

Does it exist: free will ?

by Manfred Hörz

First-level logic	$A = A$ and differentiation A, B
Second-level logic	$A \vee B$ the freedom of choice
Third-level logic	Decision for the best (Ariston) A resp. B: free will

Does it exist, free will and if it does, is it transcendent? Or is it from this world? Is it a part of nature? Can animals be free-willed?

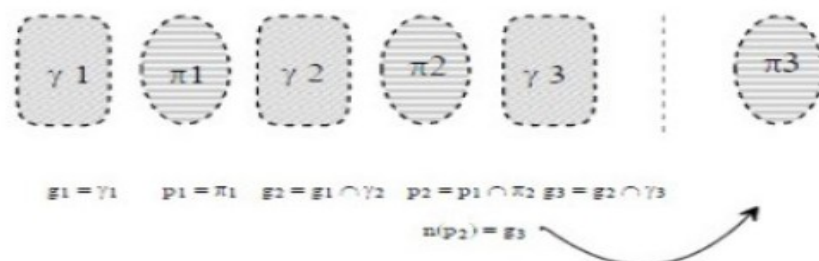
There are necessary conditions of free will. If in a situation there is just one possible succession situation, then that is deterministic. This is the case of a baby and it is the case of the beginning of the world too. Under the condition of his survival for a baby a presence situation follows the absence situation. It is the emotional change from unease to ease, mildly said. In the nothingness, the beginning of the world, their mutual annihilation follows to the split into virtual photons and antiphotons. The nothingness to their virtual being.

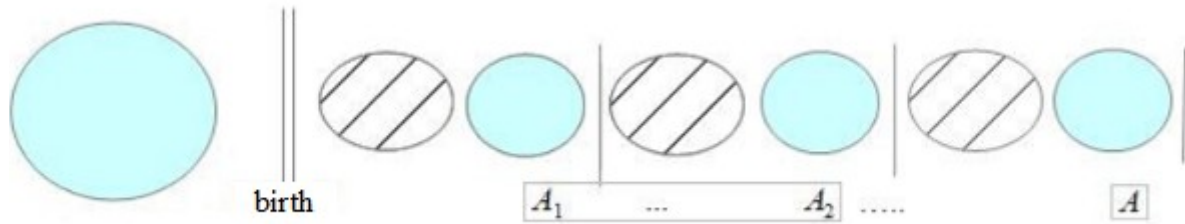
Free will requires a kind of consciousness. Not just the sequence of situations, they are pure emotional or ontological. The being must have climbed the primary level of logic that logic of identification, that of $A = A$ or better the equating of A_n and A_{n+1} , which are not the same too.

Condition for this is the sequence of emotional unease situations and ease situations. These are contrary, because there are transitions, a gliding over, and are above all logic. Since the ease situations are not perfect, there is always a shortcoming, like Brecht would say „but something is missing“ or the Stones „I can get no (real) satisfaction“. This deficit stems from the impossibility of the unborn child to experience the paradisiacal uterine symbiosis in the presence.

The usual solution to the problem is to compensate by quantity the lack of quality adding the relative ease situations in which the secular, extrauterine mother is present again, in superpositions: the memory.

The experienced succession of positive moments of ease situations- interrupted by discomfort situations - is followed by a logical sequence of superpositions of past comfort situations, which generates the logical expectation within the next discomfort situation to precisely this "pre-concept", the logical representations.



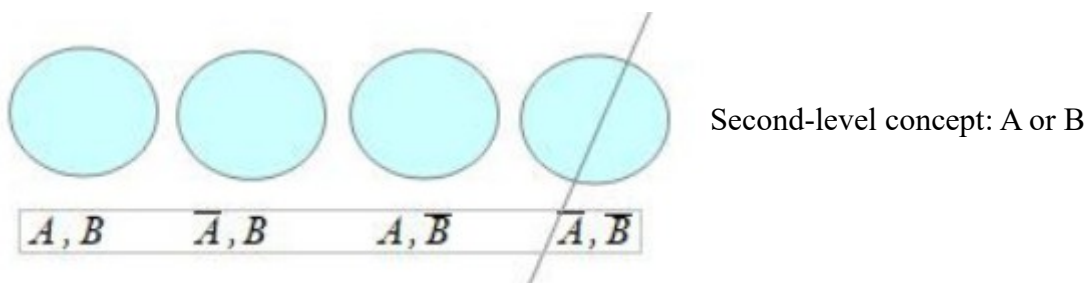


The image (the object or the pre-concept, which are all the same at this stage of consciousness) is finally fixed in the series $A_1, A_1 \cap A_2, \dots, A_1 \cap A_2 \cap \dots \cap A_n$ if there is a certain degree of similarity, i.e. is set as A or as $A = A$, as identification of the last members of the series.

In the upper diagram the experienced singular unease situations are denoted as γ , the experienced ease situations as π . The g is modeled as the respective intersection of the γ , their pre-conceptual representations and the p the corresponding intersections of the ease situations as their pre-conceptual representations. The p_n are the logical expectations in the corresponding discomfort situations γ_n .

This concept, this thing, this picture A logically represents the emotion that awaits its fulfillment in A. This concept is not only mediated in a social interaction process (of mother and child), but also indirectly through the respective company, which is already inherent to the mother. This concept is as apparent from the Dialectics of unease and ease situations, even in itself explosive or at least torn, since he also carries the discomfort situations in itself.

If the being possesses two concepts or things A and B arising from the split of A's logical expectation and disappointment that A did not occur, and if the basso continuo of the comfort situation generates of new chain of $B's$, the second stage of the logic gets possible, which consists of all propositional combinations and A and B inclusive their negations. They are a collection ($\lambda\omicron\gamma\omicron\varsigma$), a logic of different combinations of situations: $A \wedge B, \neg A \wedge B, A \wedge \neg B, \neg A \wedge \neg B$. If there are reasons and the ability of the being to summarize the first three, then the concept of the (enclosing) or $A \vee B$ arises, which exists only as a second-level concept and nowhere as a single concrete situation. Of course you also get the exclusionary, the either-or, which is the usual in normal thinking, by summarizing the two middle combinations.



Now choice between A and B gets possible, which can be pure arbitrariness or contingency.

As a second condition, there must be an ethical good or better, an Ariston, so that the arbitrariness can be set apart from the usefull, rational decision, which is the free will.

At the lowest level, free will is the one who takes care of oneself, that is, who chooses the possibility that he believes would be the appropriate means of fulfilling his own aims. The basis of these goals lies in the intentionality, the orientation of the absent to the present, in the striving for the preferred, the pleasurable.

This basic structure, which tends from discomfort to pleasure then generates the good of the goal and secondarily, the good of the means on the patial level. On this basis, no mistake is possible. For this applies the Socratic saying that no one deliberately chooses the bad, without hesitation. Only in later phases, the error becomes possible.

At the higher level, good will no longer be that of the individual, but how the word "good" reveals that it is about the whole, the relationship between human being and human being or the relationship between human being and society.

At the next higher level good means the relationship of human being to the world at all. Free is then the will, if he recognizes the laws of Nature and acts according to her. Freedom is the insight into necessity and to act accordingly (Spinoza). This dialectic is related to the good, the ethics. Freedom is at a higher level necessity. But the law of nature is love through and through. First abstract love finds its fulfillment in death until it does not only preserve, but increases life on a more complex level. The free will wants the best, it is the good will. The will that does not want the good is wrong in his choice or he is simply arbitrary, who submits to chance.

The free will is part of nature, it is immanent to it, just as the mind is nature, only one very developed level. Nature is free. It allows freedom through its basic structure, it creates the space of possibilities by its split, which is inherent to it. Everything that exists has polar or initially even adversarial character, part and antipart. These span the space of freedom initially abstract as a condition of the possibility of freedom, as transcendental, and then as real in the form of alternatives. It is the free will of nothingness to practice in polarity for unity. Here, no alternative is chosen, but the loving annihilation. Totally symmetrical, part and antipart are equal and equal in rights. Only with the creation of the real parts (photons), surrounded by the possible alternatives (virtual photons) the choice is prepared. Principle or idea is also the best here, the engine of development. Nature only knows the relative determination in certain intermediate stages for the purpose of stabilization.

The thesis of general determination arises from anxious natures, which are searching their own security. But it does not exist. Evolution is a constant interplay of relative determination and consequent freedom, which is necessary for higher development. Both are already created in the script of the world. The space-time of the fluctuation is chaotic, but the process of reunification is deterministic viewed from the outside. It necessarily leads to death. But this determination is free in nucleo. For their purpose don't need choice because both parts belong together. And without purpose, freedom is mere arbitrariness.

Once living beings have the two components, second-order logic and ethical structures, they have free will.

Freedom also grows with the development of more concepts A, B, C, with its dimension. Freedom not only sustains its distinctions and ethics, it also grows qualitatively by the higher ethics forms and at least quantitatively by their higher dimensions.

The distinction of Kant into the realm of necessity of nature and the realm of freedom of the mind or the ethics, is not only not necessary, but is based on false premises, namely in the presupposition the laws of nature being deterministic. What determines is indeed the ethics, if

you are not at the primary level of just one concept. Because ethics tells you to decide for one of the different possibilities to do the best. If there are two (or more) best, then within that choice, the will falls back on the randomness of arbitrariness, even if this is already good in itself.

Perhaps it is still important to highlight that the differentiation of identifications – ie $A = A$, $B = B$ – are connected both with the concept, the positing, and with the reality of Incommensurability. The differentiation results from the non - fulfillment of the virtuality of the concept through the reality that allows the dichotomy A , B . This logical non - fulfillment, the split of concept and reality, in which both the mind and the Nature or the Other appears, is the reason for the possibility of the best, that is, the ethics that is the appearance of „Wirklichkeit“ in which reality unites with ideality.

What do these logical-philosophical reflections look like when reflected on neuronal level ? Will the free will disappear again?

The first condition was the first-order logic, the image formation or conceptualization of $A = A$. I will limit myself here to the visual system. As in the philosophical view of emergence of consciousness, we must distinguish two systems, that of the adult, which prepares the situation of the child with his habits and views and ensures for a temporary regularity. The other system is that of the emerging infantile consciousness. The first system provides for a certain return of situations and their elements. For example, similar objects are presented for certain time, i.e. pictures that the adult has itself constituted with the help of his parents. These stimulate via the sensory receptors a network of neurons of the brain, some of which are "on", others "off". This pattern overlaps with similar patterns in the further stimulations until a relatively stable crosslinking using the synapses yields, so that with similar stimulation this network is activated. This is a finite set limit that means the picture. However, there is still a physical phenomenon to be added. Such a neural activity pattern generates namely via the (accelerated) moving ions of the axons an electromagnetic field, or according to the quantum electrodynamics, a relatively stable photon complex, which is produced by superposition of the individual complexes, i.e. fields, but most of his life remains bound to the material body. A remainder may be radiated. In my opinion, this is the real consciousness, which is usually constantly enriched. The way leads first via socially prepared sensory stimuli to the neural system, which then feeds the photonic system. In philosophy of mind, the notion of Qualia is often mentioned. These are parts of the photonic system, which speaks a different language than the neural one. Which is one way or the other „feels like“ belongs to the photonic system of subjective consciousness, the mind. The $A = A$ thus has a neural representative and a photonic one, whereby in the latter one, classically speaking, has built relatively stable vibration pattern, which consists of several vibrations. A Fourier analysis could extract the components from it again, which would mean that a concretely experienced situation A_i is recalled from the conceptual A , of course with other parts of the situation that associatively are connected with.

The second condition, the logic of the second stage, the propositional logic, especially the $A \vee B$ is formed in the photonic system by superposition of overlays. One can think of the simple analogy of the hypercycles of Ptolemy or Eigen. In the neural system, the structure may be similar by combining networks. This second condition provides for the possibility of arbitrariness, the immediate presupposition of free will. Not just one subsystem is available, but at least two subsystems, which can be addressed by the total system. The subject of the decision, whether arbitrariness or free will is in the photonic complex.

Just as the subject is invisible and becomes visible only through his expressions and interactions, so it is with the light that is in the interaction with the objects giving them color and visibility. Like the subject is creator and initiator of facts, light is the creator of matter. It is the light that decides, it is doing what it wants to do, said Feynman about electrons and it's even more true for photons. Light is spirit and subject. Not because we're used to seeing it as an 'object' of observation it is what we

expect. The light is as mysterious as the subject and the universe. Leibniz had correctly seen it with his monads, when he speaks of the „Geist“ particles, which are both matter as well as spirit. Today they will be better described as photons, which also signify the light of knowledge. The subject of the decision is the photons complexes. Seen materially, the ego appears as an illusion. Because it is considered wrong. The ego is true. Just as the mind is the maximum space of true thinking. Who will drive away the spirit from matter will no longer be able to see him there. What he sees is the level of the object, which is certainly possible, but just a lower level. Only when the subject 'sees' a subject, i.e. lovingly interacting with it, it knows that it is subject. Ultimately, photons interact only with photons, in their different forms, be they pure photons or included in matter.

Then we have the third prerequisite, the Ariston. The best is goal-oriented. It is the highest of the present possibilities. When we act or think, that is productively acting, we draw on the basis of the present first the thinkable and then the feasible of the next stage. A decision that is reasonable depends on this goal. The best is predetermined in the present. Sometimes in a variety. It is like an interpretation of a work of art that transcends the work, so that the work of art becomes a part of the interpretation. Each correct interpretation continues the work upwards.

Photonally, it is the next higher consistent configuration that contains the actual vibrations. Or neuronal the higher complex that contains the neural systems as parts. This is a general evolutionary principle. Here it happens explicitly at the photonal level, where it often only indirectly uses the virtual photons, the spirit particles. Consider the electromagnetic interaction mediated by these particles and realized in them. The mind acts on the matter or the neural circuits back. Einstein was the first to explain this in the photoelectric effect, which today, for example, serves our lift doors. The mind induces the neural structures which seem to produce the rational act of free will. That may be the case, but only secondarily. The relation between neural structures and photonic complexes is in some way similar to relation between electricity and magnetism. Electricity is able to induce magnetism, such as in electric motors, and changing magnetism also generates electricity, as is known with dynamos.

The freedom of the will does not situate in the neural networks. That's why he's so doubted today because you're looking in the wrong place. He is at home in the photon complex. Thus, the free will reveals its existence, if you consider not only the neuron structures but the more basic quantum electrodynamics.

