# The Doubling Theory Could Explain the Homeopathy

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#### Abstract

The homeopathy, proposed by Samuel Hahnemann in 1796, is based on three points : The "law of similarity" (if an active substance causes an illness, the same diluted substance can cure the same illness). The individualizing of the sick person and of his remedy. The choice of the dilution coming from the clinical researches.

Many authors (1986, 1987, Cazin, Garborit, Chaoui, Boiron, Belon, Cherruault, Papapanayotou; 1988, Del Giudice, Preparata, Vitellio; 1996, 1999, 2000, Conte, Berliocchi, Lasne, Vernot; ...) try to explain the problem of the dilution into the water. But any homeopathic model give us a complete clinical, chemical and physical explanation. However, the new idea of temporal openings of the Doubling Theory (1998, 1999, Garnier-Malet) brings a new explanation of principle of dilution.

Keywords : dilution, succusion, information, diffusion, anticipation.

# **1** Introduction

In fact, a complete model of homeopathy must explain five points :

- 1) The paradox of the great dilution (1986, 1987, Aubin, Poitevin, Davenas, Benveniste): an active diluted principle into a polar solvent (water or alcohol) remains active beyond the Avogadro's number.
- 2) The succussion : when an homeopathic solution is agitated, its activity is stimulated.
- 3) The converse effect : there is a critical dilution which can reverse the effect of the homeopathic substance. So, the blood is coming fluid by aspirin. It becomes coagulated with diluted aspirin (5CH, dilution =  $10^{-10}$ ).
- 4) The Arndt and Schulz's law (1992, Fabrocini) : the biologic activity grows up with the high dilution.
- 5) The Hering's law : an illness is more serious when it goes from the periphery to the inside. Dr Elminger (1985) adds that the corporal physical or psychical traumatisms involve biological disturbances which obey to a chronological order. To suppress the consequences of these traumatisms, it is necessary to cure the effects of these traumatisms in a reverse order. Without this reverse order, the biological unbalances are worsened.

The Doubling Theory and the resulting "fundamental motion of spinback" can explain all the points above. The most important idea of this theory is the possibility to use an accelerated time's flow within imperceptive temporal openings. So, it is possible to

International Journal of Computing Anticipatory Systems, Volume 13, 2002 Edited by D. M. Dubois, CHAOS, Liège, Belgium, ISSN 1373-5411 ISBN 2-9600262-7-6 have a cyclic undulatory propagation of periodical motion into an horizon with an acceleration of time and a corpuscular reconstitution of the same motion within all particles of this horizon where the time's flow is decelerated.

First of all, it is necessary to see the spinback and the theorical consequences again : particularly, we shall see that all particles is going to obligatory points of reconstitution and dissociation. These points give to the particle a tetrahedral direction. Well, the molecular structure of the water  $(H_20)$  is also tetrahedral (figure 1).

So, we can explain how the structure of water may be the best medium to realize this fundamental motion.





#### 1.1 The Fundamental Motion or the Spinback

The doubling theory considers that a particle is always an horizon of internal particles. A particle is also an internal particle in its horizon.

Each horizon or particle makes a fundamental motion which is composed of three simultaneous rotations in  $\Omega_0=2\Omega_1$  (figure 2):

- 1) A rotation  $\varphi$  (center  $o_0$ ) of the diameter of  $\Omega_1$  in the plane of  $\Omega_0$ .
- 2) A rotation  $\varphi$  of  $\Omega_1$  around this diameter.
- 3) A rotation  $2\phi$  of  $\Omega_1$  around itself.



Figure 2 : the fundamental motion.

When  $\varphi = \pi$ , this motion is called "spinback" of the particle (or horizon)  $\Omega_0$ .

With a changing of space's scale (effect of magnifying glass), the particle  $2\Omega_n$  and the horizon  $\Omega_0$  are making the same motion during the rotation  $\pi$  of  $2\Omega_n$  on  $\Omega_0$ .

This motion of  $2\Omega_n$  is called "tangential spinback".

This periodic spinback determinates the time flow as well in  $\Omega_0$  as in  $2\Omega_n$ .

The spinback of  $\Omega_0$  involves a dissociation of  $\Omega_0$ ,  $\Omega_1$ ,  $\Omega_2$ ,...,  $\Omega_n$  when  $\varphi=0$  and a reconstitution when  $\varphi=\pi$ . During the spinback of  $\Omega_0$ ,  $\Omega_1$  makes 2 spinbacks into  $\Omega_0$  and  $\Omega_n$  makes  $2^n$  spinbacks de  $\Omega_n$  into  $\Omega_{n-1}$ .

But  $\forall n$ , the spinback of  $\Omega_n$  into  $2\Omega_n$  is tangential or radial (figure 3).

The tangential spinback of  $2\Omega_n$  correspond to  $2^n$  radial spinbacks of  $2\Omega_n$  into  $\Omega_0$ .

So, the tangential spinback is  $2^n$  times slower than the radial spinback.

But, radial or tangential, the path is equal to  $\pi R$ , if R is radius of  $\Omega_0$ . In the horizon  $\Omega_e$  (where  $\Omega_0$  is a particle), the radial path of  $\Omega_n$  seems to be rectilinear and equal to 2R.

The radial path of  $\Omega_n$  into  $(2\Omega_n)_t$  is  $2^n$  slower than the radial path of  $\Omega_n$  into  $(2\Omega_n)_t$ .

But,  $\Omega_0$  is a particle. It makes a radial path into its horizon  $\Omega_e$ .

The clocks in  $(2\Omega_n)_t$  and  $(2\Omega_n)_r$  are the same but their hands don't turn at the same rate.



Figure 3 : radial and tangential spinbacks

This radial path of  $\Omega_0$  is  $2^n$  times slower than the radial path of  $\Omega_n$  (figure 5b) So, the particle  $2\Omega_n$ , which can be dissociated into  $(2\Omega_n)_t$  and  $(2\Omega_n)_r$ , may be reconstituted at the end of the spinback of  $\Omega_0$ .

## **1.2 Anticipation of the Radial Particle**

By definition, the tangential rotation  $\pi - \pi/2^n$  of  $(2\Omega_n)_t$  corresponds to  $2^{n-1}$  radial spinbacks of  $\Omega_n$  (figure 4).



Figure 4 : anticipation of radial particle

The particle  $\Omega_n$  is together tangential into  $(2\Omega_n)_t$  and radial into  $(2\Omega_n)_r$ . But the radial spinback of  $(2\Omega_n)_r$  is ended. It may be considered as an anticipation of the tangential

spinback of  $(2\Omega_n)_t$ . So, a virtual initial rotation  $\pi/2^n$  of  $\Omega_0$  corresponds to a virtual tangential spinback of  $\Omega_0$  before its real spinback.

This virtual spinback involves a radial virtual path  $2R/2^n$  of  $\Omega_0$  which corresponds to an anticipation of this initial horizon.

### 1.3 Dilation of the Radial Particle $(2^n = 8)$

During the rotation  $\pi - \pi/2^n$ , the radial particle  $(\Omega_n)_r$  could be dilated to become  $(2^n\Omega_n)_r = (\Omega_0)_r$ , similar to  $\Omega_0$ .

In that case,  $(2\Omega_n)_t$  would become the initial particle of the initial horizon  $(\Omega_0)_r$  which would be an initial horizon making its spinback  $2^n$  times more quickly than  $\Omega_0$  (1999, Garnier Malet).

In the three-dimensional space, this dilation (×  $2^n$ ) of the radial particle uses n=3 successive dilations (× 2). When the rotation of  $\Omega_1$  takes the initial particle  $o_0$  along, this particles takes its horizon  $\Omega_0$  along (figure 5a and 5b).



After the rotation  $\pi/2$  of  $\Omega_0$ , the velocity V of  $o_0$  on the plane xz is the velocity 2V of  $o_1$ , at the center of the space  $2\Omega_1$ .

So,  $o_0$  becomes  $2o_1$  at the center of  $2\Omega_1$  (figure 5b).

In the three-dimensional space xyz, the plane yz becomes the initial plane of the dilated horizon  $2\Omega_1$ .

But the initial velocity is now 2V on the initial plane xy.

A rotation  $\pi/2$  of  $2\Omega_1$  on this second initial plane yz corresponds to the rotation  $\pi/4$  of  $\Omega_0$  (figure 5a). With the velocity 4V of  $o_2$  on the plane xz,  $o_0$  becomes  $4o_2$  within the dilated horizon  $4\Omega_2$ .

In the same way, the rotation  $\pi/2$  of  $4\Omega_2$  in this third initial plane zx corresponds to the rotation  $\pi/8$  of  $\Omega_0$  (figure 5a).

With a velocity 8V of  $o_3$  on the initial plane xy,  $o_0$  becomes  $8o_3$  within the dilated horizon  $8\Omega_3$ , juxtaposed on  $\Omega_0$  (figure 6a).



The rotation  $\pi - \pi/8$  of  $8\Omega_3$  corresponds to the rotation  $(\pi - \pi/8)8$  of  $\Omega_0$ . So,  $o_0$  becomes 640<sub>6</sub> in the dilated horizon 64 $\Omega_6$  (figure 6b).

The position of  $64\Omega_6$  could be the initial position of  $\Omega_0$  before its two radial spinbacks into  $2\Omega_0$ , which would correspond to the tangential spinback of  $\Omega_6$  on  $\Omega_0$  (figure 6c). But the velocity of the spinback of  $64\Omega_6$  is equal to 64V. So, this spinback corresponds to the rotation  $\pi/2$  de  $2\Omega_0$  which corresponds to the spinback of  $\Omega_0$  into  $2\Omega_0$ .

So, the dilated horizon  $(8x8)\Omega_6=64\Omega_6$  makes its first spinback before the spinback of  $\Omega_0$  and after the rotation  $\pi - \pi/128$  de  $\Omega_0$ .

### 1.4 Exchange of the Radial Path and the Tangential Path

After the dilation (×2<sup>3</sup>) of  $\Omega_3$  (corresponding to the rotation  $\pi - \pi/8$  of  $\Omega_0$ ) the dilated horizon  $(\Omega_0)_r$  is similar to  $\Omega_0$ . But the radial axis of  $(\Omega_0)_r$  is not the radial axis of  $\Omega_0$  (figure 7a).



This internal dilation of the particle  $(\Omega_3)_r$  in its horizon is not observable in the external horizon  $\Omega_e$  where  $\Omega_0$  is a particle.

Initially (figure 7b), the horizon  $2\Omega_3$  on  $\Omega_0$  is virtual on the radial axis of  $(\Omega_0)_r$ .

The dilation of  $(\Omega_3)_r$  gives another initial horizon  $(\Omega_0)_r$  with a real initial particle  $\Omega_6$  which is also dilated into  $(\Omega_6)_{\text{dilated}}$  (figure 7c).

The anticipation of  $(\Omega_0)_r$  on the radial axis of  $(\Omega_0)_r$  involves a real supplementary rotation  $\pi/8$ . So, with the precedent rotation  $\pi-\pi/8$ ,  $(2\Omega_6)_{\text{dilated}}$  is ending its spinback before the spinback of  $(\Omega_0)_r$  and  $\Omega_0$ .

#### **1.5 The Doubling Transformation**

The end of the spinback of  $(\Omega_0)_r$  corresponds to a doubling of the initial particle before the end of the spinback of  $\Omega_0$ . It gives to the particle a possibility of exchanging radial and tangential and conversely, before the end of the spinback of  $\Omega_0$  (figure 8). This spinback ends this doubling transformation. With this exchange, the time's flow of the particle changes.



Figure 8 : the doubling transformation

# 1.6 The Acceleration of the Time's Flow

In the external horizon  $\Omega_e$  of the particle  $\Omega_0$ , the internal dilations of  $\Omega_3$  and  $\Omega_6$  within  $\Omega_0$  are imperceptive. Moreover, the radial motion of  $\Omega_0$  makes the 9<sup>th</sup> spinback of  $\Omega_3$  imperceptive (figure 9). But the exchange (radial-tangential) uses this 9<sup>th</sup> spinback which must be included in the dynamic particle  $\Omega_0$  of the external horizon  $\Omega_e$ .

 $\Omega_0$  corresponds to a limit of perception in the external horizon  $\Omega_e$ .

The exchanges (radial-tangential) use the accelerated time of the dilated horizon  $8\Omega_3$ and  $64\Omega_6$ . The spinback of  $8\Omega_3$  is eight times faster than the spinback of  $\Omega_0$  and the spinback of  $64\Omega_6$  is eight times faster than the spinback of  $8\Omega_3$ .

These exchanges are imperceptive in  $2\Omega_0$  and out of  $\Omega_0$ .



#### Figure 9: imperceptive dilation and exchange

In the same way, the exchanges (radial-tangential) between  $8\Omega_3$  and  $64\Omega_6$  are imperceptive in  $8\Omega_3$  and  $64\Omega_6$  and out of these horizons.

The  $10^{th}$  radial spinback into an horizon is always the first tangential spinback at the time of the dilation of the internal particle (figure 9).

So, the exchange needs an acceleration of the time's flow from 1 to 10.

This acceleration will be from 1 to  $10^3$ , during the two exchanges into  $8\Omega_3$  and  $64\Omega_6$ .

In the same time, it is from <u>1</u> to <u>10</u> into  $\Omega_0$ . So, at the end of the spinback of  $\Omega_0$  (or  $8\Omega_3$  or  $64\Omega_6$ ) the difference will be  $10^2$ .

At the end of the spinback of  $\Omega_0$ , the radial (=10) and the tangential (=1) in  $\Omega_0$  become the radial (=10<sup>2</sup>) and the tangential (=10) in  $\Omega'_0$ . So, the exchange uses an acceleration from 1 to 10 as well for the radial as for the tangential.

# 1.7 "Temporal Openings" and "Stroboscopic Time's Flows"

These exchanges of radial and tangential particles are imperceptive in the initial horizon  $\Omega_0$  but real in the dilated particle where they are other imperceptive exchanges.

The times of these imperceptive exchanges define temporal openings in the time's flow which is always a stroboscopic time's flow with a succession of imperceptive "temporal openings". These exchanges need six intermediate stroboscopic time's flows which are defined by seven embedded horizons from  $\Omega_0$  to  $\Omega_6$ .

The external particle  $\Omega_0$  is the first, the intermediate particle  $\Omega_3$  is the fourth, and the internal particle  $\Omega_6$  is the seventh. The first anticipative exchange is made in the eighth. The reverse exchange is making in the nineteenth. So, we find the initial conditions again in the tenth. When the doubling transformation is ending, the seven horizons are juxtaposed. It is the time of the exchanges of particles.

Then, a new doubling transformation is beginning: the seventh and last horizon  $2(64\Omega_6)$  of the first doubling becomes the first horizon  $\Omega_1=2\Omega_0$  of the second doubling. Three radial velocities  $C_0$ ,  $C_1$ , and  $C_2$  are necessary for two successive reconstitutions of the three embedded horizons  $\Omega_0$ ,  $\Omega_3$  and  $\Omega_6$ . During the time  $\tau$  of the 54 spinbacks of the internal particle  $\Omega_6$ , the acceleration is from 1 to  $10^6$  of the intermediate particle during the acceleration from 1 to 100 of the external particle. So (1998, Garnier-Malet) :

 $C_0 = 7C_1 = (7^3/12)10^5C_2$  $C_2 = 216(\pi R/\tau)10^4 = 54.10^6 \pi^{5/2}(\pi R_T/4\tau) = 299\ 792\ \text{km./sec.}$ 

So, a non-observable particle in an horizon may be an temporal opening in the time flow of this horizon. But this horizon may be also a non-observable particle in another horizon where the time flow is not the same.

So, the time flow is always stroboscopic with a succession of temporal openings. The embedding of dynamic horizons or particles accelerates or decelerates the time flow. This fundamental motion enables the particle to become an initial horizon where the time's flow (defined by the spinback of the horizon) is accelerated.

The embedding of horizons and particles give to the smallest particle an acceleration so that an experiment in this particle becomes instantaneous within the initial horizon.

This very fast experiment can be considered as a real future in the temporal opening of the initial horizon but it is only a potential future.

The exchange of the radial and the tangential particles into temporal openings gives to the initial particles the information of the doubled particle during the imperceptive time of their time's flow..

So, three embedding of particles (internal, intermediate, external) can mix the real past and the potential future of the intermediate particle (2000, Garnier-Malet). This hyperincursivity (1996, Dubois) gives to the particle real informations in a nonobservable time.

These informations use privileged trajectories which are defined by the fundamental motion. With two initial different particles (radial and tangential), it is possible to obtain all potential trajectories which transport all the past, present and future informations. We shall see that these two particles are the components H and O of the molecule  $H_2O$ .

## 2 The Best Vector of Informations Into an Horizon of Particles

# 2.1 The Equilateral and Potential Bifurcation of the Initial Particle

The fundamental motion of the horizon  $\Omega$  implies the exchange of the radial particles  $\alpha$  into  $\Omega$  and the tangential particles  $\alpha$  on  $\Omega$  before the end of the spinback of  $\Omega$ , after the rotation  $\pi - \pi/8$  or  $180^{\circ}-22,5^{\circ}$  (figure 10).



Figure 10 : reconstitution by anticipative juxtaposition.

The figure 11 shows us three possible bifurcations of the initial particle  $\alpha$ .

The connection between the radial path (fig. 11a) and the tangential path (fig. 11b) gives to the particle the possibility to exchange the radial path and the tangential path before the end of the spinback of  $\Omega$  after the rotation  $\pi - \pi/8 = 7\pi/8$ .

The position of  $\alpha'$  (fig. 11c) is a virtual position in an external horizon where  $\Omega$  is a particle, because  $\Omega$  makes a same radial doubling motion in the same time. This motion corresponds to an anticipation of the spinback of  $\Omega$  which defines a "temporal opening". This temporal opening is the exchange time which gives to the particle three potential and equilateral bifurcations when the initial particle is the particle  $\alpha = \Omega/8$  on  $\Omega$ .



Figure 11 : the equilateral bifurcation.

## 2.2 The Tetrahedron is the Best Initial Particle

The initial particle has one radial path and three potential and equilateral tangential paths (figure 12).

The radial particle makes the radial spinback 8 times faster than the tangential particle. So, the initial particle has 4 potential positions on the tops of a tetrahedron.

In the same way, the initial particle  $\alpha/8$  on the horizon  $\alpha$  has a radial path so that this position is the center of the tetrahedron. This center is also on the top of another tetrahedron which is moving 8 times faster than the first tetrahedron.



Figure 12 : the dynamical tetrahedron.

The fundamental doubling motion is always a motion of three embedded particles (internal ---, intermediate --, external - - -). The embedding of particles is also the embedding of tetrahedrons : the center on the intermediate (or external) tetrahedron is the top of the internal (or intermediate) tetrahedron.

#### 2.3 Dilation of the Particle in its Horizon and Temporal Opening

At the end of the radial path of the radial particle  $\alpha/8$ , the tetrahedron is dilated.

The radial top of the initial tetrahedron is a small tetrahedral particle which goes out of  $\Omega$  after the tangential rotation  $\pi/4+\pi/8-\pi/64$  of the tangential particle (figure 13). It is the internal particle.

One spinback allows this small tetrahedron to become the initial particle of the next horizon  $\Omega$ '. This spinback exchanges the radial path and the tangential path into the dilated particles  $\alpha = \Omega/8$  and  $8\alpha/8 = \alpha$ . This dilation is the consequence of the fundamental doubling motion. It is not observable out of the horizon  $\Omega$  which makes its own radial path.

The time of the spinback of the non-observable dilated particle  $8\alpha/8=\alpha$  defines a "temporal opening" in an external horizon where the horizon  $\Omega$  is a particle.





### 2.4 The Propagation of the Initial Information

The doubling motion makes periodical dissociation (fission) and reconstitution (fusion) of the initial particle. The reconstitution of the particle is making on the radial axis. However, the tetrahedron gives to the particles privileged direction (figure 14). In fact, the spinback into a temporal hole allows the particle to take ten radial axis into a icosahedron.



Figure 14 : geometrical structures in temporal opening.

The embedding of the tetrahedrons gives a succession of reconstitutions of the initial particle around the initial position of the initial particle. So, the doubling motion produces an undulatory effect with periodical reconstitution which gives again initial information (figure 15).



Figure 15 : periodical reconstitution of the initial information on one radial axis

There are three velocities of the propagation (internal, intermediate, external), so that :

 $C_0 = 7C_1 = (7^3/12)10^5C_2$ 

 $C_2$ = 299 792 km/s is the velocity of the doubling (see paragraph 1.7).

The particle gives its initial condition again into the holes of the time. These successive reconstitutions along radial axis are made with a velocity faster than the speed of light which is the speed of reconstitution of the initial particle into the flow of time.

#### 2.5 The Doubling Bonds or the Bonding Energies

The periodical exchanges of the radial paths and the tangential paths of the particles into the temporal openings need four permanent doubling bonds between the three embedded particles. A particle is always the intermediate particle between an internal particle and an external particle which are embedded in the same doubling motion. It is together on the top of a tetrahedron and on the center of another.

The periodical juxtaposition of the three tetrahedrons (internal, intermediate, external) give four bonds to any particle which is always an intermediate embedded particle : two radial bonds and two tangential bonds with the external particle and the internal particle. There are six different kinds of connections between the particles which are embedded in the same doubling transformation by four bonds (figure 16).



Figure 16 : the six kinds of doubling bonds in a tetrahedral dynamic horizon.

A particle is always at the top of ten tetrahedrons which are connected in one icosahedron. There are ten potential radial directions and ten potential tangential directions. The spinback of the internal particle allows the external particle to anticipate its privileged direction. This anticipation gives to the intermediate observable particle its new direction. This direction depends of the juxtaposition of three tetrahedrons (internal, intermediate, external). The exchanges between the radial and the tangential paths give to particles the possibility to go in any potential direction.

With the periodical reconstitution of the particle into holes of the time, the undulatory propagation diffuses initial information of the initial particle in all icosahedral directions. With the fastest velocity  $C_0 = (7^3/12)10^5C_2$  (see paragraph 1.7) in temporal opening, this diffusion is "almost" instantaneous into the horizon of the initial particle.

# 2.6 The Limits of the Diffusion of the Information

Interactions of any particle are limited by its horizon. At its turn, this horizon is a particle into its horizon. The embedding of internal, intermediate and external particles gives to any particle an anticipative information before its propagation into its horizon. But this horizon stops the diffusion of the initial information and diffuses all the consequences into its own horizon.

The internal radial particle goes out of this horizon with all informations and becomes the future external tangential particle on the external horizon. The external tangential particle goes into this horizon with one information and becomes the future internal radial particle. So, at periodical times of reconstitution, the intermediate particle receives the necessary informations to choose one of all the potential icosahedral directions.

The limit of the propagation of informations depends of the dimension of the initial particle. The dimension of the particle corresponds to the dimension of its horizon.

The theorem of three doubling energies (1999, Garnier Malet) enables us to calculate the ratio of times of exchanges between the internal and external particles.

The acceleration of the motion of spinbacks transforms 1 tangential spinback to 10 radial spinbacks during the three exchanges between the internal, intermediate and external particles. So 1 initial external tangential spinback becomes 1000 radial internal spinbacks. In the same time, 1/1000 radial internal spinback becomes 1 external tangential spinback. The above structure is a dynamic structure.

# 3 The Tetrahedral Structure of the Water

The molecule of water (1995, Gerschell) corresponds to the tetrahedron (figure 16) with hydrogen bonds which are radial or tangential, internal or external.

In fact, the doubling theory considers four kinds of hydrogen bonds which distribute information within imperceptive temporal openings, but only one kind of bonds is perceptive out of temporal openings. Because of its tetrahedral structure, the water is the best vector of the information. So, it is necessary for all living organisms. The hydric circuits of the human organism are very important : 97 % of the human embryo (one month old) is water. Without water the fast transmission of vital information, life is impossible (figure 17).

Because of the dipole moment ( $\mu$ = 1,87 Debye), the water can establish hydrogen bonds which organize the molecules to form "clusters" (1991, Watterson).

The clusters seem correspond to the horizon of one initial molecule. So, the doubling motion of the clusters could depend of the doubling motion of this molecule.

By considering some results (1995, Gerschell), it is possible to think that the vibrations of the water molecule (about  $10^{12}$  exchanges/sec.) correspond to the anticipative spinbacks between two successive clusters. In fact, according to Caro (1989, 1992), the duration of life of clusters is  $10^{-12}$ /seconde.

The present experiments don't enable us to make a precise connection between the duration of clusters and the acceleration of the time's flow within the temporal openings. However, it is clear that this connection exist : the clusters are together dynamic horizons and particles making spinbacks into their own dynamic horizons.

The hydrogen bonds of one molecule must correspond to the tangential and radial bonds with the "internal" and "external" molecules, embedded in the same doubling transformation.

At each top of a tetrahedron, the molecule disposes of ten radial or ten tangential potential directions (figure 17).



Figure 17 : the potential directions

The different choices of path determinate blocs more and less amorphous.

# 4 The Principles of the Homeopathy

With the doubling theory, it is possible to explain the five basic principles of homeopathy.

# 4.1 The Paradox of the Great Dilution

It is said that an active diluted principle into a polar solvent (water or alcohol) remains active beyond the Avogadro's number.

If this polar solvent verifies the above characters, the horizon of water's molecules where the component are introduced knows the information which is conveyed by doubling motion. The information is conveyed by a undulatory way. It is a succession of radial and tangential exchanges within temporal openings (figure 18).



Figure 18 : The tunnels of times

In fact, in these temporal openings, the particle is reconstituted. This reconstitution is corpuscular. So, the undulatory propagation is a vector of periodical and corpuscular information. The corpuscles are themselves embedded in periodical dissociation and reconstitution, but the fundamental motion is not observable within their horizon.

The velocity of the propagation into the temporal openings is so that C<sub>2</sub>>C<sub>0</sub>.

Because of the very important difference between  $C_0$  and  $C_2$  (see paragraph 1.7), this propagation can be considered as almost instantaneous. First of all, it is anticipative. The anticipation allows the hyperincursion, defined by D.M. Dubois (1996).

Benveniste (1986, 1988) says that the water has a memory.

Is it a reality ? Paul Caro (1989) says that the life of a cluster is very fast  $(10^{-11} \text{ sec})$ , so there is no possibility of memory. Del Giudice, Preparata, Vitiello (1988) says that the molecule of water is a free electric dipole laser : "As a result, one can envisage the possibility that the coherent interaction between the water electric dipoles and the radiation field fulfills the very important task of generating ordered structures in macroscopic domains (i.e., within a few hundred microns) which could then have a fundamental role in the organization of inanimate as well as living matter in the wonderful ways that physical analysis is incessantly revealing."

So, we can consider that the active diluted principle creates an electromagnetic wave. The water electric dipoles take the same orientation.

The time of relaxation can be considered as an electromagnetic memory. In fact, the information is the consequence of periodic reconstitutions into temporal openings.

These temporal openings are not static, but dynamic. They are the place of radial and tangential exchanges which are exchanges of time's flows. So we can say that the memory of water is not a static memory (Read Only Memory) but a dynamic memory (Random Access Memory) resulting from permanent exchanges of informations.

# 4. 2 The Succussion of the Homeopathic Solution

When an homeopathic solution is agitated, its activity is stimulated.

The agitation of the solvent actives the radial and tangential exchanges and also the anticipation. So, the succussion implies a best propagation of the information. The information is given to the particle by these exchanges which use the acceleration of the time's flow.

# 4.3 The Converse Effect

An basic idea of the doubling theory is the converse effect which transforms an horizon of particles into a particle within another horizon. Moreover, the doubling needs seven embedded horizons. The clusters are the horizon of initial particles which becomes particles in their horizon. These horizons are amorphous blocs. The radial pulsation of these blocs corresponds to the radial and periodic reconstitution.

# 4.4 The Arndt and Schulz's law

The biologic activity grows up with the high dilution. The exchange of radial and tangential corresponds to the dilation of the initial particle (see paragraph 1.4) which becomes an initial horizon within temporal openings of the initial time's flow. This dilated horizon which owns the initial information gives to the initial horizon this information. At its turn, this his initial horizon becomes an initial particle within its own horizon. Each of their particles becomes the initial particle owning the initial information.

#### 4.5 The Hering's law

An illness is more serious when it goes from the periphery to the inside. Dr Elminger adds that the corporal physical or psychical traumatisms involve biological disturbances which obey to a chronological order. To suppress the consequences of these traumatisms, it is necessary to cure the effects of these traumatisms in a reverse order. Without this reverse order, the biological unbalances are worsened.

The last particle is always the first reconstituted horizon.

# 4 Conclusion

In the present discussions about the homeopathy, there are two contradictory explanations. Researchers separate the undulatory aspect and the corpuscular aspect of the solvent and of the solute. <sup>2</sup>Authors who only consider the undulatory aspect suppose that the great dilution into a solvent does not conserve all the corpuscular proprieties of the solute.

Lasne, Berliocchi, Conte (2000) consider that the high dilution of a solute implies the formation of "white holes" in the solvent but this explanation is presently an assumption which does not correspond to a corpuscular observable phenomenon. In fact, the dilution could create a "white hole" which could create a neutron wave. Oxygen 17 and tritium could be created by this wave and could imply radioactivity  $\beta$ . This radioactivity is observable and measurable (film bêta-max). But the rarefaction of the active produce by dilution is not a corpuscular phenomenon.

Other authors, who consider only the corpuscular aspect, suppose that it is impossible to transport a chemical propriety of the solute into the solvent when the dilution is too important.

As Caro (1989), Lehn (1989) says "the phenomenon, called memory of water is not compatible with present physical and chemical knowledge"

Sometimes, this importance is so that the number of molecules of the solute is not significant in comparison with the Avogadro's number  $(6,023 \ 10^{23})$ : this limit corresponds to 12CH (dilution  $10^{-24}$ ). After 12CH (that is to say: more than the Avogadro's number), the homeopathy seems to have no logical explanation if you consider that the information is only corpuscular.

With the holes of the time, the paradox of the great dilution disappears. In fact, the periodical corpuscular reconstitution in the holes of the time creates an undulatory information which is "almost" instantaneous (see  $C_0$  and  $C_2$ , paragraph 3.1.1).

The dilution is an undulatory operator of a cyclic corpuscular phenomena. The corpuscle emits a wave within temporal openings.

Because of the acceleration of the time's flow, the velocity of this wave is "almost" instantaneous in the horizon of the corpuscle.

By definition of the temporal openings, the undulatory effect does not appear. The cyclic phenomena within temporal openings disappear : the time between dissociation and reconstitution of doubled corpuscles is too fast to be observed.

Finally, the acceleration, the deceleration or the inversion of the proprieties of the solute can be the consequences of the embedding of the horizons.

An horizon of a particle is always a particle in another horizon.

The boundary which determinates this transformation allows the particles to exchange radial and tangential paths.

That explains possibilities to modify the chemical proprieties of the solute.

# References

- 1. Hahnemann S. 1984, L'Organon de l'art de guérir, 6° édition, traduit de l'allemand par R.C. Roy, Editions Boiron.
- 2. Elminger J., 1985, La médecine retrouvée, Lausanne (Suisse).
- Poitevin B, Aubin, M., Benvéniste J., 1986, Approche d'une analyse de l'effet d'Apis mellifica sur la dégranulation des basophiles humains in vitro, Innovation et technologie en biologie et médecine, vol 7, pp 64-68.
- 4. Cazin J.C. et Cherruault Y., 1986, Etude pharmacologique de dilutions hahnemaniennes sur la retention et la mobilisation de l'arsenic chez le rat, Fondation Française pour le Recherche en Homéopathie, Lyon.
- Davenas E., Poitevin B., Benvéniste J., 1987, Effect of Mouse Peritoneal Macrophages of Orally Administratered Very High Dilutions of Silicea, European Journal of Pharmacology, vol 135, pp 313-319.
- Cazin J.C., Cazin M., Gaborit J.L., Chaoui A., Boiron J., Belon P., Cherruault Y., Papapanayotou C., 1987, Study of the Effect of Decimal and Centesimal Dilution of Arsenic on Retention and Mobilization of Arsenic in the Rat. Human Toxical, vol 6, pp 315-320.
- 7. Del Giudice E., Preparata G., Vitiello G., 1988, Water as Free Electric Dipole Laser, Physical Review Letter, vol 61, pp 1085-1088.

- 8. Poitevin B. Davenas E., Benvéniste J., 1988, In Vitro Immunological Degranulation of Human Basophils is Modulated by Lung Histamine an Apis Mellifica, British Jouranl of Clinical Pharmacology, vol 25, pp 439-444.
- 9. Benveniste J. 1988, Dr. Jacques Benveniste Replies, Nature, 28 July, 334, 291.
- 10. Caro Paul, 1989, Les structures de l'eau liquide, Journal International de Médecine, supplément au n°136, septembre.
- 11. Lehn J.M., 1989, cours au Collège de France.
- 12. Watterson J.G., 1991, The Interaction of Water and Proteins in Cellular Function. Prog. Mol. Subcell. Bio., vol 12, pp.113-134.
- 13. Caro Paul, 1992; De l'Eau, Hachette, Paris, p. 135.
- 14. Amato I, 1992, A New Blueprint for Water's Architecture. Science Vol 256, p 1764.
- 15. Fabrocini, V., 1992, cours d'homéopathie, médecine naturelle énergétique et psychosomatique, Ed. de Vecchi, Paris.
- 16. Gerschell A., 1995, Liaisons intermoleculaires, InterEditions-CNRS Editions, chap. 7.
- 17. Conte R.R., Berliocchi H., Lasne Y., Vernot G., 1996, Théorie des hautes dilutions et aspects expérimentaux, Polytechnica Paris.
- Dubois, Daniel M., 1996, Introduction of the Aristotle's Final Causation in Cast: Concept and Method of Incursion and Hyperincursion in Computer Aided Systems Theory – Eurocast'95. Edited by Pichter, R Moreni Diaz, R. Albrecht. Lecture Notes in Computer Science, vol. 1030, Springer-Verlag, Berlin, Heidelberg, New-York, pp 477-493.
- Garnier Malet J.P., 1998, Modelling and Computing of Anticipatory Embedded System : Application to the Solar System (Speed of Light). International Journal of Computing Anticipatory Systems, Ed. by D.M. Dubois, Publ. by CHAOS, Liège, Belgium, vol. 2, pp. 132 à156.
- Garnier Malet J.P., 1999, Geometrical Model of Anticipatory Embedded Systems, International Journal of Computing Anticipatory Systems, Ed. by D.M. Dubois, Publ. by CHAOS, Liège, Belgium, vol. 3, pp.143 à159.
- 21. Conte R.R., Lasne Y., 1999, Theory of High Dilution and Experimental Aspect, An Overview, Biomedical Therapy, vol 17, n°3.
- 22. Lasne Y., Conte R.R., Berliocchi H., 2000, Théorie des hautes dilutions, application au vivant, Polytechnica Paris.
- 23. Garnier Malet J.P., 2000, The Doubling Theory, International Journal of Computing Anticipatory Systems, Ed. by D.M. Dubois, Publ. by CHAOS, Liège, Belgium, vol. 5, pp. 39 à 62.
- 24. Garnier Malet J.P., 2001, The Three Time Flow of Any Quantum or Cosmic Particle, International Journal of Computing Anticipatory Systems, Ed. by D.M. Dubois, Publ. by CHAOS, Liège, Belgium, vol. 10, pp. 311 à 321.