These behaviors were linked to highly significant displacements for these superior animals and the administered drugs were specifically violent.

Should we, though, talk about "placebo effect" or conditioning?

Following a study not quoted as reference, some animals like cows or laboratory rats could be placebo-sensible. Why not!!

Some animals, treated by veterinaries following the "effect of a placebo" principles, have been cured of various troubles...All right!!

When we are aware of all the precautions taken in the modern experimental clinical trials with animals, it is difficult to imagine these two hypotheses:

- How can any animal know that a homeopathic remedy, diluted and unflavored, has been mixed in his drinking water?
- To avoid stress, some works have been conducted by introducing the studied remedy in the cage air, breathed by the laboratory rodents.

These studies are all conducted versus placebo.

What about the plants experiments?

How can we argue on the "placebo effect" for the more and more numerous works on the plants?

We impatiently wait for the negative arguments to emerge...

Just as we are still waiting for their arguments about the substances high dilutions done in laboratory experimental research, on isolated cells.

To conclude, it is **kind of easy to denounce the “placebo effect” for a clinical study conducted without taking into account the homeopathy specificities.** That becomes more and more **difficult for the high dilutions researches, including those on homeopathy.**

Scientific publications

The homeopathy scientific publications apply to clinical experimentations, physico-chemical research, and all the laboratory experimental works done on homeopathic remedies.

These latest include the very high dilutions of substances containing no more molecule of the initial active ingredient and are far beyond the limits defined by Amedeo Avogadro's works.

Logically, the high dilutions problems originate numerous hypotheses.

The hypotheses on the action mechanisms, a double-edged sword

In that case, paradoxically, we can join the opponents' ranks, even if in a shaded manner, and for most of the situations.

We have never encountered so many pseudo-science as for these hypotheses.

Determinist chaos, quantic approaches, and more specifically “water memory” are the most frequent suggestions.

There is a lot more but we cannot quote them all as this article has a limit and is not a book...

As we gave enough explanations about the “water memory” in a recent article, we won't come back to it. You can read it on this site.

The determinist chaos theory has demonstrated that light variations of meteorological parameters, neglected in the classical approaches, can induce big climatic changes in other parts of the world. Let's simply add, quoting the well-known example, “if a butterfly wings flap in Asia can set off a tornado in the U.S.A”. it only can be done in a specific context. Each flap, anywhere in the world, will not produce fortunately such consequences!

In quantic physic for example, we have read very detailed articles including the same fundamental mistake: after an analogical thinking process, some homeopathy proper data are introduced in the specific formulas of the expressed scientific phenomena and some conclusions are drawn. The problem is very simple: the concerned formulas are characteristic of the defined scientific phenomena. Introducing parameters, coming from other fields, in that case homeopathy, is doing pseudo-science.

By introducing parameters in a specific equation, don't they admit that they correspond to the physical-chemical related phenomena?

In quantic physics, we have already seen and keep on seeing this kind of analogical reasoning, which is not scientific. In the last International Homeopathic Medical League Congress in Berlin, and at a personal level, our attention has been called by a participant's question: « *Why do you pay so much attention to the homeopathy old principles whereas here, we only talk about quantic physics application to explain homeopathy?* »

Not being a great specialist of quantic physics, we send to the most famous French quantic physician, all the abundant literature concerning the medley between quantic physics and homeopathy.

Here's Professor Levy-Leblond's answer:

«To the general secretary,

I have read with a lot of interest and a mix of pleasure and irritation all the articles you sent me.

I can only confirm that your fears are truly justified and that these articles don't have any thoughtful scientific value. The quantic theory allusions are pure rhetoric and lay on an old and has-been presentation of its basic ideas.

The most irritant fact is with no doubt that the authors pretend to apply only a "qualitative metaphor", which could be admitted (but not justified as publication in a professional review). However, all the discursive strategies aim to prove the explications seriousness, by asking to physics to warrant them by a strict authority argument.

I'm usually interested by these pseudo-scientific drifts (without any confusion with really metaphoric uses that can be examine one by one) and I will be ready to answer to other demands in that field...»

Isn't it common sense to let the true specialists speak about what they best know? Furthermore, if you have an intuition, before writing whatever you think, isn't it justified to consult them?

As published in the site article, we already expressed our opinion on the true sense of "water memory". We explained the context and understood that the opponents enjoy this vocabulary and this phenomena approach but with a pejorative goal.

Our most important remark, done at this hypothesis level, is to denounce the incompetence of some homeopathy defenders: whatever their convictions, they are their own worst enemy by the non-credibility of their interpretations. Nothing is easy...

One of the activities of both the GIRI and the International Monaco Talks is to denunciate all the pseudo scientific processes, whatever their origin.

Clinical research

This research is easily understood and retained by the scientific and medical community. It's considered until now as the sole **real** proof of medicament or therapy effectiveness.

Different methods and study levels are possible:

http://www.ebm.lib.ulg.ac.be/prostate/typ_etud.htm

The best method in clinical trials for allopathic medicaments with quantitation consists in double blind against placebo tests. We widely talked about this in our former article.

Comparing the experimental protocols quality, in the comparative tests of the analyzed works, is what meta-analysis is limited to. Indeed, the protocol quality is essential but it doesn't consider neither the starting hypotheses nor the tests type pertinence.

The double blind technique, doctor and patient, is a problem in homeopathy:

The patients' treatments must evolve according to the emerging symptoms. It's not compatible with a working method, which supposes that the therapist cannot determine if it's a reaction to the former treatment or to the placebo.

Obviously, the opponents only swear by this notion of the double blind against placebo tests. We perfectly know that we have always obtained some poor results to validate homeopathy (around 10% of effectiveness when compared to a placebo).

Aren't we in a dialogue of the deaf?

They want to apply to homeopathy the methods widely recognized as the best ones in the actual context of mechanist paradigm. Many scientists from different fields ask to limit the paradigm to the corresponding scientific approaches...

However, apart from denying each evolution and each progress- let's stay in the light- we will have to admit new paradigms correlated with the observation of unquestioned physical and biological phenomena.

To illustrate this necessary approach, the notion of new paradigm is widely appraised in sociology when the social phenomena must be explained while current and hot...

The scientific world reacts more slowly. It's more a remark than a critic. We must think of the pseudo science drifts and the new concepts integration. Since when, are the quantic physics bases taught in our colleges?

Homeopathy needs to consider a great number of parameters and that's the main problem.

Why can't we predict the weather over more than 5 days if it's not because there are too many parameters?

The current scientific thought can only deal with a limited degree of complexity. It can't go far beyond.

As far as we are concerned and in its actual conception, the only reasonable and acceptable proposition is the double blind against placebo experimentation.

The decision makers, i.e. the politicians, logically only take into account the negative remarks of the scientists. These latest expose their opinions only within the mechanist thought, the only one to be recognized.

In England, in a 2009 report by the House of Commons (<http://www.publications.parliament.uk/pa/cm200910/cmselect/cmsctech/45/45.pdf>), it is published that the homeopaths claim for the double blind against placebo method, but the "officials" refuse to accept it. They argue that this method is the **only valid** one to differentiate homeopathy effectiveness from a placebo.

Depending on the opportunities whatever the countries, homeopathy is regularly criticized for that reason.

That's also the reason why the opponents, quoting some rare old works conducted by independent structures but done according to the official methods, have never verified any conclusive results (Cf .J.J Aulas, De granules en aiguilles, book-e book, 2010)

The mechanist paradigm doesn't match with the homeopathic method approach.

It would be non-sense to keep on doing classical clinical analysis by double blind against placebo. They were numerous in homeopathy and as suggested with a kind of logic and satisfaction by the opponents, with good experimental protocols...

The whole homeopathic community is aware of that problem and keeps on being wide opened.

(As an example, read: <http://www.homeopathie-unio.be/uploads/files/unprotected/Weerwoord-UHB/replique-website-fr.pdf>)

Working sessions have been organized all over Europe and worldwide to study the dialogue possibilities and to establish new protocols, easily understood by anyone and specific to homeopathy.

That will be the subject of a future article.

Experimental Research in Homeopathy

The opponents' attacks are limited to the critic on the over mediatised polemic on the "water memory", to the experimental protocols invalidity and to the lack of experimentations repeatability.

In a former article on this site (*Few comments for a better understanding and knowledge of homeopathy research*), we say that it's true that **the "water memory" theory does not directly concern the homeopathy research.**

It's a hypothesis on the solvent capability to retain molecular information and not even a single molecule of the original substance remains after successive dilutions...

This hypothesis stays within the limits of the solvent general properties, which may explain some effects of a molecular print still to define but noting else.

There's no particular link with the homeopathy essential principle: the similitude.

Due to their approach in accordance with the dominant scientific thought, the opponents benefit from media opportunities.

When attacked on the problem of the proves of the homeopathy effectiveness, the homeopathic practitioners too often refer to this "water memory", for the great satisfaction of their opponents.

The experimental protocols problem deserves more attention.

The laboratory experimental research is recent, starting in the beginning of the 80s. The specialized pharmaceutical laboratories have sponsored the first studies.

Most of the college researchers, having signed contracts, did not have large homeopathy knowledge and there was no scientific works on high dilutions.

In order to preserve their independence towards the sponsors and to exchange their knowledge and observations, the college scientists, working on this subject, created an international and selective structure: the GIRI (International Research Group on the Infinitesimal).

Surprisingly or from our point of view intentionally, this structure, existing for more than 25 years and where hundreds of college researchers' publications have been presented, is never pointed out. Whereas it's well represented by books from Kluwer Academic Publishers and Elsevier, by an Internet site, etc...

Once again, we must underline the difficulty to publish works on high dilutions.

It's so strong that it leads researches managers to advise young scientists against choosing that subject which will drive them right away on a no-issue path at the beginning of their career. This is especially true in Europe but not at all in Brazil where these works are widely accepted in the college fields, as already pointed up.

In spite of all these obstacles, numerous works revealed to be repeatable according to the most rigorous scientific criteria.

In laboratory experimentation, the simplification of the experimental models means that they don't reach the complexity of the models, requested for the clinical tests. They can sometimes allow the double blind against placebo use.

To illustrate, let's quote the last works of Bellavite and coll, taking over some old researches about the Gelsemium effects: (<http://www.ncbi.nlm.nih.gov/pubmed/20401745>).

They confirm the first works published in the 80s about this remedy effect on the rats' anxiety.

During the last GIRI meeting (2011, Brazil), a conclusion became obvious: the high dilutions research, whether concerning the biological aspect or the physicians approach, is a full-part subject, being in its early stages and going far beyond the homeopathy limits.

The observed and published results often agree with the homeopathy principles, sometimes not. However, that doesn't mean that they refute homeopathy. In high dilutions, appear other phenomena than those concerning that field.

The observation of the high dilutions activity may reveal different, unexpected or contradictory results from the homeopathy, which is logical for a new subject, which mechanisms still remain unknown.

Numerous hypotheses are present: existence of specific receptors differing from the cells molecular ones, data transmission theories with Professors Madeleine Bastide's and Agnès Lagache's works, and now the biosemiotics help (see 2010 and 2011 publications on the GIRI site)...

That took 25 years to the GIRI to reach that point.

Worldwide, the new students' and researchers' generation, numerous and motivated, is interested by that subject. That brings great hopes for the understanding of the low dilutions mechanism and the substances high dilutions, including the homeopathic.

Polemics and opponents cannot prevent this development.

Conclusion

It has been reproached to the defenders of a **controversial** scientific or medical subject to complicate the experimental results. It disturbs the reader with an accumulation of data and claims he can't control.

That's why we choose to speak of a minimum of publications in this article.

The references exist for those willing to go further. The main constraint is sometimes the language as all the international publications are written in English.

To resume, we can say that all the classical experimental models must be adapted to the homeopathy specificity. To be evaluated as a whole, it needs its proper experimental standards.

That's the common claim among classical physicians, biologists, sociologists, and that's ours too...

When the parameters to be considered are too important for a classical study, it's not possible to use a classical scheme. This was perfectly expressed by Professor Henri Atlan when considering the uncertainty of the long-term ecological forecasts (International Monaco Talks, 2010).

Some unexplained phenomena have been understood only by discovering that it's a fractal structure, i.e. for the specific genes ability to build up the complex lung construction: the genes only have to "knot", to use the formula established by Mandelbrot, in a "simple" way (<http://www.edelo.net/chaos/sommaire.htm>).

We cannot understand why homeopathy, taken in a thinking mode different from the mechanist approach limited to the molecular, could not find any explanation to its action mode. Once again, accepting a new paradigm is validating a new matrice for a thinking manner.

The opponents do not approve it.

Let's remind that as they represent the conventional rationality (mechanist paradigm: effect due to a sole molecule), they benefit from the media and politics audience.

That's the only reason why homeopathy is frequently attacked and that even leads to call it charlatanism.

Let's refer to Dr Aulas' words, quite fierce, in one of his latest books about placebo, already cited in this article:

« The problem arises with strong acuity for the medicines whose effectiveness has not been demonstrated and especially for homeopathy. The homeopathic remedy is the placebo paragon, sold on a large scale. Most of the time, it doesn't contain any active molecule and no clinical essay, strictly conducted, has proven effectiveness higher than a placebo. Prescribing though a homeopathic remedy is a lie: if the doctor believes in the specific effect of the homeopathy remedy, he cheats his patient as well as himself; if he doesn't believe in his prescription, he betrays only his patient. In both cases, the fraud is patent.

Arising the treachery to a mass therapy is not worthy of a society still admitting the value of the Enlightenment”.

We think that his discourse is violent. Let's imagine what may feel: hundreds of researchers, worldwide, working on that subject; thousands of hundreds of homeopaths; without forgetting millions of patients all over the world satisfied with their treatments.

Is homeopathy the greatest imposture of all time?

Until now, the opponents and their relations never succeed in forbidding the homeopathy practice and nowhere in the world.

Let's keep on betting on the authorities tolerance, on the modern homeopathy progresses and on the pharmacology of the high dilutions, actually in construction.

Considered as a Traditional medicine, it still holds some secrets. We hope that the Research, still beginner in that field, will disclose them one day, meanwhile opening other doors, useful for the whole Research.