

The duties of research and technology from the point of view of science, art, and the so called “natural evolvment” (whatever this might be).

Original German title: Die Aufgabe der Forschung und der Technik aus der Sicht der Wissenschaften, der Kunst und der sogenannten "Naturgewollten Entwicklung" (was das auch immer sei).

Vision paper and philosophical study
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English summary and fully translated Chapter Five

Summary

This essay consist of six chapters. Each of them is based upon, and refers to, the preceding chapters.

Chapter One

It is desirable that the actual technological development go in the following direction (especially as utility for art): A better addressing of our main senses through more sophisticated conservation of human sensations; a more extensive utilization of the natural spectrum of each sense with the help of technical devices. Thereby we could not only enhance the analysis of natural stimuli, but possibly also synthesize new sensations that are seldom in nature, or do not exist at all.

Chapter Two

A more extensive exploration of the three “neglected” senses of our human body would be welcome: smell, taste, and touch. Research should be intensified in analyzing, synthesizing, and conserving sensations with the help of technical devices, as is the case today with our “priority” senses vision and hearing.

Chapter Three

One should try to parallel several senses, especially for artistical communication processes (e.g., synesthetics in multi media art).

Chapter Four

One should try to concentrate research on media which enable dialogues—contrary to those which allow monologues only, e.g., television and radio broadcasting.

Chapter Five

In my personal opinion it is necessary to intensify the research efforts towards a global, almost perfect communication with the help of technology. (The more intense the

interconnections among brain cells are and the more brain cells are connected, the higher is the intelligence of the whole brain cell complex.)

Chapter Six

For the distant future, I would consider ideal the exploration of human mind and brain (by psychology and neurobiology) to clarify a potential redevelopment of long distance communication from a technical to a kind of mental form of communication. The mental contact among brains with possibly higher than speed of light fast connections would make most of our technical media obsolete.

In short: Technology is possibly only an instrument in a transition stage of human evolution. All the things we try hard to obtain with the help of our technology are possibly much easier to reach with our mere human mind—if they are worth reaching at all...

Chapter Five (fully translated from the German original)

In my personal opinion it is necessary to intensify the research efforts towards a fast and perfect communication, and that's why: Through the tremendous increase of human population, huge social structures have formed (e.g., cities, nations) which can not survive without mass communication. The complexity of today's society (which is also a consequence of overpopulation) has led to an increased need for information. This is also a consequence of higher education, which itself is a result of higher civilization standards. Besides the cross linking of the world through direct human-human communication systems, the linking of computers (machine-machine and human-machine) must not be neglected. Efforts for standardization are being made right now.

Public databases achieve rising importance. As mentioned in Chapter One, a culture relies in Chapter on the conservation of data that result from different human activities. Thanks to the high storage capacities of computer systems it is possible today that a central database could be built to hold all information concerning a certain domain (economy, science) and which could be easily accessed from any point in this world by the widespread telephone network. By this the overview over certain human achievements could be extremely simplified, as well the waste of double carried-out research could be avoided. This means the coordination in research could be improved (unfortunately not between the political blocks of our world). This effect of connecting the world, the coordination of activities of every kind, could lead to an improvement of communication among individuals. Through increasingly intense communication among humans, misunderstandings occur more seldom. In my experience, these misunderstandings are the main reason for injustice, delusion, and envy among human beings. Crass misunderstandings among nations lead eventually to rancor, violence, and war, which feedback to misunderstandings, injustices, etc. This self upswinging vicious circle, which leads eventually to world wars and world destruction, can be broken through only by communication among individuals. The efforts to eliminate misunderstandings have to be coordinated globally: single groups have no chance to solve global problems! Thanks to the actual technology global coordination is more likely to be achieved than in the past! Reward would be global agreement and harmony among the nations, acceptance and understanding of human peculiarities, which could probably lead to world peace.

These problems can also be described in a different way: As far as I know, the biological intelligence of a brain (like the human one) is based mostly on the quantity of connections among the brain cells. The more complex the connections are, the more intelligent is the entity. The second factor of course is the quantity of active nerve cells in the brain. (New born still have to connect the brain cells, which happens in the first months of life; brain cells of older people die off slowly.) One could imagine that nature is still young and at the beginning of its evolution. The apportionment of the existing global intelligence in billions of (human and other) brains, which interact “only” by sense organs, could be an intermediate stage on the way to the complete connecting of all nerve cells which are living on our planet. This could be synonymous to the evolution of unicellular entities to bigger cell conglomerates, which lead eventually to the actual human being! Parallel to this development the intelligence increased. The actual situation is perhaps only a risky intermediate stage in the evolution of a “global intelligence”, which consists in the closely connected brains of all creatures! This so called global intelligence would be non-self-destructive. As the cells of human beings usually work together in a complementary way (and not against each other), our world could live in harmony and would therefore not be self-destructive as it is today. Perhaps we human beings are the first product of terrestrial nature, who could take a first but important step towards a naturally evolving world communication, with the help of technical tools. The final objective of nature could be not only the coordination of all terrestrial nerve cells, but also connecting several planetary intelligences, which already harmonize within themselves—as far as there is extraterrestrial life at all (which I believe).

I return to my postulation of a high-performance communication medium including a universal net. With the logical combination of today's possibilities (cellular phone, view phone, satellite links, great technical advances in the miniaturization of electronics) I suggest the following: Communication among humans would be most perfect (in a technical sense), if every (adult) person in this world would have a special device on him, with the size and the weight of a compact wrist watch and the following features: built-in TV camera and monitor; microphone and loudspeaker; transmitter and receiver; able to contact directly geostationary satellites. Every human being in this world has its own personal telephone number and can be called from everywhere and anytime (presupposed the called human being is ready and in the mood to contact, which is completely up to himself). The audio and video communication should be modified by a built-in translation computer to avoid possible language problems. Doubts on the realization of such a sophisticated system, because of the many built-in features, can be neglected if one observes carefully the soaring development and decrease in size of electronics of the last decades. With the help of such a system we would probably reach the limits of our technical possibilities: It would be a perfect telecommunication, which itself is necessary for the development of a global intelligence—with emphasis on the word “technical”. This comment leads us to Chapter Six.

(A true technical progress would be only possible by the implantation of technical communication gear like an even smaller device than the described wrist watches, straight into the human brain. This means connecting brain cells directly to communication devices. Although this sort of “direct interference of technology on human thinking” is technically possible, the ethical resistance of humanity would probably be too big and such a system would never be accepted globally.)