

*Current topics viewed in the light of the Ancient Wisdom or Theo-sophia — the common source of all great world religions, philosophies and sciences* 

### The basis of Trust

You are more than your depression

### Chance or law?

How 'the struggle for existence' gets more and more out of fashion

Recent research into planet Jupiter

The inner growth of animals and plants



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### **Chance or law?** *p. 79*

The notions *chance* and *probability* play a major role in modern science, for instance in the quantum theory of physics, the mutation theory of biology, and the game theory (often applied in economics and psychology). On what observations do scientists base the concept of chance? And are we able to understand the facts observed by them in a different way, in a *theosophical* way?

Henk Bezemer



### How "the struggle for existence" gets more and more out of fashion *p*. 84

It is no point of discussion that Darwin has done fantastic research. But the later materialistic interpretation of these observations, namely that struggle and chance are the basis for evolving life, is more and more under pressure.

Bouke van den Noort

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As usual, the editors of *Lucifer, the Light-bringer* try to apply Theosophia to all kinds of issues and problems that are relevant today. Theosophia is not just a dusty doctrine just to be studied, but a practical philosophy of life, applicable to every problem.

One of today's biggest problems is the large number of people suffering from depression worldwide. The number is so great that some speak of an epidemic. A study group has been discussing this enormous problem for more than a year. An attempt has been made to analyze what a depression is, how it develops and, above all, what we can do to prevent depression and how we can help people who suffer from it.

This issue also includes two current scientific topics, that both have a clear social impact as well. In the article *Chance or law* we discuss scientific notions of chance and probability. They play an important role in for instance the quantum theory of physics, the mutation theory of biology and the game theory. Are we able to understand the facts observed by scientists in a theosophical way? Another article is about the biological assumption that everywhere in nature there is a struggle for existence. However, there is a growing number of indications and evidence that this assumption is no longer tenable and, fortunately, becomes out of fashion.

*The basis of Trust* deals with the psychological problem that authorities no longer trust subordinates, just as people increasingly mistrust each other. However, you can also approach your fellow man with a basic positive attitude. Then another kind of society is born.

Furthermore, we publish two short articles that place recent discoveries in a theosophical light: one about planet Jupiter; another one about the adaptability of plants.

Finally, some questions asked to us are answered in the section Question & Answers.

We hope that this issue may contribute to the practicality of Theosophia. We are convinced that the world needs this age-old Wisdom-Religion more than anything else. Your comments, questions and feedback will be, as always, highly appreciated. They help us to improve our magazine.

The editors



### **Key thoughts**

>> Trust is acting on the principle of Unity.

>> The basis of trust is Self-Confidence, to confide in the Higher Self.

Self-Confidence originates in Self-knowledge.

Self-Confidence is always growing.

Self-Confidence is the source of trusting others.

>> Forgiving is renewing trust.

>> The purest form of selfconfidence is self-forgetfulness.

## The basis of Trust

What is confidence or trust? How does it work? And why is it so important to trust others, even if they violate our trust?

The founder of the Theosophical Society, Helena Petrovna Blavatsky (1831 – 1891), was tested in several ways, one of which was trust. People, who initially were her friends and benefited from her, later disreputed her. Therefore, it is surprising to read her explanation in a letter to a friend on why she continued to trust people, although she knew many had betrayed her:

Each one of us is a piece of charcoal, more or less black and, excuse me, stinking. But there is hardly any piece so vile and dirty that it has not atoms wherein lie the germ of a future diamond. And I keep my eye fixed on these atoms, and do not see the rest, and do not want to see. As I work for others and not for myself, I permit myself to use these atoms for the common cause.<sup>(1)</sup>

How is it possible that Mme H.P. Blavatsky continued to trust people, even though her trust was betrayed time and time again? What is trust? How does trust work? And why is it important that we continue to trust people, even though they violate our trust?

### The basis of Trust

H.P. Blavatsky once again publicly announced the Theosophia, more elaborate than ever before. She was able to convey this 'Wisdom of the Gods' because she had been trained for many years and she had aligned her life with this wisdom. In this way she had become a living example of her message. This 'Divine Wisdom' was also the fundament of her trust, in herself and in others. It focuses on the idea of unity and the fact that a human is a composite being that flows forth from the Higher Self.

### Unity

According to Theosophia, there is one boundless Life that flows through everything, one Truth of which we are all a part of, one Source from which all life flows. Unity is the central thought. We are only seemingly independent: the idea that we could exist separate from one another is an illusion. The self-conscious awareness of this unity, unification, is the goal of all religions. As a result of this unification, the identification with the All, Nature opens all her secrets to us because we have fully identified with her.

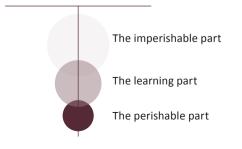
### The Higher Self

According to the idea of unity, all beings are essentially one. However, as a manifestation of that one boundless consciousness, they are composite. In this manifestation there is always duality, a distinction between spirit and matter, between consciousness and its instrument. Consciousness can only be effective and develop further if it uses a vehicle, a body with its survival instincts and life energy. But the essentially infinite and pure consciousness or spirit cannot work directly through the body. Therefore, it makes use of a 'transformer', a learning part that increasingly expresses the infinite potential of the imperishable consciousness. This part is also referred to as the soul. We, human souls, learn to express consciousness through the faculty of thought. And with the faculty of thought we have developed self-awareness as well. We can say 'I' to ourselves and have a sense of self, we can reflect on ourselves as an acting individual.

Using this self-awareness, we can choose to identify with our body, our transitory and vehicular part, the lower self or lower nature on the one hand, or with our spirit, our imperishable and universal part, the Higher Self or higher nature on the other hand.

If we follow our personality or the lower self, we say, 'I am me' and see ourselves as separated from others. If we follow our Higher Self or our higher nature then we say, 'I am' and we see ourselves connected to others or even completely one with the All: 'Ahim asmi parabrahman', 'I am Parabrahman' (the Boundless), according to universal eastern mysticism. From this perspective, the personal 'self', considered as something independent, is an illusion. Likewise, the 'other', considered apart from us, is an illusion. From the standpoint of the Higher Self we experience only unity and we cooperate with Nature, because we have become one with it.

#### The Boundless



### What is Trust?

Trust starts with self-confidence or self-trust. If you do not have confidence in yourself, in your own thinking and acting then you will not succeed in trusting others either. Confidence therefore depends on how you see yourself and to what extent you are aware of this. Based on the distinction between lower self and Higher Self, we can approach and define trust from at least two levels. We can speak of Trust with a capital letter and trust with a lowercase letter. We will explain this below.

### Self-Confidence versus self-confidence

Truly Trusting (with a capital letter) is what we do when we reason from the Higher Self. Trust then means that we (intuitively or consciously) start from Unity, from one Reality, one Truth, the one Self that we essentially are and one Law that works through everything. The etymology of the word 'trust' also shares the same root as the word 'truth'.

This Trust is based on Self-confidence with a capital S. You start from the Higher Self that connects you to the totality. You are aware of the unity, you do not see others as separate from yourself and you recognize your responsibility in the whole. You have confidence in your own actions because you follow a selfless motive and you know that any compassionate act will eventually lead to a harmonious consequence, in accordance with the strictly just Laws of Nature. But you also realize that you are not omniscient, which is why you are always open to learn. You forget yourself in the service of others and thus eliminate any uncertainty or doubt about your own behavior, even though sometimes you may experience setbacks or make mistakes. Whatever happens to you, you see it as a lesson and you know that you will find clues to deal with any situation as long as you are open to the influences of the Higher Self: your conscience, intuitions and compassion. In the case of self-confidence with a lowercase letter, the self-image is based on the personality, a self or an 'I-am-me' that is detached from others. In that case self-confidence is the result of a comparison of this self-image with what you assume to be reality.

If the ideal image of yourself is based on transient qualities that belong to the lower self, on externalities such as status, fame or beauty for example, then this can create the appearance of self-confidence as long as this is confirmed by others. For example, you have been given a high position and everyone is looking up to you. You have made a name for yourself and people want to take selfies with you. You are driving in an expensive car and people turn their heads, et cetera. This sort of confirmation is based on looks or reputation; on the way others perceive you. It comes from outside and therefore it is never enough. You will always need the confirmation of others because it does not come from within yourself. The same applies to the use of 'social media' that often reduces self-confidence. People can create an online image of themselves that they cannot actually live up to, which needs the confirmation of something that is outside of them: the likes, shares and retweets of others. And they mirror themselves to the equally distorted images that others create of themselves. Moreover, the personal form of self-confidence is always temporary. If, for example, people are not doing so well for a moment and they cannot share any cheerful pictures on Facebook, this will result in fewer likes. Or if they derive their self-confidence from physical beauty, this will decrease, as they get older. In the personal perception of reality, they can no longer live up to their own 'ideal' self-image because people will no longer look at them, which may lead to seeking refuge in plastic surgery for instance.

### Growth in self-confidence

An average person is sometimes led by his lower self and acts according to personal and selfish motives, and sometimes by the Higher Self and thus follows a selfless and impersonal motive. In general, he is not very aware of this yet. Only rarely, therefore, do we meet exactly one of the two extreme forms of self-image and self-confidence outlined above. There is usually a hybrid form, which means there are many gradations of trust. However, even just becoming aware of this already means that you can create freedom of choice for yourself to follow one of the two directions: self-confidence or Self-Confidence. Self-Confidence therefore stems from Self-knowledge.

Thus, the realization that we can grow from self-confidence to Self-Confidence is the first step to growth! For example, if you first learn to drive a car you will probably have less self-confidence, consciously or unconsciously, doing that. The more you actually see that you are improving, the more self-confidence you gain. Until you master it to the extent that you know that you are self-reliant in any traffic situation. And if you do make a mistake at some point, then you do not doubt your ability anymore, but just take it upon yourself to do better next time. Because you know that you have that ability in you. Confidence can therefore always continue to grow.

It is important how you view yourself: as something static or as something that is always growing. From the viewpoint of the Higher Self, we are essentially infinite, and we are eternally engaged in expressing more of the boundless abilities. We know that we are always learning. You cannot express the Higher Self in its entirety, but you know that it is what you are in essence and so you are always growing. From the personality or the viewpoint of the lower self, we are often inclined to restrict or crystallize our self-image. After all, we just are who we are, we say. If people start telling themselves 'I cannot drive', they will focus on the mistakes they make, which confirms their limited self-image. And that is how they mold reality according to their own limitations.

In short, true Self-Confidence arises from Self-knowledge, which is based on the Higher Self. From the point of view of the Higher Self, Self-Confidence is ever growing. The more we learn to know our Self and with that the totality, the greater our Trust is. Because we realize that our personal, lower self is illusory, there is no comparison. This Self-Confidence cannot be destroyed. It does not come from outside and is not dependent on others, nor on circumstances. In all circumstances we can recognize a challenge or lesson to express more of the Self. Self-Confidence requires continuous attention; the increasing expression of the Higher Self.

This Self-Confidence also translates into real confidence in others, like the trust shown by Mme Blavatsky.

### Trusting (in) others

If you start from the Higher Self, which is essentially one with the whole, there is a boundless trust in others. Because the Higher Self of another person differs in nothing from ours. Each being is essentially connected to the whole through the Higher Self and we are therefore in reality one. When we reach that unity (relatively speaking, because there are no absolute finish lines in the boundless, but for example in the way a human reaches Buddhahood on a human level) 'trust' is no longer the right term, because it has become direct knowledge. We have identified ourselves with others completely and have become one with that essence from which all of us emerge. Any doubt that we differ from others has disappeared.

As long as we have not reached this complete identification with others, we do not speak of knowing, but can only speak of trust. In the style of Lao-tse (*Tao teh Ching*, verse 18) you could say: as soon as the Tao (Unity) disappears, trust will appear. And with trust also comes the opposite: distrust. In other words: trust is inherent to our duality and the free will to choose between the suggestions of the Higher Self and the tendencies of the personality or lower self. However, once we have developed the Self-knowledge that enables us to distinguish the Higher Self from the lower self, we can, using our free will, also choose to let one of the two reign. And we can continue to do the same towards others. Perhaps this is what Blavatsky meant when she wrote:

And I keep my eye fixed on these atoms [namely those "wherein lie the germ of a future diamond", in other words wherein the connection to the Higher Self can be found – E.B.] and do not see the rest, and do not want to see.<sup>(2)</sup>

### Resonance

Self-Confidence therefore translates into trust in others. Because all beings are essentially one, we resonate with each other. When we trust in our own higher nature, when we adopt a selfless attitude, we radiate it to others. Without this having to be apparent from our words or our behavior, we cause an equal vibration in the other



Painting 'Pygmalion et Galatée' by Jean-Leon Gerome (1824-1904). It depicts an ancient Greek myth: the sculptor Pygmalion creates a sculpture that is so beautiful that he himself falls in love with it. He asks the Goddess Artemis (Diana) to bring the sculpture to life; a request that the goddess eventually meets. In psychology, the term 'Pygmalion effect' is used to indicate that if a leader has high, positive expectations of his employees, those employees will indeed be more capable. person. If the other person relies on his higher nature as well and is open to his intuition and conscience, there can be direct trust between two people who have just met. Scientific research has also shown that this can make quite a difference. In education there is a famous study, 'Pygmalion in the classroom'. In the study, a group of teachers was told that there was a group of strong students and a weak group. In reality, the pupils were randomly divided into one of the two groups. After a year it turned out that the pupils in the so-called 'strong' group also scored better than the so-called 'weaker' pupils. Teacher confidence thus proved to be a significant factor in the pupil's performance.<sup>(3)</sup>

This is also the reason why the renowned psychiatrist Viktor Frankl quoted Goethe's following quote as "the most apt maxim and motto for any psychotherapeutic activity":

"If you take man as he is, you make him worse. If you take man, as he should be, we make him capable of becoming what he can be."

Frankl says that towards others we have to be

"...idealists in a way, because then we will wind up as the true, the real realists".  $^{\rm (4)}$ 

That's why Blavatsky wrote that two thirds of evil in the world would disappear if we only assumed that others do not want to harm us, just as we do not want to harm them.<sup>(4)</sup> Let alone how peaceful the world would be if we had boundless trust in our fellow human beings, as Mrs. Blavatsky showed us before.

Does this mean that we always have to trust others blindly? And what if you place your trust in someone and your trust is violated? How can we best deal with this?

### From trust to Trust

The insight that every human being is a direct ray of the Higher Self is also the key to how we can deal with others who are unfaithful. We should restore the Self-Confidence of others. It is therefore no coincidence that the word delinquent comes from the prefix *de* – which means "(completely) away from" or "away" and the Latin word *linquere* which means "leaving behind" or "leaving"/"left" — in other words 'someone who has completely left'. We have to let others experience the interconnectedness again and help them to rebuild trust in their own Higher

Self. In fact, every measure in the legal process should be focused on this.

Forgiveness is essential in this process. Amy Biehl's parents provide us with a good example. Biehl was an American student and anti-apartheid activist who was murdered during her studies in Cape Town, South Africa, when she ended up in a black crowd riot. Despite this tragic situation her parents have been working since her death in the towns where their daughter's murderers came from. Based on what they had heard from their daughter, Biehl's parents understood that the anger in the black community that eventually became fatal for her had its origin in the wretched conditions in which these people lived. That is why, after her death, they decided to continue her work in the same spirit, by means of a foundation that tries to prevent children who grow up there from coming into contact with violence. In an interview her parents explained that they were inspired by the words of Jesus in the New Testament that you have to forgive a brother who does you wrong "Seventy times seven times".<sup>(6)</sup> Something that Biehl's parents actually try to do by connecting with their daughter's murderers.<sup>(7)</sup>

This does not mean that temporary isolation such as imprisonment is always superfluous as a consequence of crimes committed. A person may have lost control of his lower nature in such a way that society must be protected from him. But every human being has a free will and is able to redefine his direction at any moment by choosing for his lower or higher nature. We can condemn acts, but people can never be permanently condemned as being unreliable or bad.

If the delinquent independently wishes to take responsibility for his own actions, there is only one way in which we can restore trust in him. And that is by giving it. That is why restorative justice, which aims to restore trust of and in convicted persons, is so much more successful than the law that focuses on punishment.

This trust is never 'blind'. It is not the vague, naive or lazy confidence without looking at whomever it is about. Neither is it relinquishing responsibility for what the consequences may be. Nor is it built up through continuous monitoring or sampling aimed at detecting failure, which is actually based on distrust and which resonates with the lower self, with the personality.

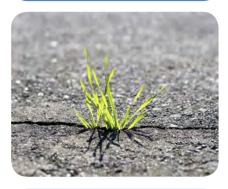
On the contrary, we are constantly paying positive attention to people we trust, we are interested in them. We identify with them and in this way we inspire each other, consciously or unconsciously, to be honest, sincere and trustworthy. Like, for example, the way we interact with our children. In the beginning we cannot let them do everything independently and we cannot always let them carry on as they want, but our attitude is one of boundless trust, accompanied by a lot of patience and forgiveness. We first prevent children from playing with fire, we give them no more responsibility than they can handle at any given moment. But we always act based on the conviction that they are ultimately capable of acting independently. We identify with the other, are always focused on addressing the noble within ourselves and others, and so encourage each other to express this. It is therefore an active interaction. Trust is a verb.

And so, in a sense, we are all children of the Higher Self, and as human beings we are learning to increasingly express the boundless wisdom, compassion and sense of unity. Forgiveness, trust and patience is what we have to give each other in order to grow. And if we really start from the Higher Self which is the core of *every* being, and the notion that all beings are essentially One, then trust cannot be betrayed. When we realize that unfaithfulness is due to ignorance, from lack of Self-Confidence, we can always forgive others or restore trust.

The paradox is that we achieve the highest form of self-confidence, or rather: Self-Confidence, through self-forgetfulness. This starts with the realization that the personal self, considered as existing apart from others, is an illusion, and that we are essentially one with the All. The more we forget ourselves, the easier it will be for us to identify with the Higher Self in which we are one with others and can rely on that. We achieve true unity when we have become one with the Higher Self and through it with the whole. Then we will no longer have to trust – in others, in the world or in the future – but we *know* because we have already become it.

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### **Key thoughts**

>> Depression arises due to the inability to observe our more noble aspects, also resulting in not seeing our relationship with others. You get carried away by negative thoughts and no longer have control over your thinking process.

Trust in the Self and trust in others is the remedy.

In developing real selfconfidence, the paradox is: you develop it by self-forgetfulness.

>> When you have an adequate philosophy of life, the chance that you get depressed becomes smaller.

>> There are triggers by which depression can start to express itself. However, the real cause is an imbalance in thinking and feeling.

>> You can help depressed people by listening to them, and by inspiring, but not by imposing anything.

# You are more than your depression

### What are the causes of depression and how can you overcome them?

Overcoming a depression is not easy. Yet it is possible. Theosophical insights in our consciousness bring us to an understanding of what a depression is, how you can prevent it, and how you can guide your fellow men who are faced with it.

In order to prevent possible misunderstandings: just like all other articles in our magazine *Lucifer – the Light-bringer* we direct ourselves to all readers who have the peace and clarity of mind to reflect upon the more profound questions of life. In short, this is not a practical guide for strongly depressed people.

Shakespeare makes Hamlet cry out that man is an exalted being. And indeed, every man has great intellectual and spiritual capacities. There is so much more to a human being than is usually assumed. Blessed with free will, he can choose to be a constructive power. Man has created wonderful works of art, has written profound philosophical and spiritual essays. Humans are capable of loving and inspiring each other selflessly.

Then, why are there so many people who do not know what to do with their lives? People who are weighed down under a heavy depression and do not see a way out of their suffering. We know that many, many people suffer from depression. And since it is one of the tasks of *Lucifer* to offer people perspective by spreading knowledge, we see it as our duty to at least try to come up with a solution to this enormous problem.

In this article, we firstly determine what a depression is, then we analyse how it comes into being, and finally, we try to find out what to do about it. Or even better: how we can prevent depression.

### What is depression?

Depression is certainly something different than a foul mood or sadness. Almost everyone does not feel well at times. However, depression is characterized by the following, long-term symptoms:

- dejection;
- a loss of spirit;
- feelings of anxiety;
- lack of interest (apathy).

The nature of depression lies in the fact that such gloomy thoughts keep coming back to the depressed person.

This is caused by the cyclical character of thoughts. Indeed, you can recognize a certain life cycle in thoughts. They are born, you can feed them, they can grow and multiply. When we no longer feed them, they will die and disappear from our world of thoughts, until they are reborn after a certain cycle, when we think of them again. Thoughts gain power when they are fed by our thinking. So, as you think a thought more often, it will attract more attention and come back sooner and stronger. At a certain point, it can be so overwhelming, that it pushes out all other thoughts.

Compare it with a young cuckoo. The cuckoo has laid its egg in the nest of a little songbird, that hatches it together with its own eggs. However, the young cuckoo is much bigger than the other hatchlings. It will continually swallow up all the food that the (guest) parents bring, thereby withholding the food from its brothers and sisters, and at a certain point it will push its stepbrothers and -sisters out of the nest.

The depressive thought, which pushes out all other thoughts like that young cuckoo, is always a restrictive thought. It is related to the own personality, that lives in the idea or feeling of isolation. Therefore, depression strengthens the focus on the personal 'me', and even to the extent that the consciousness is no longer able to observe "above" personal ideas and aspirations.

Therefore, you could call depression self-inflicted. Or, by insufficient control over your own thinking, you are unable to control the stream of thoughts. Your thinking is permeable, so to speak, and attracts gloomy thoughts. For that reason, depressive thoughts spread in you like weeds. Maybe this sounds harsh, but it also means that you can solve the depression yourself - and that is encouraging! When we learn to concentrate on something that we find interesting or beautiful, our state of mind will change. Depression, or even a foul mood, can only arise when we are focused on ourselves. When we focus on a thought that rises above our personal selves, like an artistic, religious, philosophical or scientific idea, or when we feel intense compassion towards others, our mood will change immediately, since we are no longer focused on ourselves. Then, we are diverted from ego-directed, negative thoughts.

### Why is it that some people are (more) vulnerable to depression than others?

Depression can be described as being vulnerable to depressed, anxious and apathetic thoughts, which overrule all other thoughts. Now, the thought atmosphere of our planet is pretty contaminated by an enormous quantity of depressing thoughts. This is caused by the negative thinking of many people. They incorporate thoughts from others, conscious or unconsciously, mostly because they don't think independently. This will make you depressed. This process occurs just like a physical epidemic, whereby the germ (the virus or the bacterium) goes from man to man. As a result, people get contaminated. In turn, those contaminated people grow new bacteria. In this way we make each other ill. In an identical way we can make each other ill with depressed thoughts. However, what causes that one person to be more vulnerable for such thoughts than another? In our opinion, there are three causes:

- 1. Inability to see and use the own free will.
- 2. Inability to look 'inside'
- 3. Inability to look 'outside'

### Inability to see and use the own free will

By free will we mean in particular that you independently choose which thoughts you think. Depressed people often have the impression that they are not capable of thinking other thoughts than the gloomy ones which torture them so.

But the free will is also very important in light of the composition of the human consciousness. Man has certain qualitatively different aspects of consciousness. Since man has a free will, he can choose between those aspects. He can choose for personal characteristics, biased towards selfishness, or for noble, unselfish impulses and characteristics. All these unselfish characteristics result from what you may call the Higher Self; and the personal, selfish characteristics form the lower self. It is this lower part that can get depressed.

### Inability to look 'inside'

What do we mean by the inability to look 'inside'? First of all, let us say that this inability does not need to be chronic. You should rather see it as a temporary restriction. That inability to look inside has everything to do with the composition of consciousness. As soon as someone no longer experiences his more inner aspects of consciousness (those aspects that result from what we earlier called the Higher Self), he also has the impression that he is incapable of controlling his thoughts. Then, he passively surrenders to the gloomy thoughts. He does not feel he is capable of mastering those gloomy thoughts.

That feeling of powerlessness quickly results in seeking the

blame outside of yourself. 'It is a result of my upbringing that I am who I am'. 'I cannot do anything about it, it is my DNA, it is that particle in my brain'.

We create our own reality. Something is true and exists for us when we assign truth and reality to it. When we only assign reality to our depressed thoughts, and we therefore miss the ability to look inside – to our spiritual aspects – then we make ourselves vulnerable to all kinds of depressed thoughts which so abundantly circulate in our world. Then, the reality created by yourself is dominated by the impression that you cannot do much, that you are a failure. "I failed, and I will always fail", the depressed person says. He does not see his own qualities in his innermost part.

### Inability to look 'outside'

The inability to look 'outside' is closely linked to the inability to look inside. What do we mean by this? You are no longer capable of really seeing the people around you. You no longer understand that you have an essential link with them. You feel that you are a human being on an uninhabited island; someone without contact with other living beings. You don't feel understood. You think that others can mean nothing to you and you can mean nothing to them.

Here, also, you create your own reality. When someone no longer sees himself as part of a group, then that's a fact for him. Then, you create a world of thoughts in which your partner, your friends or colleagues reject you, don't appreciate you, don't need you or don't understand you anyway. You see the other as a referee who judges disapprovingly. This image only exists in the thinking of those who suffer from depression and can only arise because the thoughts circulate around the own personal ego again.

Why does this inability to look outside relate to the inability to look inside? Because the higher aspects do recognize the relationships between beings. When we no longer experience those higher influences, the situation arises that we think that others have nothing to do with us. It results in the feeling of isolation.

The element of competition, by which the current society is permeated, feeds the inability. Particularly for young people, everything must look like a competition. Who is the best? Who gets the highest ratings? Who wins the game or the quiz? Which country has the strongest economy, the best education system? Hit lists are everywhere. *Social media* play a crucial role here. On Facebook, for example, everyone shows himself in his best light. Setbacks and failures are not posted. In this way, a make-believe image of reality arises. Others think they have to comply with that reality. As a result, a competition arises between who has the most beautiful holiday pictures, has been to the most outrageous parties, and has the most *likes*. The idea that we should work together is found secondary to the idea that you need to be better than others. And when the pressure becomes too big, you feel powerless, you no longer see your own qualities, and you no longer realize that the other is not your competitor but your companion.

### Loss of confidence

In a natural process of learning, as you often see with children, you assume that you will eventually master what you learn. Generally, young toddlers will not think that they will never learn to walk, and even when they fall down a lot, they will not give up on their attempts. Why is this often so different with older people?

Above, we already outlined the pressure and competition in current society. However, what plays an even bigger role is the lack of confidence that people have in themselves. That lack arises because of a wrong view on life and on man. When you perceive man as a product that has arisen coincidentally, then it is obvious that you can lose confidence in yourself easily. However, even when you have a view on life that is based on karma, you can open up to the depressing ideas that circulate in the world in such a way, that you become depressed. When we lose confidence in our higher aspects and thereby also lose confidence in others, the chance is very real that we get in a downward spiral.

With discouraged people you often see that they had negative experiences in life or had experiences they perceived as negative. They get stuck in those experiences, so to speak, which results in negative thoughts being repeated. As said above, thoughts have the tendency to return cyclically to the person that thinks them. In this way, you keep getting deeper in the dumps.

One of the symptoms of depression is passivity, even apathy. That passivity results in an even larger degree of unconscious thinking. You surrender to the stream of gloomy thoughts. You are throwing the door wide open for all those gloomy thoughts, related to your own thinking, that belong to the thinking atmosphere of the earth.

Because of the vulnerability to such thoughts the idea arises that life can be hopeless, in serious cases combined with a death wish.

### What to do?

It goes without saying that there is no easy remedy for depression. Perhaps, the stream of gloomy thoughts has grown in many years, even lives. When thoughts have been fed by the human consciousness for years, then it is impossible that they cease to exist in a short period of time. Having said that, the healing process is possible *without any doubt*.

We need to become confident again: first of all, to get confidence in our free will and then get confidence in the (Higher) Self. Then we know we possess all capacities which are needed to live meaningfully, and that we are able to use them. Then, we also get confidence in our fellow men, since they also have the same potential of spiritual capacities as we do.

Confidence arises when we no longer see ourselves as a victim. We brought it upon ourselves! We put the stream of negative thoughts into motion, and we ourselves chose to feed them. The causes of it can always be traced back to ourselves.

In developing self-confidence, the big paradox is that we in fact need to start with self-forgetfulness. Because the Higher Self is that aspect inside us, in which capacities and qualities are present, which, when we develop them, turn us into useful, blissful and noble powers. In the Higher Self, capacities like understanding, compassion, calm, patience and perseverance are present. Those capacities emerge when we forget the characteristics of the lower self – the personal man. It is that personal man who is depressed. He does not see the bonds he shares with other life. He does not see a purpose in life. That's why we should forget the lower self, so that the Higher Self in us can take shape and take the lead.

You forget the lower self by not paying attention to it. So, direct your thoughts towards something else. Try to find something of the above personal and cherish that. It helps when you realize that each restricting idea about yourself is illusionary. Ultimately, you are an independent thinking consciousness, master of your thoughts. All wisdom is inside you. We learn by bringing out what is inwardly present within us. You learn every day, each second, and you do this life after life. Life is a training ground and it makes sense. As you gain confidence in your Self, confidence in others increases as well.

Often, depressed people do not realize what they are doing to others. Due to the focus on the lower self they do not understand how non-collegial, even anti-social they behave. They do not realize that they think they are the centre of the world and only have an eye for their own depressed thoughts. Some self-reflection can already be an encouragement to come out of your depression. Direct yourself towards the other, since true love, friendship and compassion make you focus not on yourself, but on your fellow man.

Then, you get an ever better understanding that you are not on your own. It is an illusion to think that nobody can help you. You are never alone. Because you are connected with everything around you. You are an indispensable node in a life web. In essence, you are a source of compassion and able to inspire others.

Of course, you will not immediately grow from a heavy depression into a pure compassionate power in the world. However, you can start with little things, like more frequently visiting your family, helping your neighbour with groceries, showing sincere interest in the story of your colleague, et cetera.

Development of confidence in your Self and in the other can only take place on the basis of free will. You have to know that it can succeed. Deep inside us we know that transformation of our character is possible. That inner knowing strengthens and inspires us to actually change our lives with our free will.

### Why are so many people depressed?

The figures on the number of people that are depressed and who take anti-depressants are alarmingly high. In the whole western world people suffer from depression. It is undoubtedly the largest (psychic) epidemic of our time. This raises the question of why so many people are depressed at present. An answer often given to this question is that the pressure and stress are enormous these days. We do not deny that but believe that there is an even deeper cause.

#### The cause is a lack of vision on life.

The old Christian thoughts about heaven and hell, the meaning of life, about a Supreme Being that runs everything, have strongly lost influence due to modern, materialistic science. Even religious people doubt this vision. On the other hand, materialism does not give perspective at all. After all, when it is true that life emerged from dead matter, and that everything is determined by coincidence, then life has neither meaning nor purpose. Theosophia teaches that we are in a transition period. The old medieval thoughts are dismissed, but a new life philosophy, more based on facts, hardly exists. The consequence is insecurity and sometimes even despair. Sometimes you see old and new thoughts in one man. For example, someone can have found Theosophia to be true, and yet old thoughts reoccur, making him also suffer from depression. The less you find peace in a trustworthy philosophy on life, the more focus you get on the temporary nature of existence. You want to enjoy. However, sustainable happiness does not exist in a world in which everything is transitory. Then you no longer see perspective, and this makes you vulnerable to depressing thoughts.

### Triggers

Yet not everyone gets depressed. In fact, regardless of how big depression may be, it is always a minority that is depressed. In other words: even if the atmosphere of thoughts is full of despondent and depressed thoughts, you do not need to get infected by it. However, it is not the case that the non-depressed majority has a practical life philosophy. In that respect, depressed and non-depressed people cannot be distinguished. Then, why is it that some people get depressed and others do not? For one thing, of course, because people are different and react differently to circumstances. But maybe even more important is the fact that when living conditions are favourable, it looks like you can have a good and happy life without a life philosophy. When you prosper and grow economically or on a personal level, and you do not think all that much about life, then it looks like you don't have a thing to worry about. Until destiny turns. Then, that happy life turns out to be cosmetic. Then, it turns out that money and possessions are no security for happiness whatsoever, since, after all, the rich are also often depressed.

And still, we say depression is not caused by living conditions. The fact that there are people who manage to feel happy in the most terrible conditions, illustrates this. Actually, it is all about the view on those living conditions, and it is the lack of a right view which makes it possible that a depression is lying in wait.

In fact, this implies that if you do not have an adequate life philosophy, you are latently depressed. Therefore, even the most joyful people can get depressed when they are suddenly confronted with an unexpected turn in their personal lives.

Those turns are like *triggers* that suddenly waken a sleeping depression. Below, we show some of those *triggers*.

### **Emotional fatigue and imbalance**

In our society there are many people who are emotionally overloaded. The causes of that are almost endless. That overload can arise due to stress and pressure to perform (competition) at school or at work. You are tired, have trouble sleeping and still go on working. Mentally demanding work is also part of this. Traumatic loss can also disturb our emotional balance, like the loss of a loved one, a job, and divorce. Alcohol and drugs also often play a disastrous role in this process.

This trigger also includes all other kinds of trauma, like sexual abuse and domestic violence. They contribute to an emotional imbalance in many cases.

Someone who is emotionally stunned, cannot think quietly. They become oversensitive to mental and emotional influences. Critical faculties weaken. Mind you, depression always results from disharmonic thinking. When someone places too much emphasis on their emotional, mental aspects, then they make themselves vulnerable to thoughts which could bring about these events described above. So, it is not the case that the events themselves cause the depression, but the mental-emotional reaction to them. After all, two people who find themselves in the same situation – mourning as a result of a death for instance – can react totally different. If you control your thinking, the risk of a depression is much smaller.

In a healthy mental-emotional situation, man's consciousness forms a protective shield, by which certain thoughts are kept out of his thinking. In fact, this shield is formed by a field of constructive views around man. Due to the emotional imbalance, which always develops as a result of disharmonic thinking, cracks arise in it, causing people to become vulnerable to mentally depressing germs, just like physical weariness makes us vulnerable to bacteria and viruses. Our shield of consciousness becomes permeable and depressing influences get through. So, it is our own mental-emotional state, which makes us vulnerable to depression or not.

An illustration of this is the so-called postnatal depression. In the womb, the baby is connected to the body of the mother by a physical umbilical cord. But after birth, the child is still connected to the mother, only now by an *emotional umbilical cord*. It is connected to the *emotional nature* of the mother. The consciousness of mother and child are so much focused on each other, that the mother notices all little difficulties and discomforts of her baby. Due to this strong emotional connection, the mother can become emotionally worn out, for instance in the case of a cry-baby. The father and other family members play an important role in preventing a postnatal depression by supporting the mother and in this way keeping the shield of consciousness closed to 'intruders' from outside.

### High requirements

Another trigger is no longer being able to meet the requirements imposed by others or imposed upon oneself. Some people set the bar very high for themselves. Those requirements may have resulted from an unselfish motivation, however, if they are unrealistic, they may result in disappointment. For instance, you cannot expect that global warming is undone in one year thanks to your tireless efforts. And after decennia of war in the Middle East, it will also take generations before there will be peace, even if you work hard for that.

When people *personalize* their unselfish ideals and perceive the achievement or otherwise as a *personal* success or failure, then it is almost impossible that it will not lead to a deception. Then, you will blame yourself or others. Then, cynicism arises: the world will never get better anyway. Often, the high standards also have a personal background. Sometimes, unconsciously, one works for oneself: for the bigger house, the new car and the second holiday. Later, when you have achieved these goals, you wonder what you did it for anyway, because it did not deliver what you had hoped for.

### Dealing with setback

Another trigger is the inability to deal well with setback. Of course, this trigger has everything to do with the previous one; when you expect (too) much from life, the risk of setback is big. However, failure of an undertaking is not necessarily bad at all. You can grow and get stronger as a result of it. However, problems arise when you fall into passivity because of it.

In most cases, children are no longer taught how to deal with setback. Parents perceive their offspring as little princes and princesses. Everything in their lives has to run smoothly and without problems. If they are failing at school, the teacher gets the blame. Moreover, it is often assumed they have to be good at everything. These unrealistic expectations almost inevitably lead to disillusionment.

### Loneliness

Another trigger is loneliness. Family ties are looser than they used to be. Familiar surroundings may have fallen away. People live next to each other without knowing one another. Shyness prevents from making contacts and giving or asking for help.

Mind you, loneliness in itself is not the depression, how-

ever, it increases the vulnerability to it. In fact, loneliness does not actually exist since we are interconnected to all other life. A perception of loneliness is a state of mind which arises if you focus on your own personal self and are not able to look more deeply inward and, in fact, are not able to look 'outwardly' as well.

People are alienated from nature, they live in concrete buildings. Especially fall and winter, when it is dark, are perceived as a hard time by many people. If you do not have a life philosophy, and you feel completely on your own, then the vulnerability to depression is big. It seems like all those depressing thoughts accumulate in the darkness of the winter night and like a thief sneak into the consciousness of man.

### Healing process

By far the most important medicine for all this gloom is cherishing an *active* spiritual vision on life. That is also the most adequate prevention of depression. Everyone is able to develop a spiritual vision on man as he really is. Everyone is able to form for themself an idea of noble qualities, of beauty, the notion that is present within our Higher Self.

Teach man to see himself as a pilgrim of eternity, who has an eternity behind him and in front of him. If you have seen something of that nobility, in yourself and in others, then no depressing thought is able to get to you. Next to forgetfulness of your personal self, development of concentration is of utmost importance. To learn to concentrate on spiritual, above personal aspects is the remedy. And that certainly needs not always be theosophical ideas, although those are of course very effective. But also, if you steer yourself towards music, to nature, or if you do charity work, unselfishly work in a canteen of a community centre or sports club, then you are already busy awakening some of those already mentioned above personal aspects in yourself.

What is very useful about this, is that you learn to forgive others. Sincere forgiveness is an above personal characteristic par excellence, which is in turn liberating. Learn not to see yourself as a victim, but as part of a process with the result of you being stronger in life in the end. See your own failures and setbacks as reactions to inner growth. They are not always unfavourable. Suffering is your best friend. Even if you do not recognize that immediately, it always appeals to your noble aspects. How many times are people not grateful afterwards for the insight they gained by suffering they have gone through earlier?

### Guidance of depressed people

In general, it will be useless to bombard heavily depressed people with theosophical guidelines. That will have no effect, or hardly any. After all, depressed people are so absorbed in their personal self, that they only catch those thoughts, that have directly to do with that lower self. Nevertheless, the healing process, as described above, can be an excellent basis to help them, provided that it is applied with much tact, judge of character and wisdom. With that, the general rule applies: do not impose anything. Try to find out together what above personal things still play a role. Which ideal one still has?

As a guide you need to listen very carefully. Each person has an ideal. Try to find out together what that is. Everyone has a vision on something that will only be accomplished in the future: by listening and asking questions you can discover that ideal. So, make contact with the still healthy part in man. Don't go with the depression. You can show understanding for it, but you should not enhance it.

Of course, you have to have imperturbable patience. If you lose your own above personal attitude, you will not have much success. Your above personal love for the other will protect you from his depression, but moreover, is a very real support for the one you try to help. The knowledge that everyone, including someone who suffers from depression, in essence has all capacities to lead a meaningful life, will help you to develop this patience and this love. Growth of consciousness often does not come in leaps, but step by step. A practical tip could be to keep a little diary together, in which the positive little steps forward are noted.

Finally, it would be good to take the depressed person out of his environment, of course if he wants that. It is that environment that is filled with all those negative thoughts, so to speak. Taking a walk on the beach together, going to a concert or a good movie, will break the routine. As a result, other thoughts are taken up, and the gloomy thoughts will lose some of their power. However, never push, try to inspire.

#### **Our responsibility**

Each individual is responsible for his own mental and emotional state of mind. After all, you think your own thoughts. Still, we are also responsible for each other. Thinking thoughts is a serious matter since thoughts can go from one thinking faculty to the next.

Like we have to take care together that the environment is not polluted, we also have to keep the mental and emotional atmosphere of the earth clean together. We are all responsible for the psychical state of health on earth. So, it is our duty to inspire those who are out of balance and suffer from depressions to find harmony in themselves.

#### Anti-depressants

Next to talk therapies, professionals try to cure depressions with medicines. Or rather, 'cure' is not the right word, since although these so-called depressants prevent that gloomy thoughts manifest, they do not make them disappear. The cause of it is not taken away. The gloomy thoughts will come back again when you stop taking anti-depressants. In fact, a big part of emotional life is deactivated, because these pills cause certain effects in the brain, making thoughts and feelings unable to manifest. That's why anti-depressants never solve anything. You can use them to 'survive' the worst spikes of depression, but then in fact, there already needs to be a plan to phase them out and to do without them in the end.

Between professionals, anti-depressants are considered in a nuanced light. Strongly opposed to it is the Danish professor, Peter Gøtzsche. He wrote the book *Deadly psychiatry and organised denial. On anti-depressants.*<sup>(1)</sup> For years, he fights against the excessive use of anti-depressants and the questionable role that pharmaceutical companies play in that. He claims the effects of anti-depressants are extremely small, also because the diagnosis is not always right. The side effects – like thoughts of suicide and addiction – are disregarded. Other experts paint a more positive picture. The Dutch psychiatrist Christiaan Vinkers and pharmacist Roeland Vis also believe that anti-depressants are prescribed too often, and that these medicines often do not have effect, however, so they say, in some cases they can even be lifesaving.

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### Henk Bezemer



## Chance or law?

The notions chance and probability play a major role in modern science, for instance in the quantum theory of physics, the mutation theory of biology, and the game theory (often applied in economics and psychology). On what observations do scientists base the concept of chance? And are we able to understand the facts observed by them in a different way, in a theosophical way?

### What does chance mean?

Originally, chance means "those things that fall upon you". The word originates from the Latin word *cadens*, falling. So, we use the word "chance" for all those events that, so to speak, "fall on your path, from an unknown source".

In science, the word has a more specific meaning. As it is described in the Dutch Wikipedia (translated):

*Chance* can be seen as the occurrence of events for which no *final cause* can be found [*final* used here in the philosophical sense of "aimed at a target"; H.B.], or which arise by a stochastic [random; H.B.] process. Chance is a form of the wider notion "indeterminate cause", which is each event that unintentionally, undirected or unstructured determines the occurrence of another event.

In short: while in common language no attempt is made to describe the cause of "incidents that come your way", the scientific definition poses that that cause is not there at all, or if it is there, that it somehow produces random, unpredictable effects. From a *theosophical perspective* we would never use the word chance,

would never use the word chance, since we believe it is an obscuring term. According to Theosophia, each time scientists speak about chance, it is about a situation where the cause of an event has not yet been found. And by "cause" we do not mean some blind mechanical cause but the influence of living, conscious beings on one another. Conscious beings that inherently have free will. We will elaborate on this below.

The questions we will discuss in this article are:

- a) What is the causal background of our physical world and all its phenomena?
- b) What is free will? Does each being express some measure of free will?
- c) What is the theosophical explanation of statistics? We will investi-

### Key thoughts

>> Chance is a word that hides our ignorance about the causes.

> The behavior of an individual being is fundamentally unpredictable, since it is an expression of its *free will*. Free will is never absolute, since it is always restricted by the choices that any living being has made in the past.

>> You can describe the average habitual pattern of a group of beings by means of statistics. Such a pattern has its origin in a common characteristic. These beings have formed a group because of the attracting power of this common characteristic. gate the observations done by psychologists, physicists – the behavior of subatomic particles – and statistical experts. And we will look at ordinary games like rolling dice. All these varying situations are expressions of the same principle. We must try to find that one principle.

- d) What causes the continuous change of group habits a change that may be slow or fast, but is continuously going on?
- e) Altogether: what is a wiser attitude than using the word "chance"?

### The Boundless

What is the causal background of our physical world and all its phenomena? In order to find the explanation of chance and probability, the best start is from the basic principle of Theosophia. And that is the fact that all that exists, without exception, arises from One Boundless Principle, from a unity that is incomprehensible. Incomprehensible, because it is the Source and deepest Core of all that exists: and the number of beings and worlds is limitless.

We can elaborate this basic idea a bit more: there is a force working behind all external things, and that force may be called consciousness, or life. Each object or physical manifestation has arisen as the result of one or more living beings, expressing themselves in a physical form. The whole Universe is alive. The Universe can be perceived as a great web of living beings, embodying themselves again and again.

An important consequence of the Principle of Boundlessness is that all beings, being manifestations of the Boundless, are that Boundless Principle themselves in their deepest core. Of course, they express their essence in a *limited* way. What they express depends on the stage of inner growth they have reached up till now. The simple fact that a being embodies itself, clothes itself in a form, already brings about a certain limitation – regardless of how spiritual and ethereal that being may be. However, since each being carries boundless possibilities, there is always the urge, and also the real perspective, to overcome its current limitations and enter even greater fields of consciousness and life. A great view, on which we can reflect for years.

### Freedom of choice: yes, but never unrestricted

Is free will in the sense of limitless freedom, a fact? We have pointed out that each consciousness manifests itself

in some restricted form or body. Furthermore, each being is part of a higher, more comprehensive consciousness that sets certain limits to the freedom of all the entities within its sphere of influence. This means that no absolute random behavior, no absolute freedom of action is ever possible. Each being always has a limit within which it can express its powers.

This possibility to make choices yourself, self-consciousnessly or instinctively, is one of the core ideas of Theosophia. For our consciousness is not limited in its deepest essence. After all, we arise from the Boundless. However, from that free will, that unlimited vision, those unlimited capacities, we are only able to express a limited portion. So, even atomic or subatomic beings have a certain portion of free will — and that explains a number of amazing facts in nature: when a bundle of light reflects in a mirror, it turns out that not all rays of light behave like the average ray does. The number of deviating rays is relatively small, but they are there. So, the subatomic particles show a kind of unpredictability, and this unpredictability can never be totally eliminated by trying to create equal circumstances. That's true, we theosophists would add that this occurs because that unpredictability is an expression of the innate free will of these beings.

*Corresponding* types of consciousness have a more or less corresponding behavior. Yet, as a result of individual free will, there are always deviations. Think about a group of people that form a sports club or school or other organization: they have a number of common habits, a generally accepted way of cooperating with each other But at the same time we see that each member or each co-worker gives his own flavor or interpretation to those habits or rules.

### Statistical descriptions of habits of a group

What are statistics? It is a way of describing the behavior of a group of corresponding beings. We will mention a few concrete examples. Each family has a more or less consistent pattern of spending money, that you can express as "so much percent is used for this purpose, and so much for that purpose". With more or less variation, depending on several factors. When we think of a group of pupils at school, we can state – simply by keeping track – that a certain percentage will go on to further their education after getting their diploma, and other percentages choose to find a job or start a family. And as a third example: all car drivers who approach an intersection are a group in a certain way, and here you can keep track as well: which part goes left, or right, or straight ahead? The larger the group, the more exact we can predict that "so much percent will act in this or that way". Think of the frequency of child births in a country. Those percentages are known pretty accurately and change only gradually in the course of the years. For it concerns many thousands of births.

### The predictability of devices

So, we are able to describe the behavior of groups of people, animals and plants in statistics. Is this also possible with less developed beings like the minerals and atomic beings? For instance, is a device also a group of beings?

Well, from a theosophical perspective this is indeed the case. Everything is alive. A device is simply an orderly structure of chemical atoms, and atoms are living, conscious *beings*. This structure is of course invented by a thinking man: a being that is able to impose its will onto these atoms to a certain extent.

As each group of beings, also a device has its own group character and certain properties and limitations. When you drive a car frequently, you know that each individual car has its peculiarities: its own noise, its own strengths and weaknesses. Maybe largely due to the characteristics of its "boss", but that is another question. Those characteristics can be statistically described, for instance, there is a greater or lesser probability that car A shows some malfunctions than car B.

When we look at devices that are intentionally designed to deliver a *constant* product, we also observe deviations, however small. Let us take a measuring device like a scale. When you weigh the same object ten times in a row, the device will deliver a slightly different outcome ten times. Therefore, in the specifications of measuring devices the *accuracy* (difference between measurement and real value) and *precision* (the variance you see when you measure the same thing repeatedly) must be mentioned. With certain types of instruments, that variance can be displayed in a typical bell-shaped graph. Such a graph shows that the chance of occurrence of an extreme value is less than the chance of occurrence of a value close to the average (see annexed illustration).

### Statistics and predictability

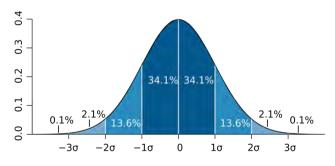
All these statistical descriptions (of the mean and the variance) still do not tell us what an individual member of the group will do or choose. Or, what some device will do in the next second. Statistics do not predict *individual* events, as these are determined by free will. They only give

us information on the probability that one of the possible events will take place.

Of course, we can enlarge our understanding of these *individual* choices. When we know all people driving cars personally, then we know with more certainty what some driver will do at some intersection. But even then, there is an uncertainty, since someone can decide at the last moment to take another turn, in order to pick up that colleague after all.

So, statistics describe the behavior of *groups of beings*, who each in themselves have a portion of free will. And since that free will is limited to a certain extent, you can attach a certain measure of probability to these statistical numbers. It is never an absolute prediction.

Many people find it difficult to make a fundamental difference between statistical calculations and real events. Think about the medical tests that may lead to a prediction like "you have a 23% chance to get illness so-and-so". Most people cannot cope well with this information. They rely on the knowledge of the researchers. For them these results are "truths". For them 23% means: "I may have a grave illness in my genes or in my constitution". It may influence their thoughts greatly. It creates suffering, before there is any real signal that they will really become ill. And it creates suffering as they usually do not understand what it means if they, being spiritual centers of consciousness, indeed would become ill. Unfortunately, both expert and client do not understand reincarnation and karma. They are ignorant about the origin of their fate — unless they have heard or read some good theosophical explanations.



This graph (a so-called "normal distribution" or "Gauss curve") shows that the probability of a certain outcome is greater as it is closer to the mean.

### Is complete free will possible?

Were there to be 100 percent free will, then there would be no predictability at all. That theoretical situation could not be captured in statistics. Other beings would perceive it as completely arbitrary, or, like a scientist would say "at random". For instance, think of a man who makes a number of choices and does certain things today, that have *no causal relation at all* to the things he wished and did in the past, including his former incarnations. There would be no relation at all to the boundless past that that being has behind him. From a theosophical perspective this is an impossibility. We cannot even imagine such a man! Nowhere in Nature do we observe absolute arbitrariness. It is impossible since all beings are fundamentally linked, and no single being can get out of this Unity of Life, being the center of our own being.

### And what about dice?

When dice are made accurately, there is more or less an equal probability distribution over all six sides. But if someone is able to throw from the right starting position with the right force, he can gradually learn to throw the number he wishes. Just because the behavior of the dice does *not* change, so remains stable, the thrower can learn to determine the outcome. In short: just like everything in the Universe, a dice follows the law of cause and effect, and there is nothing coincidental about it.

Physicians try to build devices that show a number on demand that – when it's right – is a completely arbitrary number, that has no relation to the numbers produced earlier. It turns out to be very difficult to make such a device! And the question is, if we will ever *perfectly* succeed in that. After all, each device has a certain character and certain limitations.

### Explaining all these observations: what is a group?

After discussing the aforementioned observations, we come to the question: what is the common, causal principle behind them all? They can be easily explained if you make a theosophical study of *groups of beings*. A number of individual beings never becomes a group by chance. Beings never run into each other for no reason. They are *attracted to each other*. And the cause of that is always a common characteristic. This common character leads to the forming of a cooperating group during a certain period. Put visually, a group is a temporary *karmic clotting*. And it is that common characteristic that makes one group have a different statistical pattern than another group. So, behind all statistics an inner cause is hiding, namely the type of consciousness of all involved.

In this way, each company, and each department of a company, has its own atmosphere, with its professional

and social aspects. We have all experienced that. Which type of illnesses people get can have something to do with this atmosphere. That sphere of influence does not come from outside, but is developed by the people themselves, by what each one thinks and does.

A village or town also has its own atmosphere and its specific population of people who feel at home in it. We estimate that a travel agency that is situated in a quite conservative small town sells less adventurous trips than a travel agency in a neighborhood full of energetic young couples who like to experience everything in life. But individual exception will always pop up, since people may have unexpected thoughts and feelings.

### How close do we cooperate?

A group may be very coordinated in aims and actions, or the opposite may be the case. How close a group is, can vary considerably. A temporary loose relation we can call a *gathering*. For instance, think of all people who spend their day on a certain beach during a beautiful summer day. When these beings are going to cooperate closely, under an overall lead, an *association* arises. For instance, all lifeguards on that beach form an association. As a group they have a joint goal and are led by experienced supervisors. Beings can even form a *unity*. This is the case when they use their individual free will to identify themselves completely with the larger whole. In this way, all great Sages, all spiritual reformers of humanity work together like the fingers of a hand.

We also see many transitional forms, since a gathering can develop into an association, and an association into a unity. And the other way around...

### **Dynamics**

The characteristic of a group never stays the same for a long period of time, as all living beings develop themselves. So we see all groups going through a sequence of growth phases. We can recognize this with groups of people, but also with devices: a car will age over time. In the mineral kingdom numerous transformations take place. A diamond started as a handful of coal...

When the characteristic of a group of beings changes, the statistical descriptions of that group also change. When homicides take place with a certain frequency in a city, this does not necessarily have to stay that way. For instance, reform on all fronts (in employment, in education and in the thinking of people: their hopes and perspectives and feelings of human dignity) can ensure that that statistical probability changes drastically. This has been proven regularly. All changes of that kind start with the work and the example of inspiring pioneers. We know there are regions in the world where it is not necessary to have a lock on your door... that situation could become universal.

In a group, big changes can also occur because some people enter or leave the group. This has of course to do with the various individual characters, and the "chemistry between them".

When we look at the growth phases of our planet Earth, so at cosmic time periods, then they take a very long time in our eyes. According to Theosophia, the matter of our Earth will eventually become more radioactive, that is, the relatively heavy atoms will fall apart into lighter atoms. The reason is that the consciousness of the Planetary Being Earth will become ever more ethereal. But as said, such developments are a matter of millions of years.

We humans are in control of ourselves and our choices, on how powerful we reform our own thinking and acting. We may restrict our free will even more by keeping to certain habits and attachments. Or we liberate our will even more by letting go of our attachments and ego-centered desires and replace them with more valuable habits.

So, let us unfold our latent, higher capacities. Let us be open to great ideas, wonderment, ethical questions and insights that break through our predictable way of thinking!

### An obscuring word

When you don't know the cause of something, then you don't come any closer by saying: "that is chance". In that way, you pull the wool over your eyes, because you use a seemingly scientific term without any significance. The result is, that you stop searching for the real cause — being satisfied with an empty term! In fact, it corresponds with saying "that is Gods will", or "thus the Fates command", or "that's the way nature works".

It is wiser and more scientific to never be satisfied with vague words, even if they are used by scientific bigwigs. The alternative has been clearly described by Plato in his Socratic dialogues: always verify the basis of a presented explanation. Is it based on facts, on universal valid laws, on logic, or on nothing of this kind?

Such an attitude is very motivating. Then we will keep on doing our utmost to find a deeper and always deeper cause, and we will keep all gates of our higher thinking open for each inspiring idea and each profound insight.

Bouke van den Noort



### **Key thoughts**

It was not Darwin himself but his fanatical supporters who emphasized the idea of a ubiquitous struggle for existence.

>> Scientific research increasingly shows that it is not struggle but cooperation underlying life's evolution.

>> The struggle we see in nature is a temporary phase of imperfect cooperation.

Not the confirmation of a theory, but the explanation of the exceptions is decisive for its sustainability.

>> The search for Truth requires an open mind: if you do not open up to something, you are not able to recognize this in the world around you.

## How "the struggle for existence" gets more and more out of fashion

Since the publication of his book *On the Origin of Species* in 1859, Darwin has left a decisive mark on scientific research regarding evolution of life. While Darwin was initially still cautious with drawing conclusions, his successors 'raised' his ideas from a modest theory to fixed facts. It is no point of discussion that Darwin has done fantastic research, nor that he, with his accurate observations and numerous fossils found, has provided overwhelming evidence for the ability of life to adapt. But the later materialistic *interpretation* of these observations, namely that struggle and chance are the basis for evolving life, is more and more under pressure.

### From Darwin to DNA

In short, Darwin's theory of evolution comes down to this: all individuals of a species differ from each other, however small that difference may be. These differences ensure that one individual is slightly better adapted to the prevailing circumstances than the other. Since the one that is better adapted is more likely to survive, it is likely to produce more offspring with the same favorable characteristics. Those with less favorable characteristics will eventually be discarded against the ones who are better adjusted and over time will disappear. This is what Darwin called *natural* selection.

What Darwin assumed, but which was not yet scientifically proven at that time, was that properties are hereditary and can therefore be passed on to the next generation. This status changed when Gregor Mendel came up with mathematical evidence for the inheritance of properties not long after that.

With his breeding experiments, Mendel saw that traits, such as flower color, are indeed passed on to offspring in certain proportions. From that time on, several scientists expressed their belief in the existence of genetic material. But it was not until 1953 that researchers were actually able to record its structure (DNA). This also demonstrated the mechanism of inheritance underlying Darwin's already convincing theory, and Neo-Darwinism was born. Apart from the fact that the theory was now seen as an established fact, it also got tougher, became more extreme. For example, Darwin reluctantly used the

concept of 'coincidence' and always with the comment that the *real cause* of spontaneous changes would probably be discovered at a later stage. Instead, Neo-Darwinism now considers coincidence as the driving force behind these spontaneous changes! Also, the idea of interdependence, as Darwin described it, moved more and more to the background. All emphasis was placed on the struggle for existence, eating and being eaten. Surviving and reproducing was supposed to be the goal in life. This idea was even extended to a molecular level when biologist Richard Dawkins published his book *The Selfish Gene* in 1976.

### Change comes from within

But things are changing. To stay close to the gene: after its discovery it was assumed that all properties are anchored in the gene. From hair color to character; it would only be a matter of time before we could point out the specific gene that is responsible for the specific trait. In the first article of this series on scientific theories that are under pressure, we have shown that this is by no means the case. <sup>(1)</sup> First of all, genes relate to *physical* properties and secondly, these properties are not as fixed as often assumed. A single gene can impact a wide range of characteristics and conversely different genes are often involved in one characteristic. Moreover, genes can be switched 'on' and 'off' depending on the situation. Trying to find answers, science examines the mechanical processes in the cell, in search of a materialistic explanation, but Theosophy is very clear in this: in the end change always comes from within, from the consciousness of a being.

This brings us to the fundamental difference between Darwin's theory and the Theosophia. Darwin's doctrine is limited to change of *form*, as a result of pressure from the environment. But according to Theosophy, this is only half the truth. Of course, the environment plays a role. Starting from the fundamental unity and connectedness of all life, as Theosophy does, it cannot be otherwise than that interaction takes place, that there is reciprocity. But the real change, the *reaction* to that interaction, always comes from within, from the force behind it. The impulse for change comes from the consciousness of a being that works through the body and 'ensouls' it. Change of form is therefore not a coincidence, but always the *result* of life's inner reaction to experiences in the external world. And this reaction we call growth or evolution.

According to Theosophy, evolution is therefore an inner development. What we observe as a change of form on the outside is an adjustment of the vehicle in order to enable the expression of the inner development. That is why we humans, because we develop the *ability to think*, do not develop physical specializations – thinking is not a physical characteristic – and therefore we cannot run like a cheetah or swim like a dolphin. And the idea that struggle would be necessary for developing our thinking faculty is an illusion, moreover, it only impedes our development.

### From struggle to cooperation

Anthropologists, being dragged along by the Neo-Darwinist ideas of struggle for existence, have often depicted a stereotyped image of the (primordial) man as aggressive and violent. Civilization and religion were supposed to be nothing more than a set of rules agreed upon in order for man to behave and not kill each other. This is literally taught at universities. But recent research shows more and more that civilization is not a convention, but something that is based on ethical values that are innate to man. There is the example of tens of thousands of soldiers who sang songs together with the 'enemy' at the front, jointly celebrated Christmas and warned each other when another attack was planned. Or there is the example of a general's diary describing how the majority of his soldiers shot over the enemy deliberately.

Studies indicating that humans are 'bad' by nature appear to be highly manipulated. One of them is the notorious Stanford Prison Experiment, which is included in standard works for psychology studies. When a group of students is divided into prisoners and guards, those in the role of guard would become extremely violent compared to those in the role of prisoner. Repetitions of this experiment later on always led to an opposite conclusion: trust is stronger than hatred, cooperation prevails over violence.

In the kingdoms below us, things are also more positive than the supporters of the struggle theory present. An increasing number of researchers is getting convinced through their observations that struggle is a highly overrated element in Neo-Darwinism.

One of them is evolutionary biologist Roberto Cazzolla Gatti. After years of fieldwork, he had to conclude that it is not struggle, but cooperation that is the main force behind evolution. The species diversity we see in nature, according to Cazzolla Gatti, can only exist due to interdependence of species in which each species creates the conditions for the niche (habitat) of a different one with its own niche.

Each species plays a fundamental role in facilitating the colonization of another. For example, plants can only settle

in a new area when pioneer species have created the right conditions and small mammals depend on large grazers for a suitable environment. On a full scale, all organisms are dependent on the nutrient cycles to which they each contribute.

In their research into speciation of fish in Lake Constance, Russian and Swiss scientists state that cooperation is the only explanation for the fact that different fish populations could develop into separate species within one area.<sup>(2)</sup> For those who take off the 'struggle glasses' for a while, another world of cooperation opens up. Like Internationally renowned behavioral biologist Frans de Waal for example, who found himself forced, based on his own observations, to let go of the idea of struggle as being the only cause for evolution. He resists the idea of aggression and competition in the animal kingdom as a basis for their existence. De Waal has published several articles and books on the innate empathic capacity of apes and contributed worldwide to research on altruism and cooperation in the animal kingdom. For example, American scientists discovered that chimpanzees preferred collaboration over competition in an experiment in which they had to perform tasks for a reward and in which the chance of competition was more than likely. Yet the chimpanzees showed five times more cooperation than competition.<sup>(3)</sup>

Comparable to De Waal, forester Peter Wholleben has made a major contribution to publicizing altruism and cooperation in the plant kingdom. In his recently published book *The Hidden Life of Trees*,<sup>(4)</sup> he reveals the most fascinating mutual connections within forests based on scientific research and his own sharp observations. He shows that the forest is one big collaborating organism. Trees appear to communicate underground via a large network of roots that are connected to each other by fungi. This way they can let other trees 'know' when they have a shortage of water. Companions who have sufficient water available can then actively pump water to those in need via the same network. Forests, as Wholleben discovered, also thrive best when species diversity is as large as possible.

### Essential unity of life

You could now wonder what is the value of the studies mentioned above, which are, by the way, just a few of many. Is this a temporary trend or is it more than that? The fact that the results of these studies repeatedly confirm cooperation as the driving force indicates that we might have come across a greater truth. But if we want to know whether they are really true, we will have to look at the *principles* on which this cooperation and mutual dependence are based.

These principles can easily be found in Theosophy. They form the foundation for the existence of The Theosophical Society and are therefore also expressed in our five objectives. In the context of this article, we limit ourselves to the first three:

- 1. To diffuse among men the knowledge of the laws inherent in the Universe.
- 2. To promulgate the knowledge of the essential unity of all that is, and to demonstrate that this unity is fundamental in Nature.
- 3. To form an active brotherhood among men.

Knowledge of the laws inherent in the Universe means that there are laws that apply to all life. With this we immediately come to the essence of the second objective, to be part of a larger whole: the knowledge of the essential unity of all that is, and to demonstrate that this unity is fundamental in Nature. Because we are all part of the Universe, there is a fundamental unity. All life emanates from the ONE boundless life that flows through the Universe. Better said, everything is that life. That is why all life is fundamentally equal and connected to each other. Once you are aware of this, you realize that interdependence is a fact in nature. That is why the third objective states: to form an active brotherhood. With the emphasis on 'active' because that brotherhood is already there, we only have to act accordingly to it. Compassion therefore, is not just a sentiment, it is a state of consciousness when one realizes that unity. This same awareness, although instinctively, we also see in the animal kingdom. Due to modern technology, more and more footage becomes available of different species helping each other. A gorilla who wants to help a bird back into the air after flying against the window, a lioness who adopts a young skewer, a wild leopard that befriends an Indian cow. In these cases, individual benefit or increased chance of survival does not play any part. And that is an essential point, because this cannot be explained from the neo-Darwinian viewpoint where there must *always* be some self-interest.

Yet we cannot deny that there is another side of the coin. Although heavily overexposed because it provides sensational images, the average nature documentary also shows struggle in nature. How can we see this in the light of that unity? You could say that we are dealing with an imperfect cooperation, something we will come back to in more detail later on.

Firstly, we should not assign human emotions and interpretations to this form of struggle. If in a population a certain place in the hierarchy has to be determined, the "struggle" is over between the males once the fight has taken place. There is no resentment or envy, everyone knows his or her place and the harmony is restored. Moreover, in most cases there is not even a physical confrontation, conflicts are often resolved in the form of a sham fight or *display*.

### Struggle eliminates, but does not create anything

Apart from being an over-highlighted element, there is another fundamental problem accompanying struggle: it eliminates but does not create anything. The idea of natural selection only eliminates things; everything that is not suitable is filtered out. It does not explain the diversity of forms that does exist. The few random beneficial mutations (spontaneous changes in the genetic material) do not explain the enormous variation of species and complexity of life we find on earth today.

This large hiatus, the absence of a creative force, has been uncovered by several scientists. Astronomer and Nobel laureate Fred Hoyle once calculated what the statistical chance is of random mutations resulting in complex life as we find around us. He compared it with "the chance that a tornado sweeping through a junkyard might assemble a Boeing 747." Hoyle was not alone with his opinion. Around 1900, Russian botanists had the same objection already and they assumed therefore that cooperation is underlying the complexity of life. In 1905, one of them published his theory stating that chloroplasts in plant cells initially lived as separate organisms and, at a later stage, merged into the cells of plants.

Convinced of this theory, microbiologist Lynn Margulis later presented the decisive evidence for it. Around 1960, she stirred up the scientific world with her theory of zymogenesis; the idea that parts of a cell once originated due to the fusion, literally merging of one bacterium with *and* in the other, becoming part of each other. Initially Margulis was ridiculed by her colleagues and her publication was rejected fifteen times. But once genetic material became accessible, her theory was immediately proven and generally accepted. It was now possible to confirm that some parts in the cell have their own DNA structure, such as for example mitochondria, the little energy centers in our cells. It is nice to point out that this theory is fully in line with Darwin's original idea of survival – not the strongest one survives – but the *best adapted* one.

### Life within life

Did Margulis, with her evidence, now solve the riddle for the emergence of the enormous variety of species? No, she did not, but she did point out an interesting phenomenon of life within life, known in Theosophy as the principle of emanation, or spheres within spheres.

Consciousnesses not only cooperate with each other, they are also part of each other. Take for instance the human consciousness within which the billions of cells that form our body have their existence. With our teeth, hair and one and a half kilos of indispensable bacteria in our intestines, we have represented all the lower natural kingdoms within us. We, in turn, are part of the earth, which according to Margulis is one big symbiotic system. And the earth, in turn, is part of the solar system, which moves within the atmosphere of the Milky Way and so on. To infinity. From the spiritualistic point of view, the Universe is actually one great symbiogenesis, expressed in the Bible by Paul with his statement: In HIM we live, we move and have our being.<sup>(5)</sup> 'Him' standing for the one boundless life that flows through every being, being its *essence*.

But how then *do* new species originate? How can we explain the diversity of species we see in nature? As mentioned before, Theosophy assumes that life develops from within, expressing more and more of that boundless life. Each kingdom and each species are in its own phase of development and it is not until everything of that particular phase *is* developed, before consciousnesses move on to the next phase, with new vehicles suitable for the development in that new phase.

Interestingly enough, this is exactly what geologists see in the different layers of the earth. Fossil records show long stable periods of several hundreds of thousands of years, after which sudden transitions are found.<sup>(6)</sup>

Moreover, it has never been proven that a sum of random mutations over time has led to a new species. This is the notorious problem of the *missing links* within the theory of evolution: the lack of transitional forms from one species to another.

### From imperfect to perfect collaboration

Now let us get back to the 'imperfect cooperation' we see in nature. The key to understanding this, is the emanation principle of consciousness within consciousness. Nothing is separate from each other, everything is connected to each other and that applies in particular to mankind and the animal kingdom. Animals live within the sphere of influence mankind creates. Less developed as they are, they instinctively follow our habitual patterns. And it is no doubt evident that our habitual patterns are not yet perfect.

As humans we are still working hard to develop our thinking ability. Imperfect as our minds still are, we all too often live in the illusion that we are separate from each other, with all the consequences this entails. Such as, for instance, territorial behavior, of which we clearly see the reflection in the animal kingdom. It is up to us to outgrow this, to develop from imperfect cooperation, which struggle in fact is, to perfect cooperation. As we make improvements to live in harmony, we will "pull up" the animals and we will gradually see a different characteristic. Until eventually there will be a state in which predators and elements such as territorial behavior belongs to the past. A state that is hinted at in the Bible in "Isaiah" 11, 6-7:

The wolf will live with the lamb, the leopard will lie down with the goat, the calf and the lion and the yearling together; and a little child will lead them.

The cow will feed with the bear, their young will lie down together, and the lion will eat straw like the ox.

### The black swan

In this article we have tried to show that cooperation is quite an underexposed element in biological sciences. With this we do not want to deny the existence of struggle, but we do want to address that considering cooperation as an exception to the rule is no longer tenable. Our aim is to draw attention to scientific assumptions that contain fundamental errors. If self-interest would be the basis for life, as often assumed, and we see exceptions, what should we then do with them? If chance and struggle cannot statistically explain the current diversity of species, then what does?

According to science philosopher Popper, a theory can only be maintained if it is also capable of explaining the exceptions. If your theory says that all swans are white, the ten thousandth white swan that you encounter will not add anything. It is the one black swan that you come across that requires a good explanation. With this your whole theory stands or falls.

In the meanwhile, the neo-Darwinian pond is swarming with black swans, but a good explanation is lacking. The challenge now, is to look at nature with an open mind, to let go of the old framework and take off the 'struggle glasses'. If you are driven by selfishness yourself, it is difficult to devise methods to prove the opposite. The creator of the Stanford Prison Experiment was able (with some manipulation) to obtain the results he *wanted* to see, but Lynn Margulis, with her intuitive mind, knew to devise the right research to prove mutual dependency. Our attitude and openness are decisive for the quality of our search for truth. Because you cannot recognize something if you have not opened yourself up to it. Or, as the quotation from biologist Werner Heisenberg, quoted by Frans de Waal says:

What we perceive is not nature itself, but nature as it reveals itself to our methods.<sup>(7)</sup>

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# Observations

### Recent research into the planet Jupiter

In 2011 NASA the well-known US space agency, launched the spacecraft "Juno" to investigate the gravitational field, atmosphere and magnetic field of the planet Jupiter from close distance. In previous years, Jupiter had already been visited by spacecrafts several times, but these predecessors had other and less advanced equipment.

In this short article we will describe some of Juno's most remarkable findings. This also gives us the chance to mention some theosophical teachings about the planet Jupiter: teachings that place the discoveries in a logical context.

The spacecraft arrived at Jupiter in 2016 and was immediately brought into a very eccentric orbit around Jupiter. This is done to ensure that the spacecraft, during each orbit, is only near Jupiter for a short period of time during which the important observations are all made. In this way, the risks to the spacecraft are minimized. The danger lies in the very strong magnetic field of Jupiter that captures many electrically charged particles, which then start circling around the planet with a tremendous speed. The passage of the spacecraft through such a particle belt should be as short as possible because the bombardment of the particles is extremely harmful to the instruments. To protect them at least partly against this harmful radiation, some instruments are packed in a thick layer of titanium. Those who wish to read more about this, can visit the website of NASA and similar websites.<sup>(1)</sup>

The spacecraft keeps functioning well and last spring NASA decided to prolong the mission for three years, till 2021. Then the spacecraft will be sent deliberately into the atmosphere of Jupiter, where it will disintegrate completely.

### Jupiter: the core of a 'mini solar system'

The planet Jupiter is by far the largest of all our visible planets. Its mass is two and a half times larger than the mass of all the other planets combined.

Consequently, Jupiter has a strong gravitational field. There are at least 87 moons circling around Jupiter. One of these moons, Ganymedes, is even larger than the planet Mercury. That's why Jupiter is often called a *mini solar system*.

The planet is a center of attraction for countless roaming objects like comets and asteroids. Many scientists believe that Jupiter has a protecting influence on the Earth: because Jupiter captures so many objects, less of them will fall on the Earth. The planet functions as a kind of shield for us.

Researchers call Jupiter sometimes a "failed star": its chemical composition resembles very much that of the Sun, but the planet is too small to bring about nuclear fusion, as the Sun does.

### Jupiter, the Child Sun

Students of the Ancient Wisdom, the Theosophia, sometimes call Jupiter a "little sun" or "Child Sun". Remember that according to the Theosophia the whole Kosmos is one great *living* organism and that each heavenly body should be seen as a world that is ensouled and governed by a kosmic being. In fact, the planets and our Sun form a very closely cooperating living unit together, a kind of cell within the living universe. According to Theosophy, 'life' or consciousness is not a rare phenomenon in the universe but is on the contrary the basis of all that exists. Kosmic Life pervades all things.

Besides, the majority of the planets that belong to our Sun are not visible to our physical eyes and physical instruments. So, when we call Jupiter the largest planet of our solar system, we consequently mean "of those planets that we human beings are able to perceive now".

Now there is something special about Jupiter. The Teachers of H.P. Blavatsky wrote that there is a Rāja-Sun right behind Jupiter.<sup>(2)</sup> Rāja-Sun means "king-sun". This is the name for kosmic entities who stand one step higher in the hierarchy than suns. A Rāja-Sun is the central point of a system that comprises many suns.<sup>(3)</sup> These Teachers added immediately that for us humans, this king-sun will still remain invisible for a very long time – until we have developed ourselves to a much more spiritual level. The words "right behind Jupiter" should be interpreted as an expression which hides a mystical truth. Gottfried de Purucker gives us the clue that the Rāja-Sun and Jupiter stand together much in the same way that a general does to his main aide-de-camp.<sup>(4)</sup> Jupiter is apparently, due to his particular characteristic, a transmitter of a part of the powers of this Rāja-Sun. The influence of the Rāja-Sun is also one of the causes of the enormous dynamics in Jupiter's atmosphere, as the Teachers of H.P. Blavatsky told us. This influence is thus very strong, yet it seems to proceed from an *immeasurable small* point.<sup>(5)</sup> In our literature, such a transition point is called a laya center.

Jupiter also has a strong interaction with our Sun – the kosmic being behind our visible Sun - which is shown by this: when Jupiter arrives at the point of its orbit where it is closest to the Sun, this interaction produces a peak of sunspot activity. So, the rhythm of Jupiter's orbit and the Sun's sunspot cycle are tuned to each other. This rhythm has an influence on the whole solar system, not only physically but also vitally and psychically. Epidemics and social upheavals occur more often when there is a peak in the number of sunspots.<sup>(6)</sup> So, the extra inflow of solar vitality may lead to all kinds of disturbances. Whether these disturbances do or do not happen, whether we human beings use this extra energy constructively or destructively, is our choice. Kosmic influences are neither positive nor negative: they are neutral powers which we can utilize for the benefit of all that lives, or for the benefit of ourselves or our own group.

So, you see, the Romans had good reason to name Jupiter after their chief god ...

### All processes within Jupiter work "differently" ...

The observations of the spacecraft Juno create in the first place more problems and less answers. The reason is: the processes within Jupiter do not work in the same way as in our planet. Everything goes "differently".

We give three examples. Polar light is also produced on Jupiter. The north and south poles light up regularly, as a reaction to the inflow of particles from the surroundings. But the chemical reactions that take place then, are incomparably different from those of our Earth.

The atmosphere of Jupiter is so compact that you may consider it a kind of fluid. Its atmosphere is a relatively thick layer. What we mean by this is that the big storms on Jupiter – which continually rage – are not tens but several thousand kilometers high. So, also on this point Jupiter differs from our planet.

Furthermore, there have been some gravitonal measurements done which give us indications about the core of Jupiter. The old theory about that core said: Jupiter has a small hard core composed of nickel, iron and stone, or no core at all.

Neither theory is likely, given the new measurements. It now seems more likely that Jupiter has a core that is diffused in some odd way and is yet one compact unit that turns around on its axis. How this combination is possible, is not known yet by the researchers.

The fact that in each planet of our solar system all processes run analogically, but never exactly in the same way as in our planet Earth, has always been stated by theosophical authors.<sup>(7)</sup> Each planetary entity has its own characteristics and is in another phase of his present period of existence. There are very young planets like Jupiter and Saturn and old planets like Mercury and Venus. Mercury and Venus are now in their last stage of life, their so called "seventh Round". Young planets produce much more vitality than old ones, just as a toddler is much more mobile and vital than an adult. G. de Purucker mentions that the planet Jupiter is presently in a birth stage which he calls the element fire stage.<sup>(8)</sup> The word 'fire' is a symbol here for substances with a certain aetherial level. Over time, the planet Jupiter will gradually materialize.

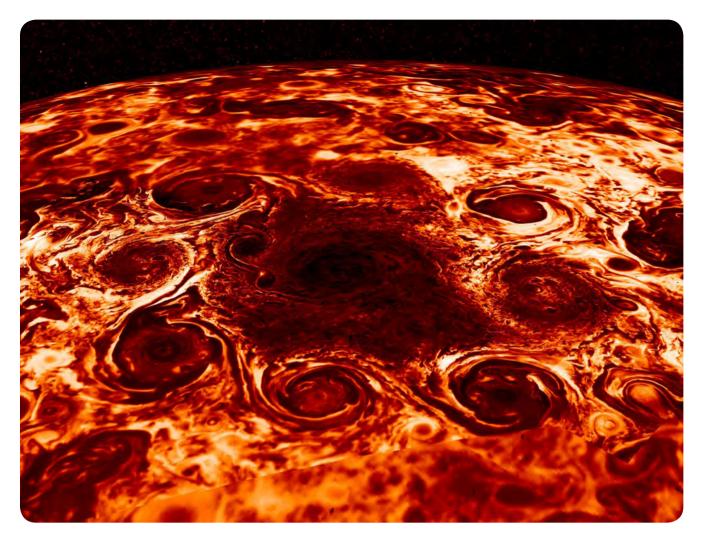
These differences in characteristics and stages of life reflect themselves in the behavior of all the beings that live within these planets. And that is finally noticeable on the physical plane, for instance as types of chemical reactions.

### Mathematical patterns around the poles

We close this short article with a marvelous picture of Jupiter's north pole. This photo has been taken by an infrared camera. That means that the light spots on the photo radiate lots of heat waves and the dark spots just a little.

On the photo we see a central cyclone surrounded by eight other cyclones. If you look closely you will see that the offshoots of these eight cyclones touch each other. On our Earth this would indicate that this system of cyclones is highly unstable. The cyclones would merge or quickly change their shape. But here on Jupiter, this seems to be a stable state — although the investigators will be sure about that only when they visit the planet again after twenty years.

Besides, above the south pole of Jupiter we see something similar, except that the central cyclone is surrounded here



by five instead of eight cyclones, which are neatly arranged in a regular pentagon. On Saturn we find a similar phenomenon: above its north pole we see one cyclone in the shape of a regular hexagon — as if it is a cell from a beehive. You see: the planets reflect mathematical patterns.

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# Plants that learn to live in completely different conditions

Because of the intercontinental transport, plants of many species have moved from one continent to another. In some cases, these exotics proved to thrive particularly well in their new environment. They spread quickly. After several decades of instability, they eventually became a permanent part of the local ecosystem.

Until now, many biologists have assumed that these newcomers are particularly interested in areas whose living conditions are similar to those of their area of origin. A plant from a subtropical region in Africa, for instance, could thrive well in the subtropical region of America, but not in a region with a temperate climate or with a dry climate. After all, the requirements which are imposed on the environment, must be the same.

### The dormant potentials in plant consciousness

Recent research nullifies this assumption completely. Three US researchers took stock of the data of more than eight

hundred species of plants brought from one continent to another - partly transferred deliberately, in the case of agricultural crops or ornamentals; and in part unintentionally, along with a ship or aircraft load. They checked in which climate zones the more than eight hundred species live now and in which zones they would originally have lived in before their intercontinental migration.<sup>(1)</sup>

What did they find out? Only a quarter of the plants stuck to their old preferences. Three-quarters expanded its ecological habitat. And in ten percent of the cases it was even possible to speak of pioneering: the plant settled in a totally new climate condition. This is a surprising result. Plants have a greater and faster adaptability than expected, and that adaptability seems to be activated by migration.

Theosophy gives us more insight into this phenomenon. Plants are living beings, and just as every entity they have countless dormant potentials in their consciousness. Those potentials can be expressed if two conditions are met.



The plant must be brought into an environment that gives the appropriate stimulation. In addition, the plant must be inwardly mature to make this new step in its development: there must be no inner barriers that need to be cleared away.<sup>(2)</sup>

### Which types of plants can learn quickly?

The researchers also looked at possible differences in adaptability between the different plants. The most flexible species were the cultivated perennial woody species. These plants sometimes showed a far-reaching pioneering behavior.

The question arises: why does this apply for these species? What type of consciousness do they have? Adapting yourself quickly to completely different circumstances requires flexibility and targeted adjustments: two characteristics of a relatively broad, intelligent consciousness. A being that is still highly specialized in one way of life and in one environment, is often not able to do that. Cultivated woody plants can generally be regarded as highly developed plants. Woody plants, such as trees and shrubs, can communicate with fellow species in various ways and display social behavior, as the Forester Peter Wohlleben demonstrated.<sup>(3)</sup> We know that animals and plants that are under direct human influence, come to an accelerated development. We see this in cats, horses and monkeys that are raised by humans. Anthropoid apes are even able to learn a kind of language with dozens of symbols. Why should not the same principle, at their level, apply to vegetable beings as well? That we have been able to make crops like corn suitable for a much larger number of climates than their original climate, is an indication of this. These breeding plants are of course the product of human intervention, selection and targeted crossbreeding, but if the potencies were not already in the plant's consciousness, the growers would never be able to make them appear. All growth takes place from within.

For biologists these discoveries have a lot of impact. They had built theoretical models to predict how much risk there is for plagues caused by exotics. Now they have to completely revise their calculations.

### Period of global mixing

There is another aspect that Theosophy can explain. We live in a time of evolutionary transition in which all continents interact with each other. According to Theosophy, that is always a sign that a number of planetary cycles are being closed and as many new ones, with a different characteristic, are being ushered in. Not only do we see this among humans – think of the enormous migrant and refugee flows – but also in the animal and plant kingdoms. These less developed beings also mix and spread over the earth. New ecosystems are gradually being born from such a mix of plant and animal species.

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# **Questions & Answers**

### The inner growth of animals and plants

### Do animals always reincarnate within one species?

If, at some point, an animal being has learned everything that there is to learn within that particular species, it will feel attracted to a higher life form and thus reincarnate in that particular form. For an animal consciousness, any form in which it incarnates - lion, cat, turtle or worm - is nothing more than a temporary school of learning. If this school no longer has anything to teach that being, if it has already developed all the capacities that belong to this form, it will no longer feel the attraction or feel pulled to this form and in the next incarnation it will move on to a higher class of evolution: a form of life that offers the opportunity to bring out *more* of its inner potential. If the entity first cloaked itself in the form of a lizard, it may take on the shape of a bird after a short or a long period of time. On average, birds tend to develop the quality to care for their offspring and exhibit richer social behavior than reptiles.

All development takes place on its own accord, gradually and from the inside out. This universal urge to realize latent potentials is reflected in all-natural processes.

Driven by this urge, a baby develops

into a toddler, a toddler into a child, a child into an adult and an adult into a mentally more mature adult.

Those inner capacities are *boundless*. This means that at some point, in the distant future, an animal being will have made itself ready to switch to the natural kingdom "above" it: the human kingdom. And that a human being will have made himself ready to switch to the natural kingdom above the human realm: the group of beings who have developed such profound wisdom that they can fulfill a spiritual, guiding role in the cosmos.

Then we will have become *beginners* in the divine school.

For the sake of clarity, we would like to mention that it is the *consciousness* that passes from one form to another.

Just as a toddler grows out of his clothes and needs bigger ones, so makes a consciousness use of forms, of bodies. Therefore, an animal body does not develop into a human body.

With our limited, human understanding it is not easy for us to imagine what a mosquito or a fly learns during one incarnation. But remember that an animal's consciousness can function at a very different pace than ours. Perhaps a minute for a fly can be compared to the experience we gain in a week. How many smells and tastes and light sensations does that animal processes in one afternoon of flying around? How many interactions does a mosquito experience when it forms a big cloud in the evening with countless other mosquitos?

You might ask: why is it that we see

so many different species of animals on Earth and that an animal being, during its incarnations, passes through countless different species, while a being that goes through the human school incarnates into a type of body that is common to all people?

The cause of this lies in the type of consciousness of human beings. It is fundamentally a step higher than the animal consciousness. G. de Purucker explains it in his beautiful book Man in Evolution as follows: while people evolve on a mental-psychological level, animals evolve on a physical level. Animals tend to be physically specialized. The different strains of animals each have a different character and produce over time, for example, a long trunk (elephants), a swimming form (mammals such as whales and dolphins) or wings (bats). People also differ enormously, but not physically. Our DNA hardly differs from each other. But our psychological characteristics can differ exceptionally: two people can live in totally different worlds in their thinking.<sup>(1)</sup>

### Do animals have karma?

Yes, because karma is a word with which we indicate a universal law: a fact that applies to all beings in the Cosmos. Each action has a corresponding consequence. And every event has had a corresponding cause. We call this principle "karma" or "the doctrine of consequences".

Nowhere in the Cosmos we can find totally undirected chaos. Everywhere we see underlying patterns and a logical follow-up of events. But sometimes it can take a long time before we discover these patterns before we "see the wood for the trees".

Cause and effect therefore apply to humans and animals, to divine and atomic consciousnesses, to everything and everyone.

Like all other entities, animals learn by cause and effect: they experience the consequences of their actions and learn their lessons from them. A dog that drinks a sip of sea water will most likely do so only once, because its stomach protests against it. A dog waiting for his boss stands at a door or at a certain spot in the yard. He knows that his boss will enter via that route. A fox that is trapped and dies is encouraged to find a way to prevent such a thing. After all, remember that dying is only a temporary resting phase.

Animals that die from an external cause learn from this. What animals don't have is moral karma.

An animal can't yet think. Its mental and spiritual abilities, including its conscience, are not yet active. You can't blame a cat for pouncing on mice and trying to kill them.

### Do plants have a soul as well?

Plants react to their environment and also act out of their own abilities. In our opinion, this can only be explained if a conscious being operates behind the plant form, or in other words, if a soul works through the plant form. Plants are in fact very sensitive entities. They respond to all kinds of external stimuli such as sunlight, animals and sounds. When a plant is eaten by insects, it sometimes sends out alarm substances in the air. Neighboring plants that perceive this substance are warned. They will then produce substances in their leaves that will make them less attractive to insects. Plants also react

strongly to feelings. A houseplant that is seen as a soulless thing will languish. A plant that is cared for with dedication grows beautifully.

This explanation can be applied to all things in the cosmos, taking into account the large differences in the stages of development. The total Cosmos lives and everything within it as well. So yes, a plant has a soul, or rather, is a soul. That being is in its deepest core a center or a tiny "drop" of the One whether we can speak of an individual being or of a multitude of beings who are united.

### Is cutting a tree murder?

From the theosophical point of view, cutting a tree means prematurely terminating its outer life. The entity behind it will not be destroyed, because it cannot be. Consciousness cannot be destroyed, nor can it be created. But the outer body of a tree being can be



Cosmic Life and is busy bringing out more and more of its cosmic possibilities. Every being is a "pilgrim" who climbs for many billions of years, step after step, the cosmic ladder of life.

Typical for plants is the fact that their consciousness does not yet have much grip on the beings - the cells and atoms - that compose their bodies. In a highly developed animal such as a mammal or bird, all organs behave as one vital, coherent system that is able to react quickly and effectively when needed. With plants, you can see that the parts have a certain autonomy. A cutting from a plant can grow into a complete plant. The branches, leaves and roots of a tree are obedient to the "general policy" (in the spring, for example, they all grow at the same time) but also show independent growth. In a series of grass pollen, it is not possible to determine destroyed.

What would be the consequence of such an action?

The tree loses an opportunity to experience and will again have to wait for the next cycle (the next spring) to try to germinate. Essentially, there is a certain delay in its evolution. In addition, the cutting affects all creatures that were more or less dependent on that tree. Cutting down a tree has much less far-reaching consequences than killing a human being. A tree consciousness is much less developed than a human consciousness. Breaking down the life of a human being is a heavy intervention in his evolution and that of all those involved. It has great spiritual, mental, psychological and physical consequences. The karmic consequences for those who knowingly commit a murder are accordingly great.

In the "spiritual ecosystem" of the Planet, a tree plays a different role than a human being. Nevertheless, this is a living and growing being. We must therefore always be respectful of trees and plants. As Plato and King Ashoka pointed out in ancient times, we must be careful with forests.

The senseless cutting of trees is not only detrimental to the tree being itself but will also come back to strike back on us, because karma works anytime and anywhere.

Remember that "not cutting down" is also an action. Failure to do so can also have major consequences. Think, for example, of trees that threaten to fall over.

### Will our humanity and the animal kingdom always remain connected to this planet Earth

Yes, as long as we have something to learn within the school of Earth. And that will certainly be the case for many more billions of years! However, we as humans will learn to broaden our thinking beyond the boundaries of the material sphere, discovering that we, as thinkers, have a role to play within the whole Planet and the whole Solar System, including their most spiritual spheres.

### Is the development of mankind a constant, evenly ascending line?

Look at how we treat animals. Is that a sign of a rising civilization? It is indeed a sign of a spiritually ascending civilization if people spontaneously treat animals as equal beings, with mildness and wisdom. Animals are not equal to us, they do not have the same needs, but they are equal in value. How we should judge our society at this point in time is left to your own judgment. It is clear that steps forward have been taken since the 19th century: vivisection by scientists is only possible with explicit permission and a farmer can no longer neglect his livestock with impunity. However, many countries have given way to a bio-industry that includes millions and millions of chickens, cows and pigs.

When we look at how past cultures dealt with animals, we see signs of both great understanding and great incomprehension. A wonderful example of compassion for the animal kingdom was given by Emperor Ashoka from India. But animals were often also seen as mere means of satisfying one's own needs. Hence, perhaps, the question: is the development of mankind going to take place in a constant, uniform manner? Well, no, it always takes place in waves. Periods of relatively powerful spiritual idealism - and thus respect for everything that lives - alternate with periods in which the "me, me, me" dominates and the true meaning of life is forgotten. Periods like that lead to all kinds of oppression, both of people and of animals. The great challenge facing us as humanity is to make the peaks of civilization more and more powerful and inspiring and to make the dips of civilization less and less low before we can turn them upwards again.

The cause of this wave motion is the fact that not all people are at the same level on the path. The groups that still have much to learn, both morally and intellectually, will and must at some point manifest themselves, lead their lives and experience the consequences of their actions in previous lives. Only in this way it is possible for them to grow. Anyone who realizes that each generation consists of a (slightly) different group of reincarnating egos, with a different characteristic and a different karmic background, will also realize that each generation can take a step forward from the point where it stands. The latter, that starting point, can therefore differ from generation to generation.

In short, a wise man knows that his altruistic work never ends: every new generation is a "new project".

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- 2. By reason of this unity: brotherhood as a fact in nature.
- 3. Respect for everyone's free will (when applied from this idea of universal brotherhood).
- 4. Respect for everyone's freedom to build up their own view of life.
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### Why this journal is called Lucifer

#### Lucifer literally means Bringer of Light.

Each culture in the East and West has his bringers of light: inspiring individuals who give the initial impulse to spiritual growth and social reform. They stimulate independent thinking and living with a profound awareness of brotherhood.

These bringers of light have always been opposed and slandered by the establishment. But there are always those who refuse to be put off by these slanderers, and start examining the wisdom of the bringers of light in an open-minded and unprejudiced way.

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(Helena Petrovna Blavatsky in the first issue of Lucifer, September 1887)