

## Syntropic perception of time<sup>1</sup>

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### 1. Entropy and syntropy

Our composed reality is fleeting and transitory. Everything that is composed of different parts is subjected to changes within the flow of time. A common view of ordinary people is identification with the world of *discretely manifested forms* (Skt. *rūpadhātu*). From such a standpoint, one obviously envisages the unescapable collapse of one's imaginary identity. This dismal worldview is due to the illusion of *separate Self* (Skt.: *ātman*). Through history, this illusion has also engendered the widely accepted pessimistic perception of time – especially in western culture (Europe and North America). *Charles Baudelaire*, for instance, wrote in his poem *L'ennemi*:

... Ô douleur! Ô douleur! Le Temps mange la vie,  
et l'obscur Ennemi qui nous ronge le cœur  
du sang que nous perdons croît et se fortifie!

(... Alas! Alas! Time eats away our lives,  
and the hidden Enemy who gnaws at our hearts  
grows by drawing strength from the blood we lose!)

Poets are very sensitive to unspoken signs of the prevailing cultural atmosphere within certain historical period. It was during the 19<sup>th</sup> century when the famous *Law of entropy* (*The Second Law of Thermodynamics*) was formulated as one of the basic laws in the classical thermodynamics. This law declares that the overall *entropy* (which is mathematical formulation of *chaos*) is always growing. So the *arrow of time* is always pointing from order to disorder, towards a final destruction of ordered structures; it is pointing in direction towards primordial chaos. And because science is now so important (for so many it even occupies the throne of a modern religion), pessimistic perception of time even got a “scientifically verifiable” support. Such a perception is named *entropic perception of time*.

This negative view thoroughly impregnated everything in our modern world: science and art, social relations, politics and economy, even everyday life. Entropic perception of reality has very deep *philosophical implications*, with enormous influence on modern global society. Most of this influence is active on the subconscious level, or on the level of *Jung's* archetypes. In short, very few people are consciously aware of its roots in the past period.

But on another level of consciousness, there exists also quite different perception of time, and I do believe that it is even much more primordial. People, animals, even plants, all of them are longing

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for a life fulfilled with happiness, endowed with absence of suffering. All these living beings grow and breathe in the *collective flow of time*, they joyfully vibrate in temporal rhythms of the whole Universe, and they long to be extended in the all-embracing beauty of universal symphony. And *time* is an important natural parameter in this symphony, like it is in every piece of music.

Definitely, longing of these beings does not grow along the temporal line of destruction. Their perception of time is not the entropic perception; it is not oriented in that philosophical direction of time. Their feelings are so primordial, so original and ever-new, that they cannot be explained in terms of *classical thermodynamics*; they cannot be explained by tools and models borrowed from our official scientific knowledge. Namely, scientific community adopted rational languages of communication, while the inner truth of living beings cannot be intellectually explained. It can be silently observed through the innocent, dispassionate, vivid eye of intuition.

From this spiritual standpoint, our *inner perception of time* is based on continuously active feeling related to the *bliss of pure existence*. But this is something quite opposite to the entropic perception of time! It has nothing to do with final destruction and chaos. We shall call it the *syntropic perception of time*.

## 2. The law of syntropy

Here it is obvious to explain the profound philosophical meaning of this word: *syntropy*. Let us start with its meaning in the realm of natural sciences. Does the idea of syntropy have a place in natural science, also in physics? The word *syntropy* was quite a new term introduced first into biology (odd 50 years ago, by *Luigi Fantappiè* and *Albert Szent-György*); but now this word has found place also in physics and mathematics.

The word *syntropy* is used in two meanings: in mathematical sense, it is *negative entropy* pertaining to complex non-linear dynamical systems; and with regard to natural phenomena, it represents the *self-organising ability of nature*. In the strict sense, the new idea of *syntropy* relates only to those natural processes that do not obey The Second Law of thermodynamics (we have mentioned it in the beginning).

For a long time since its foundation, *The Second Law* seemed to be firmly established and resistant to further modifications. But practically all physical laws, even the most fundamental laws, are due to ameliorations and modifications. Through centuries, through development of scientific theories, they find a new position: they assume the role of a special case inside a wider theory. For instance, the *Newton's* classical mechanics became a limiting case in the *Einstein's* theory of relativity.

In the last few decades, maybe from the 1980's onwards, there appear a growing number of new theoretical and experimental arguments saying that the universal validity of the Second Law is limited. It was found that certain complex quantum systems can *grow towards a state with higher internal order* – even without external influence. Therefore, Nature displays a *self-organizing ability*, and it is called *syntropy*. Knowledge about it is a new scientific discovery, a promising finding that is not compatible with the sinister Second Law. Szent-György used this idea in biology, but now it is proved also on the level of mathematics and physics. In the following, we shall call it the *law of syntropy*.

### 3. As above so below

It is well known that new scientific discoveries have always enormously influenced our lives and our perception of reality. There is no need to explain how *quantum physics* has changed, and is still continuously changing our everyday life. On practical level, this “quantum influence” is exposed with new and new electronic devices (memory chips etc.); but maybe even more important is the long-term influence on psychological and spiritual level, on the level of our subtle understanding of reality. The first hint to quantum nature of the human psyche can be found in the Bohm’s book *Quantum Theory* (the famous physicist *David Bohm* was *Krishnamurti*’s friend), but later the idea of quantum mind was presented in many other books, for instance in the *Danah Zohar*’s classic *The Quantum Self*.

And now, if the law of entropy so much influenced and solidified our *entropic perception of time*; and if we know that there is also the *law of syntropy*; it is high time to see in some more detail how this law of syntropy is going to influence our spiritual perception of reality. We shall see that the main paradigm-shift turns around the *syntropic perception of time*.

Spiritual truths are not isolated from natural laws. There is nothing like a “yawning gap” between spirit and matter. “As above, so below”, is the often cited quotation of *Hermes Trismegistus*. Whatever happens on some definite level of reality applies also to any other level. We can no more say that the material world is changing along the *entropic direction* of time; while the sentient world is running along the *syntropic direction*. Now it is time to surmount this apparent dichotomy.

### 4. How does time arrow get into our reality?

Again we must turn back to explanation of disadvantages and problems of the old scientific paradigm. Now our cardinal question will be: How does *direction of time* enter into the fundamental laws of physics?

This question has always been a great problem of theoretical physics, and has a very special place in the theory of *thermodynamics*. But this problem is not so easily solvable by methods used in orthodox natural sciences. Most physicists do admit that we have not yet found an adequate solution to the famous *problem of time arrow*. Namely, practically all fundamental physical laws are totally *symmetrical* in relation to temporal direction. (The only exception is the so-called *weak interaction* in particle physics – but its meaning is left still unexplained.) If we observe physical phenomena (phenomena in mechanics, in electricity and magnetism, and so on) and their evolution in time; and if the direction of time was *reversed* (just like if a film was played backwards), then these physical phenomena would fulfil the *same basic physical laws*. Therefore, fundamental physical laws do not give priority to some definite time direction. Then, how does time arrow get in?

In scientific literature there we can find innumerable explanations to this problem. Practically all of them are based on the *statistical interpretation* of temporal *irreversibility* (this proof-method started with *Ludwig Boltzmann*), but they do not get any bit further. A critical analysis shows that statistical interpretation does not reveal an adequate answer, because statistical interpretation of

irreversibility is always based on *temporally asymmetrical initial conditions* – so we have introduced initial temporal asymmetry into our argumentation, and this kind of reasoning is entrapped in a *vicious circle*.

## 5. Great liberation of time

An adequate answer to this dilemma is, to my opinion, much simpler than one might expect – but until now the answer was not sought in the right place. So long as we are observing our world *classically* – in the sense that our physical model of the world does not include also the *observer's consciousness* (this is the classical Cartesian dichotomy between the thinking mind and inanimate matter) – so long time does not manifest any preferred direction, and this is evident from the fundamental physical laws that are all invariant to the direction of time. The observer can see *entropic physical structures* that degrade and dissolve through the flow of time, accordingly to the Second Law. Simultaneously the observer perceives also *syntropic physical structures* that evolve themselves towards more and more complex quantum organisms, vibrating in the syntropic direction of time.

At this point we are still completely free to choose any one of the two time directions. We could live either onwards or backwards. Namely, physical laws are invariant to the direction of time arrow. But what is new is that knowledge about syntropy is liberating, since we are no more entrapped into the framework of the entropic perception of reality. We do not need some *initial condition* (low entropy at the beginning of the Great Time, in the moment of Big Bang), because low entropy is at any time simultaneously created by syntropic processes in Nature. There is an *internal balance* between entropy and syntropy.

If we are prepared to dispassionately observe this subtle balance, we experience a great change in the way how we understand the deepest nature of time. Within an instant, we are liberated from all preconceptions about some fatal pressure that may be related to the secret nature of time (and which, as some people say, may be acting from the past towards the future). We feel completely liberated from any theories of this kind. And now when we are moving freely in time, maybe forwards or maybe backwards or without moving at all, then we know that time has lost those invisible hooks by which it can be measured. It is like *unmeasurable Aether*. In brief, this is a new kind of spiritual freedom that has been experienced never before, since until now (especially in the Western society) we have been caught into this or that theory about some unique time direction. And from the standpoint of this new *mystic insight*, we can finally perceive the answer to the old dilemma about the arrow of time.

## 6. Unique direction of time

Calm abiding in the open air of this fresh and serene (and yet indescribable) freedom is silently revealing an apparently shocking truth: free choice of time direction is a great illusion. Namely, we cannot exclude the *observer's consciousness*. My consciousness and your consciousness, and also consciousness of just every sentient being, is going along the *syntropic time direction*, in direction of informational increase (increase of syntropy, decrease of entropy), along the direction of *cognition*. Let us imagine a different kind of being: a being that would decide to exist in the

opposite (*retrograde*) direction of time, so that this strange being would try to live *backwards in time*. This being could not get any knowledge about our common world, so for us, this being would cease to exist in the first origin of its existence.

Therefore, hypothetical sentient beings that are living in the opposite direction of time cannot be visibly manifested within our own experienced reality. So this is the reason why one particular direction of time (and this is this experienced direction of time) is continuously getting new touch towards the future, and so *it survives*; while the opposite time direction disconnects itself from reality, and vanishes. Through this subtle way, the *great Time* does enter into the conscious experience of every sentient being.

So our unique direction of time enters into our experienced (physical) world *together* with the eternal phenomenon of consciousness – and all beings are endowed with it. Deeper understanding of time is an extremely powerful mystic experience. It can be neither reduced nor expressed in some rational “scientific” language, language of the orthodox science which is based solely on observation of the “objective”, material world. We have said that until now all our efforts to explain the hidden nature of time direction were spent in vain – but it was so just from this Cartesian deficiency in scientific methodology. *Conscious experience is fused together with the experience of time direction*, but this has nothing to do with classical thermodynamics, nor can it be explained by its help. Contrary to the old science of thermodynamics, *cognitive science* has found the first tracks of the new scientific language.

## 7. Calm abiding in time

And now we shall ask ourselves also about our understanding of *love* – with relation to the newly discovered syntropic perception of time. Let us explore what love is, let us put it into the midst of our questioning.

Poets often say that love is perpetual unveiling of life. But in the ordeal of love, everyone’s existence is faced with ever-new understanding of time. Therefore, as the philosopher *Alain Badiou* says, love is continuously inventing a new kind of duration in life. “The bliss of love is the proof that time can entertain Eternity.” (see: *Éloge de l’amour*)

When a sentient being experiences a moment of awareness, this moment is not an isolated and dimensionless point, but rather an open *duration* in time – as the philosopher *Henri Bergson* understood it already a century ago. Bergson’s *duration* is rooted in the present conscious moment but spreads over past, present and future. In terms of modern quantum physics, this duration is described mathematically as *informational interconnectedness* in space and time (*quantum coherence* or *Bohm’s holomovement*). Quantum nature of duration engenders a new quality: calm abiding along both directions of time. A quantum being is not attached to any direction of time, and this is felt as the original freedom with respect to time (we have just spoken about this). In practice this means that every being has its own freedom to decide, completely autonomously, for its own direction of time. In this mystic origin, one cannot declare whether the world is entropic or syntropic – it is neither this nor that.

## 8. Origin of love

And lo! – As beings breathe and vibrate together in the Universe (in Buddhism this is known as collective existence, *dependent arising*, Skrt. *pratīyasamutpāda*), from love of this commune existence all of them do decide to live in *the same direction of time*. If this was not so, there would not be any interaction among beings. Isolated entities would dwell in the Universe.

Maybe some primitive quantum entities, for instance certain *elementary particles*, can really exist in the reverse time direction. A certain law from particle physics (known as the *CPT invariance*) says that exactly this happens to *antiparticles* (for instance *antiproton*): they experience negative time direction, so they *annihilate* themselves as soon as they enter our world of positive time direction.

But all those less primitive, let's say "evolved" beings with more complex internal structure, all those are pregnant with knowledge about our common direction of time. This knowledge is silently inscribed in their bodies (our bodies) since these bodies are internally structured in space and time. Sentient beings tune themselves into our common direction of time, because it is beneficent to all of them. Beings accept common time as the prime binding agent of their innermost physical existence.

## 9. Time as the binding agent of sentient reality

Syntropic vibration of physical structures in space and time is pervading all beings in the Universe. It is based on the mutually *agreed direction of time*, and so we can say that evolution that is acting inside diverse beings is mutually supporting. This vibration is like "spiritual music" that all sentient beings experience on the deepest level of consciousness, and simultaneously, this universal symphony is acting at the root of their physical existence.

So we can say that beings are tuned together in their *collective direction of time*. We have mentioned that this law applies even to the tiniest physical entities, elementary particles. Subtle awareness of a unique joint time direction is the deepest foundation for *love* among sentient beings. So here is the prime origin of love, and here is its prime purpose. This novel explanation has precise significance in the realm of theoretical physics, but nevertheless it has also a deeper spiritual meaning.

Love is not some isolated idea in the realm of human emotions, it is not some mysterious mystic power; it is rather a clearly determined quality in relation to the temporal structure of our Universe, a quality that is most easily found when manifested forms exhibit elaborate structural complexity in space and time.

## 10. Two rivers of time

In certain sense, the unique direction of time includes both the syntropic aspect and also the entropic aspect of time arrow. Both aspects are entwined together. Manifested beings grow in the blissful joy of life, and simultaneously they dissolve into modified forms. Both aspects are necessary, each pole is obvious for the existence of the other one. We did not know syntropy and so we were out of balance. But as soon as we recognize the existence of syntropy, we also

understand the subtle balance between the *syntropic* (with regard to evolution) and *entropic* (with regard to involution) nature of reality.

There is a parable about two rivers running in two opposite directions but still entangled into a single flow. When they touch each other in union, thousands of delicate streamlines from both sides formlessly entwine together and resound inside a common melody. This sound is our manifested (“visible”) reality. In science, the fusion of two opposite time directions is known as the *Kramer’s interpretation* of quantum physics. We find a similar picture in mythology of many traditional cultures: Fusion of two opposite flows is represented by a *sacred tree* with roots and branches leading both into Heaven and Earth (a tree and an inverted tree fused into one). This sacred tree was named *Yggdrasil* (in Scandinavian mythologies), or *Aśvatha* (in the Indian epic Mahabharata), etc.

If we can see both aspects of time fused together, then maybe we are even able (but able only *apparently*) to bring the flow of time to a standstill, and from this point we can silently observe the mysterious origin of time. The great daoist master *Lao Zi* wrote:

From eternal non-existence we serenely observe the mysterious beginning of the Universe,

From eternal existence we clearly see the apparent distinctions.

These two are the same in source but become different when manifested.

This sameness is called profundity. Infinite profundity is the gate whence comes the beginning of all parts of the Universe.