

FUTURE AS A RESULT OF EVOLUTION AND PLANNING

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Будущее как результат эволюции и планирования

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When one comprehends 'Future as a Result of Evolution and Planning', one can recognise that one can have an influence on the future without falling for a determinate of planning. Society can not plan its own future; it is dependent on evolution. In other words, it is not planning reason that decides the future, but evolution. An equitable evolutionary theory does not lead to reticence in all practical questions, but rather, one can be more considerate in what actions to take. Evolution occurs principally openly, so that one cannot determine it through planning, but only influence it, although the intended results do not always arise.

Когда рассматривается «Будущее как результат эволюции и планирования», то признается, что можно оказывать влияние на будущее и без определенного планирования. Общество не может планировать свое будущее, т.к. зависит от эволюционного процесса. Иными словами, не планирование определяет будущее, а эволюция. Объективная эволюционная теория не ведет к сдерживанию практических вопросов, а, наоборот, необходимо более тщательно продумывать, какие действия надо предпринять. Эволюция происходит в основном открыто, так, что человек не может определить ее через планирование, но может повлиять на нее, хотя предполагаемые результаты не всегда просто достичь, а зачастую они сопровождаются нежелательными последствиями.

Future

The utopia of the past (Thomas Moore, Tommaso Campanella, Claude-Henri de Saint-Simon, Charles Fourier, Robert Owen and others) enlightens the past future and throws an early view on the growing meaning of future.

Peoples and nations respectively weigh past, present and future differently. For this reason there was, for example, in post-war German history an oscillation of orientations between the past, present and future. The West Germans of the 1950s were busy with reconstruction and the economic miracle associated with reconstruction and were also occupied with creating a better life in that present time [1]. After reconstruction in the course of the Youth and Cultural Revolution of 1968 the focus changed to a utopian future that had to do with a classless society, antiauthoritative education and child rearing, orgiastic perpetual gratification and the elimination of all gender differences. As it became clear that this future was impossible to achieve, the prevailing discourse turned to the past, with special focus on the crimes of the National Socialists (Nazis).

Only recently a reality-based and forward-thinking discussion about the future of Germany has appeared in addition to the engagement with the past years from 1933 until 1945.

A look at past prognoses is wise when trying to illustrate the future. Prognoses are difficult because they refer to a condition or state which lies in the future. «The future cannot begin» [2]. The closest one can get to this phenomenon is when one views prognoses that were formulated in earlier times, previous years and then observed their realisation as a reminder for the present.

In the 1970s the demographer Paul Ehrlich predicted the starvation for half of humanity in the 1980s, the «Club of Rome» 1972, famine with millions of deaths until the year 2000; other researchers predicted «forest death», when the forest withers away — none of which came to pass.

Therefore, one should be careful with prognoses and definitely base them on a solid foundation.

The growing importance of the meaning of future is a result of evolution. Systems are being adapted from past into future [3]. The future is increasingly not representative of a salvation, but rather of variation. Until the 16th century it was assumed that the old was better than the new and this view culminated in the attempts toward the recreation of the ancient forms, as in the Renaissance. Politics and religion continued to dismiss any innovations in the 16th century because they were seen as demonic. After the 16th century, in the course of rising optimism toward advancement, people tried to legitimise their

opposition based on religion. God does not show himself directly or offer signs, his 'invisible hand' [4] does not gradually create the world, but rather, it is little by little that these advancements arise, for example, both Americas, the printing press and the artillery [5].

The general outbreak of the engagement with the past into that with the future occurred in the 18th century. The printing press strengthened the orientation toward the future with its temporalisation of utopias and made communication about a preconceived future possible.

The tempo of evolution increases in modern society because the mechanisms of variation, selection and stabilisation are institutionalised independently from one another. The time horizons of past and future separate and the respective possibilities of the present are simulated, which, if even possible, can be realised in the future. The new receives a worth itself and is viewed as an ultimate chance and not as a danger.

Modern society transforms time conception and the past is divided into eras. The present should develop improvements, although this is then either greeted as a novelty or rejected as a deviation [6]. This leads to new presents creating their own suitable pasts and futures. Each present constructs a new unknown future and this guaranties that the world stays open for innovations [7].

Society oscillates between positively and negatively assessed operations and between self-reference and foreign-reference and is confronted with an uncertain future. Social Functional Systems [8] put themselves in the state of self-created uncertainty and align themselves with an unknown future by the use of communication media, like money, power, love, commitment etc.

Future has to do with a virtual reality whose chances of being realised are unclear. Future remains evolutionarily indefinite and unpredictable even if trends and developments can be anticipated, and an attempt is made to make the future's certainty a present reality.

Future is based on evolution and is founded on the «auto-formation of life» [9].

Evolution

Evolution can be summed up as a process of variation, selection and stabilisation. An evolutionary theory inspects structural modification as a result of differentiation. In social development higher system complexities have been achieved and stabilised, and from there can be further processed. Here, not only material, but also cultural factors have an effect on the social developmental surges and open up new possibilities by differentiation and recombination of evolutionary mechanisms. Thus, evolutions can begin with a material change of social systems and, therefore, their structure or, in idea evolution, with the relevant semantic [10].

Reflexivity through the means of speech having become institutionalised in the process of development from animal to human being, this became a continual

theme of variation. At this stage speech became a fundamental evolutionary universal, without which there could be no human society. Selection followed in the course of evolution by means of universals developed by society with new means of interaction, which made possible a reduction of complexity for processes relevant to society. Stabilisation is achieved through system differentiation. A partial differentiation took place in the archaic stage. In the early advanced civilisations a vertical stratum evolved with stratified differentiation of society, replacing the former equality of rank. The next evolutionary stage saw a functional differentiation of society accompanied by the related assertion of universal norms.

The evolutionary process is based on the emergence of the world and the resulting development of human beings.

Modern evolutionary theory discusses whether the acquired characteristics can be passed on. This can be misunderstood as «Lamarckism» [11]. However, it is increasingly the discussion that changes in the environment and learning processes can be based on a transformation in the DNA of germ cells. After these changes are transformed into nucleic acids they can be passed on to the next generation [12].

The synthetic theory of Neodarwinism is often criticised by representatives of the systemic evolutionary theory [13]. They point out that the core point of evolution, especially for the development of higher life forms like humans, cannot only be effected through the mutative changes in given genes, but through the effect of feedback cycles. For this I use the term «Systemic Evolution».

Pyotr Kuzmich Anokhin described this transformation of individual elements in system entities [14] in 1935 long before Norbert Wiener and Ludwig von Bertalanfy. Anokhin founded the Russian school of System Theory. Here the «functional systems are dynamic, self-organizing and auto-regulating organizations whose activity is aimed at achieving adaptive results useful to the system and the organism as a whole» [15]. The use of the term Systemic Evolution has the advantage that it can be connected with social scientific Evolutionary Theory and System Theory. But System Theory also has to be connected with elements of the Action Theory, so that you can describe unintended effects of intended actions.

A connection between System and Action Theory is fruitful for sociology because one can combine structure and the rules of creating structure as values and norms, as orientation aids for one's actions. Actors' actions can produce systems, which then develop their own dynamic. On the other side of the coin, pre-existing systems present a framework for individual cost-performance ratio with subsequent actions.

Social reality is the result of social constructions, which express themselves in things such as money and marriage, for example, although they are based on raw facts, such as, for example, earth and humans. The source of human knowledge is a result of interaction between

the actors and the external world. Actors cannot recognise things as they are, but they can develop a schema, which serves to overcome the external structures and to secure the survival of the species. Human mental capacities are organised in such a way as to facilitate survival. It can be assumed that feedback processes take place between the 'ego' (the 'I') and the 'world' [16].

The developmental process of humans is only then comprehensible when one perceives the acquisition process of individuals in an exchange with an already existing reality; in other words, when one comprehends human constructs of reality as realistic constructs. This does not mean that an ontological depiction theory of reality is correct; but rather, that consciousness and communication can only develop in an adjustment with an outer reality.

Humans interact with the external world. They make the external world manageable. In this way, it can be assumed that humans incorporate schemas from the external world into their inner worlds. This is called 'constructivistic realism' [17].

Humans are constructors in this social process, which they create by means of communication in particular. Because humans live in societal associations, they have always communicated with each other [18]. Communication relies on social fabrication, which means that communication is action. Societies are not made up of people, but of actions. Therefore, I, unlike Niklas Luhmann, do not regard communication as the basic element of social systems, but rather action [19].

The basic principles of Systemic Evolutionary Theory are the following:

1. Around 3.7 billion years ago evolution was central for the genesis of life.
2. With the increasingly further development of life, the continued effective factors of variation (mutation), selection and stabilisation along with systemic control mechanisms are appearing, which are identified by feedback cycles or feedback loops.
3. Evolutionary theory builds elements of play theory with the dichotomy of chance and necessity into its conception [20].
4. Evolutionary theory can show that the human brain has grown over the last million years.

Hence the development of the human mind, consciousness and self-awareness progresses forward.

5. There is a correspondence of the patterns of evolution and human thought [21], and patterns of nature become copied in the mind. This results from the continuity of evolution, which reaches from the evolution of the quantum and molecules to that of civilisations [22].

Evolution is effective on all levels of the real world.

In my article «The Theory of Socio-Cultural Evolution» [23], I examine the societal and cultural transition in society from its beginning until the present and look at the growing meaning of the standpoint toward the

future, laying down the foundation for a sociological evolutionary theory.

Along with the steps of variation, for example, mutation, selection and stabilisation, evolution is also determined by the development of humans. Human beings are interwoven with the developmental process. They are self-referential systems. Within a body, which is divided by physical boundaries, there exists a dynamic system that is self-regulating. Internal processes regulate the metabolic process with the outer world.

Planning

It is often attempted to realise the future by planning it. However, instructions for actions are only sensible in respective functional systems.

The Planning Theory considers structural changes and an intentional anticipation of the future. These intentions often encompass deviations from the routine. Planning cannot be determined as the structure of system changes and, in this respect, planning is a result of evolution. Because the future is not determinate, one must underlie the evolutionary theory with the problems which come out of the principle unpredictability in evolution and not with a causal schema.

Therefore, one postulates the foundation for planning and decision theory as only limited rationality and attempts to get by with a mitigation of requirements for reason.

Planning and control lead to a limitation in the capacity of dealing with changes in respective areas, or organisations, and, therefore, advantages of enhancement are diminished.

When something functions, this is misunderstood as a result of planning (for instance the football game of the Champion-League-Winners); when something does not function as well as before (for instance the education system in Germany), it is understood as a result of too much or too little planning or modified conditions that are constantly changing.

When one comprehends 'Future as a Result of Evolution and Planning', one can recognise that one can have an influence on the future without falling for a determinate of planning.

Society can not plan its own future; it is dependent on evolution. In other words, it is not planning reason that decides the future, but evolution. Planning and Utopia can be vanishing points in an uncertain future.

An equitable evolutionary theory does not lead to reticence in all practical questions, but rather, one can be more considerate in what actions to take.

Unanticipated Consequences of Intentional Actions

This leads to an old topic in sociology: 'The unanticipated consequences of intentional actions' [24], which

can be studied in different scientific areas; thus, for example, the contrary effects in developmental aid, in German school reform or in the creation of terrorists by the Iraq war.

Evolution occurs principally openly, so that one cannot determine it through planning, but only influence it, although the intended results do not always arise.

In society, with its collective and individual actors and societal structures, aspired goals are often not achieved because the explanation of action is referential, on the one hand, to the actor, the «logic of the situation» and, on the other hand, to the societal structures and action situations [25]. The situation includes not only the objective attitude of the actor but also the interpretation of the situation, which can be divergent. Differences between «logic of the situation» and «situation analysis»

can cause failure and the opposite of the projected result of actions and intentions. In both areas rationality and congruence are difficult.

An important task of social science lies in analysing the unintended results of intentional human actions.

An illustration of non-intended results can be found in a word from the most significant German speaking poet Johann Wolfgang von Goethe who, through the figure of Faust, asks the devil:

«Who art thou, then?»

And he answered under the name of Mephistopheles:

«Part of that Power, not understood, which always wills the Bad, and always works the Good» [26].

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