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An anatomy of the soul or The World in which we live

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www.baderbuch.de

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Translation from the german original 2003:

Eine Anatomie der Seele

Stand: March 2007

In doubt, the German original is valid

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Contents

Preface

1. What is the Soul

- A. Dignity
- B. Spirit
- C. Grace

2. Where does the Soul come from?

- A. Time
- B. Space - Time (Minkowskis world)
- C. Time - Space: WORLD - ALL - PLERWA
- D. God
- E. Procreation
- F. Pregnancy

3. Where is the Soul?

- A. Body and Soul
- B. Present - Past
- C. Individual and Collective
- D. Man and woman.

4. Where does the soul go to?

- A. Age
- B. End of life
- C. Past and future

5. Further questions about the soul

- A. Who is the soul?
- B. Why is the soul?

Epilog

Literature

Preface

Humans developed out of the biosphere through the branch of the Hominids. They do not, however, form a branch of the much-branched biosphere, but they are their own sphere, the noosphere (Teilhard de Chardin 1961). As the biosphere (the sphere of animated nature) superposes the lithosphere (the sphere of dead nature), the noosphere (the sphere of the spirit) superposes the biosphere (noos = spirit). Unequally the biosphere, which divides itself in multiple and independent branches and twigs, which cannot associate any longer with one another, humans form in the noosphere only own trunk. Differently than to the branches of the biosphere all humans can communicate with each other and bear children with one another, not mattering if they are residents in the arctic or at the equator, in the east or the west or living 1,000 or 10,000 years separated by themselves (Johann Gottfried Herder, L. L. Cavalli-Sforza).

Differently to the dead nature (the lithosphere), which depends alone on physical and chemical processes, organisms in the biosphere are steered additionally by genetic factors. However, the relationship of the individual members of the biosphere including the noosphere is very close. The genes of all organisms are build from the same four nucleotides. In every case, three of these nucleotides form the letters of the genetic code, which determines the amino acid sequence of the proteins. 40 per cent of our genes are found in the yeast, up to 60 per cent in thread-worms, 90 per cent with mice and up to 98 per cent in apes. However, all humans differ from each other only in 0,1 per cent of their genes (Kathryn Brown). The number of genes are with plants, animals and humans in the same order of magnitude. Humans have about equivalent genes as the plants have and only three times as much genes than worms or flies.

It is not the genes, which they have to a large extent together with animals and plants, what differentiate humans from those. It is the soul, which makes humans, what they are. Originating from the animal realm, God made humans the coronation of the creation. Humans live, like the animals and plants, in nature. However, contrary to animals and plants, humans create culture. The properties of the soul have appropriate characteristics of the body and the senses to their disposal, so that the soul can work in the present to arrange the future.

Humans are not only closely connected with the biosphere. The human body is in a constant exchange with the entire nature. For example, the calcium will be dissolved to salt by water from the cliffs, taken up by humans into their bodies while drinking and incorporated into their bones. After some time the calcium atoms are exchanged by others and arrive over the elimination back to nature, where they are used by a blade of grass for its firmness. A bird eats the blade of grass and uses the same calcium atoms, in order to be able to use its flight muscles for the flight in air. After its death the bird decays, the calcium arrives into the water, from which it settles again to rocks, which build the cliffs. A similar cycle applies to all other atoms. The body is not static, but is subject to dynamic growing and passing. The senses supply the "control" and the genes the "program" for this event. The senses are again modified by external (for example illness) or internal (for example experience) influences.

Aristotle differentiated finally three essences in organisms: nutrition, sensation and intellectual capacity (de anima). He assigned the nutrition as the plants property, which one can call vegetative essence. The animals possess additionally to this vegetative essences senses, which one can call sensitive essences. However, only humans possess intellectual capacity, imaginative ability. On the basis of this viewpoint humans possess thus something, which no other organism owns and does not occur at all in dead nature. With this imaginative essence humans have spirit, fantasy, judgement and so on. What humans have ahead of all other terrestrial beings, is what we call the soul.

If one ponders about the soul, four questions come into the senses: What is the soul? Where is the soul? From where does it come? Where does it go? These questions are surely

already as old as mankind. However, since we cannot answer them definitely, they come up again and again (despite or because of our sokratic knowledge, that in fact we don't know anything about it).

1. What is the Soul

The soul bestows humans their personality. Soul and body are one in the person. The soul needs the body in order to make itself conscious, in order to be noticed and to communicate itself. For this it uses the language, of which the human is the only creature capable of doing. Despite multiple prerequisites (for example anatomy of the larynx) it is not possible for an animal to speak in the human sense, therefore to communicate experiences, to argue and much more than that. For human language not only the physiological and anatomical conditions are necessary, but also the mental ones. But what however are the capabilities, that give humans their personality and make their language possible?

Aristotle described the spirit as the strength of the soul, who thinks and forms ideas (de anima). According to Kant everything has a price in the kingdom of ends, humans however are their actually own purpose. They do not have a price, they have dignity (Groundwork of the Metaphysic of Morals 428-435). Paulus writes: *Strive for the higher grace gifts. For now remain faith, hope, love, these three* (1Kor. 12.31/13.13). Thus we can assume that the soul possesses the three soul abilities dignity, spirit and grace (Bader 1996), which Augustinus called: being, knowledge and love (De civitate Dei, XI, 26). One can regard them as mirror image of the Trinity of God: Father, Son and Holy Spirit.

Similarly to the Trinity of God, the soul is not simple compounded from these three abilities as from individual parts. On the contrary the individual parts result from the whole one. One can explain this on a triangle, as Descartes (Regulae ad directionem ingenii XII 18) used this for the explanation of the existence of God and Romano Guardini (Ethics) for the entirety of mankind: On a triangle one can differentiate surface, three sides and three angles. But one does not need all these components to build a triangle. Already when joining the three sides, hence follow the remaining elements automatically (three angles, the surface). You do not have to additionally add these elements. Just as one can join three other elements of the triangle, for example a side and two angles, the other elements will automatically be there, even if one did not want at all to have them. One causes the other.

The trinity of God explains itself best on us humans: A human, who is in his family a faithful-anxious father or mother, can be in his company a bossy chief clerk and in his club the trunk-merry member. Possibly his fellow men from the respective environment would not at all recognize him in the other spheres, in which he lives daily, since they do not know anything from the other sides of his personality. And nevertheless he is always the same human being. The Trinity, Father, Son and Holy Spirit, that is the one God, the Almighty, the one Allah, the Merciful, the one Jahwe, the Eternal one. He is always the same one, which created us according to his own picture (gene 1.27), whom however humans recognize according to ability, realization and experience in most different shapes. Therefore God has often enough been worshiped in most different ways throughout the times.

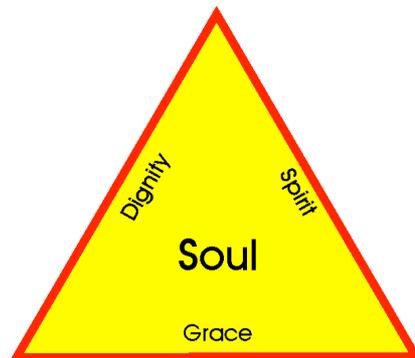


Figure1: The unity of the soul

Similarly one can understand the three soul abilities as the unit of the soul (figure 1). In the spirit are the abilities of the soul, in the dignity its characteristics and in the grace its welfare. The spirit equips humans with knowledge, the dignity gives them liberty and the grace strength. The strength of the grace enables humans with their knowledge and their liberty to bear and avoid wrong for themselves and others. Since the liberty gives however the possibility to humans to do good just like bad, they often enough use their knowledge and liberty to prepare suffering, above all if they ignore the strength of their grace. Finally they are however responsible to their conscience. No dignity without spirit, no spirit without grace, no grace without dignity.

In the noosphere humans are individual and collective at the same time. The individual expresses itself in the dignity of humans; this is the field of psychology. The collective is determined by the spirit of humans, that is the field of sociology. God however gives the grace to humans. The age-old wisdom: *I hear, what you say and see, what you do, but I do not know however, what you think* shows on the one hand the uniqueness of each human, about whom one can know much, which one cannot possess however. On the other hand this wisdom shows the borders between humans as individuals in their dignity and as collective in their spirit.

A. Dignity

The dignity is the expression of the liberty of the soul. It is closely connected with the five auxiliary verbs will, may, shall, must and can, which are an instrument of the language and which direct to the future. These words help humans to express their soul within the time opposite themselves and the community (the other ones) that is to bring oneself to consciousness and thereby to fulfil oneself. The time serves thereby humans as aid, to live and fulfil their entire I (soul and body) successively as in a film, in which they are themselves acting. Their entire I from generation to death is existent and foreseeable thereby at each time in memory and perception.

The goods of dignity are: The will, which demands: I want! The conscience, which asks: May I? The reason, which decides: I shall! The welfare, which orders: I must! The weakness, which doubts: Can I? The five cardinal virtues can be assigned to these five goods, because the virtues are the outside indications of the inside dignity. These are the four antic cardinal virtues courage, deliberation, intelligence and justice and the Christian main virtue forgiveness (Bader 1996). Forgiveness is one of the requests of the Lords prayer (Mt 6, 12), which is also ordered in the Koran (3,128). The goods of dignity find itself also in psychology in the five

factors model of the personality recognition, whereby the extra version is to be attributed to the will, the conscientiousness to the conscience, the openness to the reason, the compatibility to the welfare and the instability to the weakness (P.R. McCrae and P.T. Costa jr.). Thus the connections shown in the table 1 result:

Table 1: Connections of the dignity with virtues, psychological terms and auxiliary verbs.

Dignity	Virtues	Psychology	Auxiliary verb
will	courage	extra version	will
conscience	deliberation	conscientiousness	may
reason	intelligence	openness	shall
welfare	justice	compatibility	must
weakness	forgiveness	instability	can

Each virtue is the center of two unfitnesses, as already Aristotle established (Nicomachean Ethics, II, 6). It is the centre between the lack of the good (the good one too little) and the exaggeration of the good (the good one too much). The goods of the dignity are in intimate relationship to each other and determine thereby good and bad. They are, like the abilities of the spirit, individually differently pronounced with each human. Thus each human receives his, only to him entitled, singular and eternal characteristic of its personality. Depending on how strongly the individual goods of the dignity are expressed with a human at a certain time, he appears to others domineering or humble, taking or giving, hesitating or vigorously, fair or unfair, enemy or friend and so on. The dignity stands in the area of conflict of its goods (figure 2). It is reflected in the character of humans.

The goods, which give to humans their dignity, enable them according to their will freely, independently and solely responsible to act (*humans have the free choice and are master of their acts*, Maimonides, part V, Chapter 5,4). The will is however not independent of thinking (Bieri). That means, humans carry the responsibility for their actions by themselves according to their conscience opposite other humans and in relation to God and have to answer for it. The conscience has rights, because it has obligations. It is the leader of the soul. The experience of conscience is the king way to God (John Henry Newman). The conscience judges due to the reason, which decides on correct or wrong (according to best knowledge and conscience). Does the will act against the reason, it is bad (against better knowledge). If the reason errs, because it does not know a law, which has to be known, the act developing from it is bad (ignorance does not protect against punishment). If the conscience gives way to the weakness and submits to the will, the bad happens. Therefore dignity is neither well nor

bad, correctly or wrong. Only what humans make on the basis of their dignity, is well or bad. All conscience is consciousness, but not all consciousness is conscience (Matthias Claudius). There is no conscience without realization of good and bad. The conscience gives to consciousness the realization of good and bad.

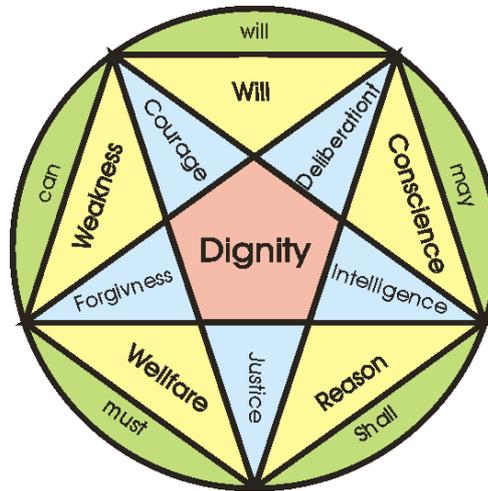


Figure 2: The dignity in the attention of its goods

Since in space and time the actions of the soul and thus also those of the dignity come off over its body, particularly over the nervous system, such effects can partially also be observed with animals. With those, however, will, may, shall, must and can are steered instinctively by the cybernetics of the nervous system. In contrast to it these effects take place with humans consciously, since they are steered by their soul, which uses the cybernetic nervous system as its tools. Consciousness is the expression of the soul mediated by the body (see chapter 5.A. Who is the soul).

The ethical standards rise from humans own altruism, thus from the behavior, to do others good without thereby to have an advantage, thus from their welfare. The ethical standards form therefore the basis for a society, which has the well being of all members issued as a goal (Eccles). The completion for this is to be found in the Commandment of charity (Lk 10.27). The basis of the welfare, the projecting ability into other humans (Empathy), is already with babies and infants, if they share the joy, the sorrow or the pain of their environment by laughter or crying. Depending upon education and learning, the often different moral understanding of the adults develops from there.

It may appear strange that here the weakness, which Augustinus calls failure (de civitate Dei, XII, 7), is assigned to the dignity beside such strong goods as the will or reason. There is however for humans probably hardly a circumstance or a condition, with which not only their will or their reason, but also their weakness is expressed. By weakness I understand the characteristic of humans, to give way (against better knowledge, from selfishness, from insight, from cowardice, out of consideration, to the own advantage or the advantage others). Heinrich Boell urgently described the weaknesses of humans in his narrations. The weakness of humans causes their fallibleness and can thereby cause the evil. It leads to the evil, if it gives way to the will against the conscience or decides against the reason. Then intention becomes longing. *Nothing, that comes from the outside into humans, can make them impure, but what*

comes out from humans, makes them impure (Mk 7.15).

In addition, by their weakness humans are qualified, to show tolerance to give way and possibly cause thus the good. Tolerance means to bear the conviction of others, although it appears wrong to oneself. That means neither approval nor indifference in relation to the strange conviction, but the attention of the other person. The tolerance respects the right of the erring to his conviction. The principle of the tolerance is the right of a person, to act from his own insight, but does not exclude however his instruction for correct conduct. The border of the tolerance is given, where the rights of other persons are limited. The virtue of forgiveness is always directed toward the others.

Repentance and penitence are closely connected with forgiveness as part of this virtue. Forgiveness demands the insight and regret of the other one into his offence to become effective. The penitence of the causer leads to the repayment of the offence. This penitence can come from the culprit. However it will usually be imposed as punishment through the laws issued by the community. The act caused by the own weakness cannot be forgiven by oneself; however, it should be repented in accordance with better insight. Genuine peace can be only achieved, if the involved ones deviate from their original point of view. They must become weak in relation to their once determined principles, i.e. they have to indulge. That is possible for humans, because they possess the property of the weakness as part of their dignity. Here weakness becomes strength: *because if I am weak, I am strong (2 Kor, 12, 10). The weak ones are blessed, because theirs the heaven (Mt 5.3)*

The dignity is given to humans from the outset from God and remains unchanged up to their death. It is not bound on time. Its decisions accompany the soul into the eternity. Since God gives the dignity to humans, it cannot be taken from them. That is stated in the first sentence of the German Grundgesetz: *The dignity of humans is inviolable*, and is also part of the fundamental rights of the Charter of the European union. That differentiates dignity from the honour. For the honour one can strive, it is given by humans and can be taken by humans.

Since dignity, on which the laws are based, can not be manipulated or mutilated, we can also not expect that our future, which we create, will be better or worse than the present, so as our present is not better or worse than the past was. And despite this knowledge and desire we expect a better future due to our doing. This liberty, which is lent by the dignity to humans, means at the same time responsibility. Liberty is among other things the consciousness, that thoughts and ideas are free also under extreme outside obligation. Liberty is to communicate thoughts and ideas and act according to them. In addition, liberty is to give way to the own weakness, to suppress thoughts and ideas and go or submit into the internal captivity.

Not everything, that fails, is debt. In order to become guilty, for that very reason liberty is necessary and the will to do it nevertheless (Hans Albert Hoentges). Liberty is also to act with or against the own reason or the conscience. The expression of the liberty is the will. The liberty is however always also the liberty of the other one. Disasters such as earthquakes, tempests or epidemics are surely not made by humans in their origin, the effects of these disasters on humans however are probably all too often caused by humans, for example from lust for power, obedience, greediness, egoism, lavishness, stupidity, priggishness, laziness, brutality, self craze, presumption, force and other ones. There is nothing, which is not possible, in the good one or bad one.

The ethically wrong, the bad in the world as also the ethically correct, the good, is first in the human being, in his internal one, with himself. Only secondarily, on ground of the world

solidarity and the creative organization ability of humans on the world, sin and debt but likewise good and correctness come into general history.

From the needs of the practical reason we want not only to judge, but we must also always judge (Kant, Critique of Practical Reason, I, 3). Such must exist for all other goods of the dignity: The will drives us to act, the conscience demands us to ask, the reason orders us to think, the welfare arranges us to be concerned and the weakness pushes us to giving way. Equilibrium between these goods is worthwhile. If one prevails, it leads to abuse.

The tendency on the final aim, outgoing from the reason, has the nature of a law. The law is a regulation of the reason directed toward the public interest, which is announced by the community. It is based on the dignity of humans: Will, conscience, reason, welfare, weakness. A law must be responded. One may act contrary only if it results out of necessity. No humans are so prudent that they can foresee all possibilities. The same applies also to the laws made by humans. Law is based on human rules; justice however is based on the goods of Dignity.

Laws are for humans there and not humans for the laws. In contrast to the human law, which is fallible like humans, the divine law, on which the world is based, is without wrong and unchangeable. People laws speak right, which develops itself on the knowledge of the time. That gives however no certainty that they are also always fair, above all, if the knowledge changes with the time. People laws can be therefore against the conscience. Then they are not binding for humans. Such laws must be changed, so that Mephisto does not keep right when he explains to the pupil in the study of Faust: *Law ' and rights inherit themselves like an endless illness; They drag from generation to generation and move themselves gentle from place to place. Reason becomes insanity, kindness troubles* (Goethe).

Unfair laws will occur again and again caused by the incompleteness and the weakness of humans. The ethical principles will be based on them until the unfairness is recognized and the law is amended (Thomas's von Aquin, Summa theologica II, 1. 90-96). That is one of the reasons for the fact that in the course of time ethical standards change and are different in different cultures. Free will is possible both in the divine and in the human law. Against both, humans can offend or comply themselves (his will is humans heaven). But they carry for this in addition, the responsibility. The laws, which should secure the dignity of humans within the community, are age-old property of mankind and apply in all world religions. In the mosaic Decalogue of the Old Testament (exodus 20.2-20, Deuteronomy 5.6-21) they are summed up in the second law board (4. *honour father and mother and love your children, 5. you shall not kill, 6. you shall not commit adultery, 7. you shall not steal, 8. you shall not lie*). Hans Kueng made them as the five unalterable instructions the basis of his Weltethos.

In the 9. and 10. Commandments of the second law board Moses laid already the foundation-stone for decisions, which become necessary today. After now 3000 years later within one century an enormous progress were made in the fields of the technology, natural science, medicine, genetics, economics, communication, social welfare matters (equality of man and woman) and much more besides. With these progress conditions are created, by which paradisiacal conditions for all could exist. In addition, this enormous progress holds the danger that some few could exercise world-wide power over the remainder of mankind, is it by politics, trade, industry, media, leisure maintenance or other things. Beyond that it is now already foreseeable that humans get the possibility, to intervene into their highest material property, their hereditary property and to form it according to their own will. Thus a generation could decide over the future generations which means the rule of the dead ones over living ones.

The 9. and 10. Commandments, the two Commandments of desiring and the exercise of power (*you shall not desire the woman of your neighbour, you shall not desire your neighbours property*), should therefore be updated to this new, so far never before existing situation. That applies particularly to the position of women in these Commandments. In exodus 20.17, the older version, the women and the domestic animals are placed on an equal footing, whereas in Deuteronomy, a later version, women are named as their own persons (Schuengel-Straumann). In the meantime a large part of mankind has, among other things due to the progress described above, struggled itself through to the demand of Paulus (1 Kor 7.3-4 and 11.11-12) that both sexes, men and women, are created with the same rights, as the Bible states already at its beginning (gene 1,27: *God created thus men as his image; as image of God he created them. As man and woman he created them, and gene. 5,2: As man and woman he created them and called them humans*). This is also expressed more than 200 years ago in the American declaration of independence (table 2). Likewise these rights are fixed in the article 1 of the human right explanation of the United Nations: *All humans are born free and equivalent on dignity and rights*.

Table 2: From the beginning of the American declaration of independence of 4. July 1776.

Declaration of Independence

We hold these truth to be selfevident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and pursuit of Happiness.



Both Commandments of desiring, which were installed 3000 years ago, in order to protect the highest material property of humans at that time (woman, slaves, farm and cattle), should now protect the highest personal property, the human himself, and the highest material human property (the hereditary property). These two Commandments should read therefore in modern form:

You shall not covet power over humans!
You shall not covet the hereditary property of the children to your own use!

and likewise should be part of a World-ethos.

B. Spirit

The spirit lends to the soul the abilities to form something, to make something, to be creative, to understand others, to be conscious of ourselves, to remind bygone times, to plan the future, briefly said: to think. From the realization: *Je penser, donc je suis* (I think, therefore I am) justified Descartes (Disc. IV 1) the existence of the soul. To thinking belong ideas, understanding, logic, memory, language. Ideas make it possible for us to arrange something new from acquisition and experience. The understanding enables us to think and judge. The logic brings order into our thoughts and thereby can establish the most versatile thought buildings. The memory notes the experienced, in order to recall it from the past into the present, so we can use it for the future. With the language however we can communicate our thoughts and ideas to others and receive new thoughts and ideas; because hearing is part of the language.

The voice is a mirror of the soul. The writing belongs to the language, which is singularly owned to humans. The knowledge of writing made it possible for our ancestor, to make their thinking, their knowledge and their doing present for their descendant over all times. The writing is the spatiotemporal four-dimensional expression of humans bound to the three-dimensional space. Finally, the language, which is a good of the spirit, uses for the understanding (hermeneutic) all senses of the body (reading, writing, listening, touching, feeling and also tasting). The whole of the apparent endless different languages is the word of good, which became flesh (John 1, 1-18). The spirit is a common good of body and soul, which results by the influence of the soul on the possibilities of the human brain (H.-G. Gadamer).

Human life can exist only by communication with one another. The medium is the spoken and written language. Humans feel their consciousness by their spirit. It supplies the reasons for the effects of the goods of the dignity. The dignity depends on thinking (Peter Bieri). The dignity is the basis of the soul, the spirit is its architect. It builds on the dignity the life within time. The spirit is not a sum of brain functions, on the contrary it reigns over the brain functions (Ewald, Goller).

If one speaks of the memory, one must differentiate between two different kinds: The sensible (motor) memory and the mental (cognitive) memory. To the sensible memory and concomitantly for the sensible learning belong for example standing and going, sensory impressions such as forms, smells, pictures, area and much more, which we notice in daily life. This memory is part of the senses and therefore also owned by the animals. On the contrary, the mental memory of the spirit covers ideas, intelligence and culture, which are humans exclusive properties.

Humans possess their spirit from the time of their existence. In contrast to the dignity, which is from the outset complete and accomplished, humans can dispose over the abilities of their spirit only according to the development of their bodies, above all that of their brains, first

to full maturity and then continuously to old age. Not however the training of the brain in the course of history rendered their cognitive achievements for humans possible, but the cognitive achievements of the soul lead to the necessary training of the brain. Like everything in the three dimensional space, this training took place not suddenly but with time. And time was available sufficiently: After today's knowledge the development of humans took about 2.000.000 years, from what only the last 200.000 years lead to their final development.

With the abilities of the spirit it is possible for humans, to learn first from their parents, then from teachers, friends and many others. At the same time, wrongly recognized knowledge can be corrected again. One gets knowledge particularly by learning, wisdom by experience, whereby up to maturity learning outweighs. From there on experiencing wins an ever-greater importance. Therefore a swabian saying signifies: *The Swabian becomes clever with 40 and wise with 60*. Learning is an activity, which humans must achieve themselves. In contrast to it, human gain experience without directly working for it. That is also the reason for the fact that learning is often so hard. Humans, young or old, know that they must learn. However, thus it is not yet done. The will is present, the conscience pushes and the reason commands, their weakness however prevents them often enough to do what has to be done. Therefore it requires welfare from others, in this case teachers, so that the pupil, whatever age, really learns, what he or she should know. In order to reach this goal, the principle applies: *That, what is taught has to be examined so that it will be learned* (Bader 1991).

Humans are qualified for learning by the so called liquid intelligence. Liquid intelligence permits to learn consciously, to solve problems, to adapt to new circumstances, to collect theoretical knowledge. They possess this ability through their spirit particularly in their youth. Active learning is first acquired over the sensible memory of the brain, which is part of the body, before it enters the mental memory of the spirit. Therefore, liquid intelligence will be lost with increasing age, since the brain is subjected to aging (the brain mass decreases in the course of the life around 20 %). However crystalline intelligence rises with age. Crystalline intelligence makes it possible to us to take up experiences, which we gain during our life, to process them to our memory and thus collect wisdom, which we can communicate by the language again to others as pragmatic knowledge. *Memories are not lost. They cannot be lost, because we are made from them* (José Saramago). Earlier experiences are present not only in the memory (remembrance), but are unconsciously present (S. Freud). The events of the unconsciousness are timeless, they are in the fourdimensional WORLD (Chapter 2.B). Creative impulses are passed on over generations, suppressed and displaced ideas remain present despite social denial. A major task of the Psychoanalysis is it, to make this displaced ideas again conscious and so to make the past in the present aware (C.G. Jung).

The human memory seems to be inexhaustible. There is probably no human, who would not be able to take up still somewhat new to his memory even if he is already old and gained knowledge during all his life. Each human forgets often enough something. He makes however likewise the experience, that long forgotten things emerge suddenly again. An explanation for it would be that the soul of humans has an entrance to the past in its four-dimensional spacetime (Bader, 1995 and further down), which serves as memory in a way so the soul can surf in it like in the Internet. In order to bring however something from this four-dimensional past into the three-dimensional presence, humans need their bodies, in the case of the memory their functioning brain. If certain parts in it are disturbed, they cannot use their memory fully. That applies for example with the Alzheimer illness or the schizophrenia. With Alzheimer the function of the brain is disturbed by storage of misshaped proteins. With schizophrenia the communication system between the brain cells does not work optimally. To differentiate is thus between the memory as such, which could be further intact, and the use of

this memory, which is disturbed by these diseases certainly.

On the otherhand, disturbances of the Brain, mainly of its left half, as it is the case with autists, can lead to phenomenal memory achievements (islandtalents) as reproduction of hundred of books after one time reading or hearing, but also mental arithmetic of mathematical problems without special mathematical knowledge. The semantic memory seems to be left behind the procedural memory with this so called Savantsyndrome (Treffert and Wallace). Possibly such humans are able, to recall by their soul certain events from the four-dimensional world of the past (see the chapter "Space-Time" below) in to our three-dimensional presence with the so caused imbalance of the memory. In healthy humans however, the semantic memory seems to restrict such a recourse on the fourdimensional past so the brain can be better used for new developments and ideas for the future.

It is the spirit of humans, which brings us progress, knowledge and wealth. The spirit of humans is it although, which in addition forges weapons by the made progress, with which humans and earth may be destroyed; which can abuse their knowledge for the rule over humans and enslavement of peoples; that can drown us in our wealth. No matter, what humans invent, compile or discover to the best for humans, it will always give humans, who will make from it weapons against humans. Finally, humans will make everything what they are able to do. Only by the experience won from their doing, well or bad, they will recognize whether their acts were correct or wrong. Only from the experience, well or badly, humans become intelligent. However, one we can be certain: Nothing on earth lasts eternally, progress or backwardness, knowledge or ignorance, wealth or poverty. From the passing again new develops. The time is it, which governs us and leads us from one to the other. Through their spirit humans are not unconditionally delivered to their fate, but called, to master it.

Understanding, ideas, logic, order, everything that constitutes the spirit, are dimensionless, not bound to the three-dimensional space and independent of it. They are however temporal procedures, because they develop in our spirit with the time. They are even in the four-dimensional spacetime, the WORLD, in which our soul resides (Bader, 1995 and further down). While the terrestrial body decays after death, the spirit remains over the time, which is to be recognized already by its works, which it had created by its abilities.

C. Grace

The grace gives to humans their security by faith, hope and love. These fortunes of the grace help humans to exist in the area of conflict between individual and collective. Without faith humans cannot live, without hope humans die, without love humans do not exist. The faith is directed to what one does not know, hope is directed to what one does not have, love however is directed to what one already has, i.e. to God in myself (Thomas's von Aquin, S.Th. II, 66.6). Love does not know time, hope has no end and faith has no borders (Grass). By love faith becomes knowledge and hope becomes having. Humans need the science for recognizing, the faith however for acting.

Our knowledge is the knowledge from here and now. Our knowledge about the past and the future loses itself in the vapour of history. In this vapour knowledge becomes faith, with whose assistance we try to look back and further ahead. The doubt about the knowledge is

part of the faith. That means however, without faith no criticism is possible. Likewise first the faith is called for learning. First you have to believe what you learn, before it becomes knowledge by proof. And also then most humans have no other choice than believing. For instance, the background of scientific topics is generally so complex that it can hardly be reconstructed by the layman. He can only believe that everything has its correctness with the slogan: *It will be correct after all, what they have made there.* Humans have the right to knowledge and the liberty to believe. But also for science is valid, what Max Planck, the founder of the quantum theory, has said: *Above the doors of science stand the words written: You must believe!*

Still so many observations do not lead logically to regularity, so long a refutation is possible (Karl Popper, S.109). Since the possibility of the refutation cannot be excluded however for the future, our knowledge is based on assumption (assumption knowledge), or more simply expressed: between faith and knowledge exists only a gradual difference. All our knowledge is finally faith, i.e. *that nothing is true for all, but everything only for them, who believe in it* (André Gide, IV). Confidence is based on faith from experience and becomes thereby knowledge up to the proof of the opposite. The knowledge doubts, the faith shifts mountains. Both, knowledge and faith, take from the past and direct to the future. The knowledge builds on the evidences acquired with the intellect out of the past (scientific, technical, happened). The faith is based on the experiences of the past witnessed by the mind (seen, heard, felt). But the correctness of both will finally be proved in the future.

There are no humans, who believe in nothing, and if they believe only in the fact that there is nothing to believe for them. Only who knows everything, does not need the faith. There is however no human, who knows everything. That means that someone, who really believes in nothing, has to be ignorant for lack of his knowledge and faith, or a part of his knowledge nevertheless is faith. Differently expressed, he believes to know. Concerning God, one believes either he exists or he does not exist. Each time it is faith, since we don't know it. The way out, not to think of God at all (agnosticist), is a typically human course to push somewhat uncomfortable or difficult for the time being aside. The deep meaning of faith and knowledge becomes clear at an utterance of my wife: *I know that our nine children are from us, you can only believe it.*

We believe in a better future and hope for its implementation, for example on the basis of the accumulated knowhow and knowledge in science and technology during the past century, thus our progress. In reality our visions of the future are not based on this progress, but on that deeply and eternally faith at the good resting in humans. With the help of this faith it is indeed not possible to achieve or force the eternal peace at all. But with faith we can turn our situation together to a good one, after it is gone bad, if each particular strives again and again for it. *Faith means to think with agreement* (Albertus Magnus V, 1, 238).

The faith can convert itself, in a person or in a community, also to the bad one. Indeed then, if the own faith is forced upon others by force, is it by punishments, is it by war. The history of mankind is full of it. The crusades of the 12. and 13. Century or the faith-wars of the reformation time count for this. As recent examples we have the communism of Stalin and the national socialism of Hitler. At present we experience the Dschihad (faith war) by religious zealots such as Osama bin Laden against the western world (whereby the western world this encourages by stupidity and missing political insight). Jesus ordered his Apostels: *Go and teach* (not: force) *all people* and Mohamed announced: *There is no restraint in the faith* (Koran 2, 257). And nevertheless the faith is abused again and again for the fulfillment of some ones own greed of power.

Hope is the expectation of a desired property. It enables us to work for a goal without losing the courage. Hope gives us strength for coming out from adverse situations. Hope lets us exist, when the reason has already given up. With the help of hope we can master the most adverse circumstances of our life and the world. Only in the hopelessness we give ourselves lost.

Love has two directions in men, the love for oneself and the love for others. Both are equal, as Jesus had formulated it in the main Commandment of the Christians: *Love your next one like yourself*. The same statement is made in the golden rule: *Everything that you expect from others, do also to them* (Mt. 7, 12). Thereby as next one each human on earth is meant (Lk 10, 26-37). Jesus placed this charity next to the love of God, since God is in us, in me and in my neighbours. Therefore I love God, if I love my neighbours (Mt. 22, 37-39). Charity is ordered in the Koran in the 90th sure (das Land).

These rules are age-old human ideas on which is also based the Grundgesetz of Germany (Art. 1, Abs. 1: *The dignity of humans is inviolable*). The Commandment of the charity, the next-love, originates from the Old Testament, the book Levitikus (19, 18) of the Pentateuch, which was arranged around 500 before Christ from old tradition. Confucius already recommended the golden rule to his pupils, which is found in the discourses written between 500 and 400 before Christ (V, 11 and XII, 2). On the same basis the categorical imperative of Kant is stated: *Act in such a way that the maxims of your will can be considered at any time along with the principle of a general legislation* (Kr. pr. Ver. first part, I, 1, §7). The mercy is a basic idea of Islam. The most frequent designation of God in the Koran is: "The Merciful". Jesus extended these Commandments to the entire mankind: Brothers and sisters or neighbours and friends are not only themselves next ones. Each human is the next one - superiors and subordinates, Jew and Muslim, black and white, friend and enemy. Next love is to respect others, enemy or friend, as humans.

The love for oneself, the self-love, enables us, to carry out our desires. This can serve for learning knowledge and abilities or self-consciousness. In addition it can be the desire for material goods, for power, after fame. Although it can become fast to the self-craze. Adam Smith, the founder of our free-market economy, has recognized this inadequacy of humans clearly and has described it to the use for all of us: *We do not expect what we need for our meal of the sympathetic consideration of butchers, farmers or bakers, but as result, that they notice their own interests. We do not turn to their people- but to their self-love, and we do not mention the own needs, but speak of their advantage*.

Equally to this self-love stands the love for ones fellow, which worries itself about the next one, helping him in his fears and pains and in emergencies and dangers. The next love should not lead however to patronizing or subjecting the next one. That means that we are to recognize the self-love of our next one exactly the same way like our own self-love. Only if this takes place mutually, we can live as humans in community and peace and meet our desires to the best of everybody. *Love cannot be without realization in others, liberty not without acknowledgment of the other one* (Juergen Habermas). Life is an everlasting giving and taking and on it is based the Commandment of the next love: Love your next one like yourself.

The love can variously come to expression: Friendship = Philia = Caritas, longing = Eros = Amor, next love = Agape = Diligentia. *The love pairs, but the virtue populates; the Eros may sow, but the Caritas retains and the Agape bears fruit and sacrifices* (Joseph Bernhart, de Profundis, page 122). By this versatility the love can have different effects: Attraction -

devotion - longing - passion – unselfishness - self craze (Augustinus, God state, XIV, 7). As everything that is owned to humans, they can use or abuse the love for well-being or for sorrow for themselves or for the next one. *Love is a constant challenge, which God expects of us, probably therefore expects of us, so that we provoke the fate on our part* (Wojtyla).

Faith and hope are bound to time. If the soul of humans enters the eternity of spacetime after their terrestrial death (Bader, 1995 and further down), it knows and has. *There it needs neither faith nor hope. The love however remains eternal for the soul, since it is in God* (Thomas's von Aquin, S.th. II, 67, 3-6).

2. Where does the Soul come from?

The soul, which is a deep secret of the faith, is not accessible to the natural sciences, as we know them. The natural sciences get along in their research without soul and also without God. These two terms can be attained for us scientifically only over philosophy and theology. The soul in space and time, that are we ourselves, and God is in us. Both can be recognized however only by the faith.

Over the centuries and thousands and thousands of years humans thought over the origin of the soul. Plato, Aristotle and Origines believed, the souls exist in God. They would be thus always a part of God (Pre-existence). Gregor of Nyssa and Augustinus bent to the opinion, the soul comes from the parents (Generatianismus). Clemens of Alexandrien and Thomas's von Aquin were the opinion, the soul will be created by God during the procreation (Creationism's). Romano Guardini explains: *The soul, the actual carrier of my existence, is called directly by God. Each conception has a metaphysic background: Each time God creates this soul in personal bestowal. This must certainly be brought together with Gods absoluteness of his instant coexisting eternity.*

A. Time

The question, whether the soul was always already present or developed only at the time of inspiring, is groundless, if one arranges space and time correctly, on which Guardini refers with the "coexisting eternity" of God. Our body, a three-dimensional thing, is situated in a just so three-dimensional space, which additionally is exposed to a forth of gravity because of the pull of the earth (gravitation). Thus we divide the three dimensions of the space with our senses in width, depth and height. This organization applies however only relative to the location on earth and not relative to the cosmos. Both our body and the perceptible space change with time. In our memory however the past form remains and by our fantasy and presentiment we can design a future form (for example a house). Where however did the former form remain, where the future come from? What is the time? Augustinus admits: *If nobody asks me for it, I know it; if I want to explain it to someone asking, I do not know it.* (confessions, XI, 14.17). The future is not yet, the past not anymore, therefore they both are not being. There is nothing on earth, which is not bound to time. *Everything has its time* (Koh 3.1).

Where are future and past? Augustinus (confessions, XI, 18.23) asks. He does not know it, but knows however, where they are, they are neither future nor past, but present. The present, the now, is the border between future and past. It does not have time, is however being. For our consciousness it becomes perceptible, because we have the ability to experience up to 10 seconds of the past as simultaneous presence. But already the sight of an object at further distance shows us not the present, but the past: The sun, as it was approximately 8 minutes ago, the star Sirius, as it was approximately 9 years ago. That takes place by means of the fact that the light, which is perceptible with our eyes, has a finite speed. If a mirror would be situated on Sirius, in which we could watch ourselves, we would see ourselves not now in the present, but in the past many years younger.

Aristotle determines, (physics 4, 11, 220a): *The fact that thus the time is a measure of the movement regarding before and afterwards, and that it is coherent is obvious.*

Augustinus (confessions, XI 27, 35-36) notices: *What is it, which I measure there? Where is the short syllable, with which I want to measure, where is the long? ... Not the heard syllables themselves, which are not any more, are measured by myself. I measure*

something in my memory, which clings there as an impression. In you, my spirit, I measure the times... The impression, which is produced in you by the features with their passing and stays in you, if the features are past, for that is it, what I measure as something present, not what passed there producing the impression.

Thomas's von Aquin: (S.th. I, 10.4 to 3) says: *As the eternity is the actual measure of the being, then the time presents itself as the actual measure of the movement.*

Emanuel Kant (Kr. r., B50) wrote: *The time is a condition A priori from all impression at all, the direct condition of the inside (our souls) and evenly by it indirectly also the outside (our body and the world) impressions.*

Time can be only in the soul, only in there can passing, present and future be kept apart and experienced. The soul itself is in the eternity and not in the time. But the body of humans is in the time. Besides the physical time described here, which is measured today by the duration of even oscillations (clocks) (Augustinus as orator used for it the duration of syllables of the human voice, confessions, XI), there are other kinds of times. To emphasize is the individual, psychological time. It is from person to person and from opportunity to opportunity of different duration: Some feel themselves early old, others remain eternally young and the one is early ripe, the other one is a late-come child. Sometimes the time passes fast sometimes it lasts endlessly. Time is in the human spirit; it is the condition of the soul.

B. Space-Time (Minkowskis world)

The results, which were gained by the research in the areas of nuclear physics, quantum mechanics and cosmology, show that besides the to us well known space dimensions point (zero dimensional), line (one dimensional), even (two-dimensional) and room (three-dimensional) still further space dimensions are existent. In the meantime, for the explanation by quantum-cosmological phenomena further higher-dimension areas are postulated, for example a ten-dimensional space-time for the explanation of the Big Bang at the beginning of our four-dimensional space-time and the standardization of the three atomic forces (strong, weak and electromagnetic strength) with the force of gravity (Hawking, 1988). The same applies to the opinion, our three-dimensional universe exists as diaphragm in a higher-dimensional area (Arkani Hamed et al).

The extensive meaning of space and time becomes clear, if one regards both in the space-time continuum, which Hermann Minkowski had developed at the beginning of the 20. Century. Therein space and time are regarded not as independent units, but in a four-dimensional union, which he called WORLD. This WORLD made it possible for Albert Einstein to expand his special relativity theory to the general relativity theory. The relativity theory gives us a notion of the infinity of God, the origin of the soul and their continuation after death. In the relativity theory the time becomes flexible. By use of the imaginary number $\sqrt{-1}$ ct, which can also be written: `ict` (whereby i is the indication of an imaginary number, c the speed of light and t the time), results with time the fourth dimension of the spacetime. This is equivalently exchangeable in the four-dimensional WORLD with the three dimensions of our room. The time is an aid, with which we spacenatures, who live in a three-dimensional space, experience a further dimension, the future. It is the measure, with which we experience the for us imaginary WORLD of the fourth dimensions, the future and the past. That has Albert Einstein clearly described (Table 3).

The fourth dimension is naturally something real (see also Petry, 2002). However, it depends from where one regards the happening: In the four-dimensional WORLD (not

accessible for us) the fourth dimension is real existing. With the three coordinates x , y , and z of the three-dimensional space associates w as the fourth coordinate, freely exchangeable with the other three coordinates. In the three-dimensional space however this fourth dimension has an imaginary size, which develops for us with time and lets so develop the space-time, for us the imaginary four-dimensional WORLD. The time is the tool, with which we notice and feel the fourth dimension as past and future.

Table 3: Four-dimensional Continuum of the Relativity Theory

From: Albert Einstein, Relativity: The Special and General Theory. Translated by Robert W. Lawson, Henry Holt and Co., New York, 1920.

The here-introduced imaginary formula ($\sqrt{-1} ct$) has the dimension of length, since c (the velocity of light) has the dimension of a velocity (length divided by time). Multiplied by the time t the dimension of a length results, therefore four space dimensions remain.

The Non-mathematician is seized by a mysterious shuddering when he hears of "four-dimensional" things, by a feeling not unlike that awakened by thoughts of the occult. And yet there is no more commonplace statement than that the world in which we live is a four-dimensional space-time continuum.

...Similarly the world of physical phenomena which was briefly called "world" by Minkowski is naturally four-dimensional in the space-time sense. For it is composed of individual events, each of which is described by four numbers, namely, three space coordinates x , y , z and a time coordinate, the time-value t .

...Minkowski's important discovery for the formal development of the theory of relativity is to be found in the fact of his recognition that the four-dimensional space-time continuum of the theory of relativity, in its most essential formal properties, shows a pronounced relationship to the three-dimensional continuum of Euclidean geometrical space. In order to give due prominence to this relationship, however, we must replace the usual time coordinate t by an imaginary magnitude ($\sqrt{-1} ct$) proportional to it. Under these conditions, the natural laws satisfying the demands of the (special) theory of relativity assume mathematical forms, in which the time coordinate plays exactly the same role as the three space coordinates. Formally, these four coordinates correspond exactly to the three space coordinates in Euclidean geometry. It must be clear even to the non-mathematician that, as a consequence of this purely formal addition to our knowledge, the theory performs gained clearness in no mean measure.

One can clarify oneself experiencing the four-dimensional WORLD thereby that one imagines a two-dimensional creature, whose "Lebensraum" is the plain with the coordinates x and y . The two-dimensional nature can experience our three-dimensional space with the coordinates x , y and z only by the way, that it experiences the third dimension z of the space as an imaginary dimension ct with the time. We will call this two-dimensional organism an evennature. A three-dimensional object is only then recognized by an evennature if it meets in

its timeline this object. That is the temporal beginning of this object for the even nature. This object was before in the unknown future of the even nature. With the help of the time the even nature in its two-dimensional plain wanders through this three-dimensional object. The even nature recognizes this object not in its three-dimensional expansion, but only in each case as a two-dimensional cut through the object. If the timeline of the even nature leaves this object, it lies for the even nature in the past. For us spacenatures is this three-dimensional object with its coordinates x , y and z present in its whole expansion, even if we are outside of the time of the evennature.

Insufficiently and roughly illustrated, the entire time-bound I of humans in space-time (our life from the birth to death) can be compared with a loaf of bread, which is cut in slices and again built up from these slices (similarly as an imaginary two-dimensional even nature would experience our three-dimensional objects with the help of time). At each time we live only in a three-dimensional layer of the space-time (similar to a two-dimensional slice of bread in our space). The individual layers (our three-dimensional space) build themselves up with the time from beginning to end to an overall view, which we three-dimensional natures (space natures) recognize as the four-dimensional WORLD. The time makes it thereby possible for us, to experience the four dimensions of space-time, the WORLD, (similarly as the imaginary two-dimensional evennature the third dimension of bread would witness) and thus to fulfill our life.

This experience happens with a certain speed, for which Minkowski used the term c , the speed of light. A conception of the four-dimensional space-time gave already Galileo Galilei 1630 in his dialogue (1st day, 117), if he describes the acquisition of knowledge: *These transitions, for which our spirit uses time, which it fulfills gradually, passages the divine intellect equal to one instant or, which means the same, they are him always present.* The yesterday and the morning of our three-dimensional space are in the four-dimensional WORLD part of the today, they are simultaneous (Bader, 1995). This world is the place, in which everything takes place, in what Husserl was engaged in his "Logic investigations" and what Heidegger expressed in "sense and time".

In the remembrance we can recall the way, which we covered in time (the fourth dimension) in our memory (see above chapter 1. B. Spirit). In the future we mark out goals so we can reach them. The way there is the fourth dimension, the time. In a certain sense humans do not have a problem to convert the times, which are necessary for this, in length dimension for the sake of descriptiveness. This happens, if they want to plot an event, for example the share quotation. In a Diagram (a two-dimensional plain), the respective share quotation is laid on the ordinate (a linear line) and in the abscissa (likewise a linear line) the pertinent time. From such graphics, in which the time is represented as a linear dimension, the course of the share quotation is evident in the past and from it one can imply the share quotation in the near future. This will lead hopefully to a positive conclusion of a deal. Since we do not know however the future reliably, but only suspect, we cannot be safe over the suspected future from the past (in this case of the share quotations). A further example results in the case of filming: If the father shoots his children with a movie camera while playing, he transfers the temporal happening of three-dimensional playing in the two dimensions of a picture on a filmstrip. The time is stored thereby as a linear line (the length of the filmstrip). When playing this strip the time appears again as a time dimension on the screen. The past is gotten into the present so to speak.

C. Time - Space: WORLD - All - PLERWA

According to the theory postulated by George Gamov and confirmed of by Steven

Weinberg, time and space resulted approximately 15 billion years ago from the so-called Big Bang. After usual view of the cosmology there was no time and no space (Stephen Hawking, 1988) before the Big Bang. That applies reliably to our four-dimensional space-time, the WORLD, because before the Big Bang this WORLD was outside of our time coordinate and therefore, there was no space and time in this WORLD. This World, and to that space and time, are thought to have started by the explosion (Big Bang) of an infinitely small core, in which the entire energy of our universe was infinitely pressed together and developed by expansion like an explosion to its current size (Guth). However, are therefore space and time inventions of the Big Bang? Are they not rather conditions of the infinity? Has not the time ignited in the Big Bang our presence with its three-dimensional space and leads from there on our three-dimensional space through our four-dimensional WORLD? Couldn't it be the fact that the entire energy of our four-dimensional space-time was always distributed over this WORLD but became only present for us at our time zero, at which point time stepped into our WORLD? The four-dimensional WORLD would then exist like in a Steady State - as Bond, Gold and Hoyle had suggested it (Hawking) -, which the three-dimensional space experiences with time (Hermann Bader 1995). That means, our universe did not develop from nothing, but from elemental powers, which were called in age-old creation stories of mankind darkness, Deluge, chaos, Tohuwabohu and other ones.

One could imagine then the development and change of our three-dimensional space with time from the Big Bang up to now and further into the future formally like a two-dimensional plain, which moves with time through a three-dimensional ball or a three-dimensional hyperboloid. At the beginning of our time (the Big Bang, approximately 15 billion years ago) our three-dimensional space would have begun as a point on the surface of the four-dimensional WORLD by the entrance of the time as a three-dimensional space-slice. From this point our three-dimensional space moved continuously with the help of time through the four-dimensional world like a cut of the four-dimensional WORLD. Because of its spherical shape our space did experience at the beginning a sudden expansion out of nothing, the Big Bang. With time the expansion became ever slower when wandering through the four-dimensional WORLD. If the four-dimensional hypothetical WORLD possesses actually ball-similar shape, finally a contraction of the three-dimensional space would take place up to the nothing. The reverse Big Bang, the collapse, would happen by leaving the four-dimensional WORLD. If the four-dimensional WORLD possesses however a shape similar to a hyperbola, an always larger expansion up to the final dilution would take place. This would come the present knowledge nearest (Friedmann).

The three-dimensional time-slice, in which we live, is by the speed of the light not even, but bend into the past. The further we look with a telescope, the further the event will lay back in the past. Because of the final speed of the light we will never see the presents, thus things as they are simultaneous, but always as they were in the past.

The four-dimensional WORLD is already for a long time familiar to us as Period. We speak of period, if we mean for example a certain time in past history, like the time of baroque. This period covers roughly the development of the three-dimensional space in the years of the 18th century with all events and space changes during this time. This period is thus four-dimensional. Also, the period, which we name for example midday of 12 o'clock to 13 o'clock and in which we have three-dimensionally the lunch, is four-dimensionally. And like that the whole period of our life is four-dimensional. The term period is called in German "Zeitraum", which is, translated into English word by word: "Timespace". And this term describes exactly what it means: The four-dimensional space, in which we accomplish our life,

The WORLD, as we know it, therefore began through the time. We experience the development of our WORLD from the beginning to today and into the future with time (Augustinus, God state, XI, 6). We humans however live in this WORLD in the time. Here the question emerges whether with the traversing of such a four-dimensional WORLD everything that happens in the three-dimensional space is already predetermined or whether humans possess by strength of their soul, given by God, the possibility of forming the WORLD. Maimonides (the science of the penitence) means to that: *The answer of this question is longer as the measure of the earth and more broadly than the sea.* Is the fourdimensional WORLD the place, at which the dark mass and the dark energy (which constitute the larger part of our univers) is situated and which influence from there our three dimensional space?

God gave humans with their will the possibility to arrange (to change) the process of their life and concomitantly the future of the WORLD. Similarly as the farmer ploughs into his field furrows and thereby changes by his work the field according to his will to his favour, humans are created by God to administer the WORLD. Times form us, while we form the world. *Freely moving, the will is nevertheless at the same time moved by another: it resembles a passenger of a ship, who can spend its days freely in hundred fold changing resolutions and actions, whereas he moves nevertheless in the course of the ship. Freely hustle humans themselves at board of the necessity* (Joseph Bernehard, Chaos and Daemonie, P. 105). From the possibilities of the present the reality of the future develops through us with the help of time. But then however this future is already again the past (similar to the wave particle dualism of the quantum theory, Peter Pasic, 2003).

Time itself is a yardstick, which does not disappear simply when one experiences the four-dimensional space-time, but will exist further on in the four-dimensional WORLD. It serves as tool, with which the experience of a higher-dimension of space is made possible. The fourth dimension of the WORLD, which is a length dimension as the remaining already existing three dimensions of the space, does not develop from the time, but by the time. As one can imagine a four-dimensional space, in which the three-dimensional space becomes by the time the fourth space dimension (Minkowskis WORLD), one can imagine that the four-dimensional time-space experiences the fifth dimension again with the help of the time and ever higher dimensions, until one comes finally to the infinitely dimensional space (figure 3). There cannot be a further space dimension, thus also no movement and no time to experience. One can express the disappearing of the time in the infinitely dimensional space mathematically by introducing a factor, which divides the time by the number of given space dimensions. So the time disappears in the infinite-dimensional space. One can call this infinitely dimensional space ALL.

Likewise one can imagine a space with fewer dimensions than our three-dimensional space. In a two-dimensional space (even-space) the third dimension of our space becomes time. This resembles the tomography in medicine, with which a three-dimensional body (like the body of humans) is divided with the time into two-dimensional layers. One can build these two-dimensional layers up again with time by computer treatment to a three-dimensional form, so, if arranged with correct selection, the organs of humans (for example the heart or the brain), can be looked at in their three-dimensional form and examined, without hurting the body of the human. In contrast to the tomography of the physician, which runs discontinuously, timing takes place continuously. The time of yesterday does not move towards today and further towards tomorrow. Rather the time moves us with the three-dimensional space through the four-dimensional world.

The time is the basis of physics and concomitantly the technology. Mathematics uses the

time for the description of phenomena, philosophy strives around the meaning of the time for humans and theology tries finally to understand the origin of the time and thus its Creator (God).

One can continue now to the linear space (line-space) and finally to the zero-dimensional space (point-space). In the point-space no space dimension exist but only time, space less ONLY-TIME. At both ends of our space-time we have thus the infinity, either the condition with infinite space dimensions without time, the ALL, or the condition with infinite ONLY-TIME without space dimensions. One can call it according to the age-old designation of beginning and end of the life alpha (ONLYTIME) and omega (ALL). That leads finally to the realization that space and time are inseparable parts of eternity.

One can further cut our three-dimensional space into infinitely many levels (smooth or curved). However, this means, as the three-dimensional space has infinitely much levels (two-dimensional spaces), the four-dimensional WORLD Minkowskis has infinitely many three-dimensional spaces. Hence it follows that the infinite-dimensional UNIVERSE must have infinitely many WORLDS.

The additional space dimensions up to the infinite-dimensional ALL, described here, are not, as with the string theory of the cosmology (Hawking), in threads rolled up dimensions (so-called strings), which are attached to the four-dimensional timespace. They are rather dimensions, which are equal to the three dimensions of our three-dimensional space and exchangeable with them. We cannot recognize them however, since they are for us in the past or the future. Minkowskis fourth dimension is characterized by an imaginary number. Therefore we cannot notice them with our senses, which are part of our three-dimensional body, but we can separate them only with our understanding, which is part of the soul. This is called usually the sixth sense. Here one could ask, if the dark matter and the dark energy (David B. Cline), which contain obviously a multiple of the known mass of the protons, but are only detectable by their gravity, may be part of Minkowskis four-dimensional WORLD or may be further more-dimensional spaces.

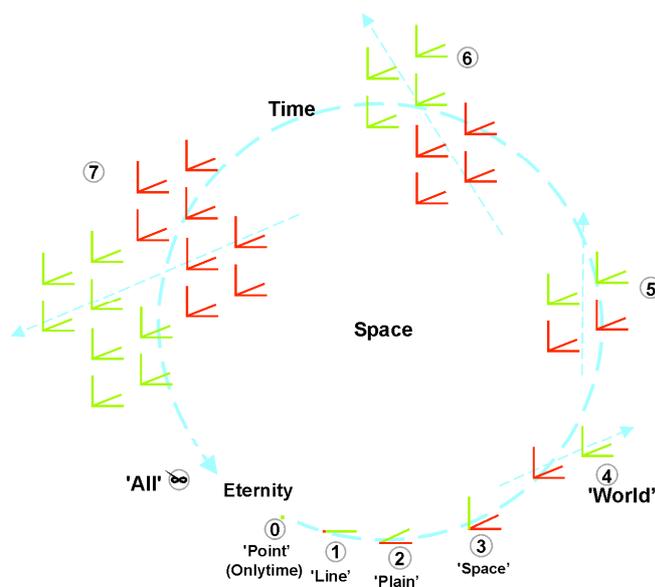


Figure 3: PLERWA (space dimensions and time).

Red: original dimensions of a space.

Green: Additionally dimensions experienced with time.

Blue: Time, with which the additional dimension is experienced.

Numbers: Dimensions of the spaces from zero to infinite.

One could call the point, line, even, room, world and all, which result through the time and which are perceptible with our senses and recognizable with our understanding, according to their initial letters: PLERWA. This expression sounds similar to the old-Greek word Pleroma (plerwma), which means abundance or perfection and which Teilhard de Chardin (*The Heart of the Subject*, page 78) called: *the mysterious result of the fulfillment and completion for the absolute being, God, the eternal being and self.*

These considerations at space and time raise reliably more questions than they can solve. What lies between four-dimensional time-space and the infinite dimensional eternity? Is that the space, in which exists, what we call purgatory (1 Kor 3.13-15) or hell (Mt 25.41)? Is that the space, in which the angels (Luk 20.36) or the extraterrestrials live? Where do we find the prince of the darkness (the devil, John 14.30)? Where is the haven (Mt 5.16) to be arranged? Are the revelation of Jone, the visions of Hildegard of Bingen, or the divine comedy of Dante Alighieri to assign to the time-space between our habitat and the eternity? Should there be natures in the four-dimensional WORLD, nothing would speak against it that these natures have a free will at least comparably to that of us humans.

These questions are naturally insignificant, if one denies the existence of God from the beginning. What, however, do then the more-dimensional spaces, which result from the advancement of the four-dimensional time-space and which are inaccessible for humans during their life, stand for? Who is where? Do the events in the Big Bang, the cosmology or the quantum theory run off from the multidimensional space-times described here? *The solution of the mystery of the life in space and time lies outside from space and time* (Wittgenstein). Humans control the space, the time however prevail over humans. There is *time and space, which unite organically, in order to weave the world-material with one another* (Teilhard de Chardin 1959).

The ideas over the PLERWA (the four-dimensional world and the infinite-dimensional universe resulting from it) developed here naturally does not claim, to explain any physical, chemical or biological problems, which run off in the three-dimensional space and the four-dimensional space-time and which we can experience and investigate consciously. Rather the framework shall be pointed out, within which all these things occur and happen, just so the realm of God.

The PLERWA is what humans call according to their religion or its custom heaven, paradise, eternity, Brahman, Pantheon, the other world, all (infinitely dimensional UNIVERSE) or nothing (zero-dimensional ONLY-TIME). Our three-dimensional real universe is the nutshell in the four-dimensional, for us imaginary WORLD, of which Stephen Hawking (the universe in the nutshell) speaks, if he quotes Shakespeare (Hamlet): *God, I could be bound in a nutshell and count myself a king of infinite space.*

D. God

One gets a notion of the infinite-dimensional universe, if the painter Max Beckmann writes (three letters to a painter, 1948): *...Space, whose substantial meaning is identical with individuality or what humans call God. Because in the beginning there was the space, this haunted and unthinkable invention of the omnipresence. Time is an invention of humans, space is the palace of the Gods.* The infinite-dimensional space, the ALL, is the invention of the omnipresent God, the palace in which he reigns and which is inaccessible and inconceivable for us humans. The time, which Beckmann calls the invention of humans, is the time, which Kant calls the direct condition of the soul and which Augustinus measures in his spirit. The human finds this time within himself as part of the ONLY-TIME, to which one inevitable comes, if one leads Einsteins consideration over Minkowskis WORLD to the end. The space-less ONLY-TIME is, like the infinite-dimensional UNIVERSE, the realm of God, of which Jesus says: My kingdom is not from this world (John 18.36). God, the all-powerful, all-prudent, omnipresent one, who calls himself "I AM" (Jahwe, old testament, ex 3.14), does not need the aid of the motion, since he is at each time everywhere, in us, in our ancestors, in our descendants. We humans on the contrary need the motion to come from one place to the other, what we can master only in the time. God is independent from time at each place, independent from place at each time.

As ruler of the infinite-dimensional ALL, which is without time and therefore without movement, he is the **motionless mover**, whom Aristotle (Metaphysica XII, 6) designated God due to his considerations and whom Thomas's von Aquin (Sum. theol. I, 2) set among the different proofs of God on the first place. The motionless mover has created the time as measure of the movement, so that the space can be filled with what we call live. As ruler of the space-less ONLY-TIME he is in the comparison to it the **moved Performer**, who is without place and space. He has created the space, so that the time can be fulfilled with what we call live. Kant recognized this in his transcendental aesthetics (Kr. r., B 36): *There are two pure forms of sensible opinions as principles of the realization a priori, i.e. space and time.* This takes place without participation of the senses and feelings. They do not need to be learned nor experienced. Space and time are a priori conceptions of the soul.

Infinitely dimensional UNIVERSE and space-less ONLY-TIME are eternal and have therefore neither beginning nor end (Paulus, Rom 16.25, Kol, 1.26, Tit, 1.2, Augustinus, God state, XII, 17). Since there can be only one eternity, infinitely dimensional UNIVERSE and space-less ONLY-TIME are the same eternity. That results also from the fact that according to Minkowski time and space dimensions turn into one another. So is also the motionless Mover, who reigns in the eternity of the infinite-dimensional space, the ALL, and who has created from there the world, and the moved Performer, who reigns in the eternity of the time and achieves again and again, what he has created, the same present God, which lives in us. Dante calls it: *where one is achieving and requiring* (the Divine Com., Hell V 23). That means also: where is space and time, because achieving happens in the space, the requiring however in the time. God has neither beginning nor end; he is beginning and end. Here the Trinity of God lights up: God father - the motionless mover, God son (Jesus) - the word in us, God Holy Spirit – the moved performer. These are however only three sides of the unique eternal infinite God. Since God is infinite, he is to be recognized for us humans also infinitely variously with infinitely many possibilities to see him. We in our finite three-dimensional terrestrial life can recognize however only some few of these sides of god and these are not always the same sides, as it is seen with the different existing religions. Despite these varieties of the religions however God is always the same, the one, the infinite one.

There are numerous attempts and considerations to prove the existence of God. Equally there are numerous attempts and considerations to prove his nonexistence. However, God cannot be proven scientifically (Kant, Kr. r. A599). Would he be proven, he would not be God. Likewise the nonexistence of God is not provable. Humans have however the liberty, due to the fact that none of these proofs are scientifically justified, to believe that there is God, or that God does not exist. Only from our faith we can know that God is. From where however do we have this infinite liberty of the faith? We have it even from there, which we call God! And this God, which reigns in the eternity, is in everyone of us and we are in him. The infinite-dimensional ALL and the dimensionless ONLYTIME offer a connection between the ontological and cosmological proofs of God. There, the motionless (cosmological) Mover and the moved (ontological) Performer are the same God.

The tremendous extension of our knowledge across nature in the last 500 years, which were recognized up to then as God given, led with many humans ever more to the opinion, God is not at all, since humans can carry out and understand the procedures of nature now due to their knowledge. Therewith, it is displaced that with the extension of our knowledge our conscious ignorance grows at the same time. That is caused by the fact, that behind each clearing-up of a nature phenomenon not only one, but usually several new unsettled phenomena emerge. These new phenomena we will solve again (with our intelligence given by God), but we will find further unresolved phenomena instead. That will probably not change in far future. Summed up this means: Our conscious ignorance grows faster than our acquired new knowledge. Just from this incompleteness of humans Descartes closed (Disc. IV, 4) that God exists.

If one assigns the faith of humans in God to their ignorance over procedures of life and nature, a probability calculus would give the priority to the existence of God, because even with the growing of our knowledge our conscious ignorance grows at the same time super proportionally. *The more the field of the recognized one grows, the more expands the range of still unknown quantities, indeed unrecognisable ones before us. The science ignites always new torches only to discover in order always new abysses* (Joseph Bernhart, The Mystic). All finding of the science is finally only finding of new questions. Thus it is left however further to the free will of each human to decide whether he believes that there is God or whether he believes that there is no God (Kanitscheider, Bauberger). Natural, there is to consider that the none comprehension of phenomena, while not believing in God, will lead easily to mechanization, whereas by believing in God it will lead to the Mystification of our thoughts. Anyhow, it is unscientific to maintain, there is no God.

It surprises again and again, how quickly atheistic systems create spare Gods. The French revolution for example the goddess of the reason, communism the Gods Marx and Lenin, the Naziregim Hitler chosen by providence, Nietzsche the superhuman announced by Zarathustra, Sigmund Freud the Sex, the modern science with the Big Bang and the Darwinist system the deus ex machina produced by the information systems and genetic engineering. Mankind apparently cannot live without religion or their replacement. This is also the oldest tradition on earth (Johann Gottlieb Herder, Suphan: 13,387-395). Faith does not only displace mountains but also Gods.

God, which one calls Emanuel (God with or in us), gave the time to humans to feudal tenure, so that they can despite their restrictions experience the future in the three-dimensional space and remember themselves on the past. The time makes it possible for humans to live in the endless folded eternity of the ALL as an individual, like we know it, with all

its liberty and his limitedness. It makes it in addition possible to have a goal, because only who has time, also has a goal. *The eternity however is nothing else but God himself* (Thomas von Aquin, S.th. I, 10.2).

E. Procreation

Of fundamental importance for the evaluation of the always-lasting question about the beginning of life is the individual and joint attitude to the life at all. A moral basic decision precedes all affirmation and formation of standards. This basic decision should be based on the present knowledge and state of research. The body is procreated with the fertilization of the ovum by the sperm cell. The soul takes out of the time in possession the space of their body, with which it forms a unit (the human). The accurate beginning of an inspired individual human is however not definable despite all scientific troubles so far taken and it probably will be so in the future, since the incarnation is like everything in the human life a temporal happening.

Due to the notion of Aristotle about the three organic ways of life: vegetable, animal, and humanly (see preface), over 2000 years the opinion was held, which also Thomas's von Aquin proposed, that the procreation in the uterus of the mother runs over three stages: Vegetable stage > animal stage > human stage. The latter should be reached with the male fetus 40 days after fertilization and with the female fetus about 80 to 90 days after fertilization. Only the medical research with the development of appropriate anatomical, histological and physiological methods in the 17. and 18. Century resulted in the scientific proof, that humans develop from the outset, thus from the impregnation, as humans and not over any preliminary stages. Starting from approximately 1800 this understanding was then transferred gradually to the appropriate laws, directives and regulations. The old 80 to 90 days period is however still indirectly contained in § 218a of the German StGB by the exemption from punishment after consultation for an abortion in the period up to the twelfth week after conception (Robert Juette 1993).

The procreation begins with the penetration of the sperm into the ovum, which completes only then its second maturing segmentation (Hermann Hepp). The two haploid cores (the motherly and the penetrated paternal core) remain still several hours separately in the ovum. Only after their reduplication and the dissolution of the core diaphragms, the chromosomes arrange themselves together in the equatorial plate and form so the final diploid chromosome set. This forms the cores of the two new cells (about 24 hours after the penetration of the sperm into the ovum). Now the genetic apparatus is formed, which remains determining the whole life of humans. This nuclear fusion is defined as the beginning of the embryo. After approximately 3 days the eight-cell stage is reached by further division of the cells. From these eight cells (Blastomers) still each particular is totipotent, i.e., from each particular of these Blastomers a new individual can develop after separation of the cells. During the further division the cells lose their totipotence. These cells, which form the embryoblast, remain however up to 2 weeks still pluripotent. That is, out of every one of these pluripotent cells the future organs of humans can be developed. By division of the embryoblast two embryoblasts can result, which develop then to twins.

During these first 2 weeks the embryoblast is on his journey from the oviduct to the Uterus to find a shelter for itself. There humans fulfill in their life their first act, the embryo nests itself into the Uterus of its mother and takes thereby possession of it. With the settling down into the Uterus, thus about two weeks after fertilization, its cells become unipotent, i.e., the embryo

becomes now definitely an indivisible, unique human. This is the most determining step for the beginning of the development of individual humans (Bader, 2001). Thereon probably refers § the 218 of the German StGB, if it says in paragraph 1 in the second sentence: *Actions, whose effect occur before conclusion of the settlement of the embryo into the uterus, are not considered as abortion in the sense of this law.*

Up to the settlement of the embryo into the Uterus - at the latest 14 days after fertilization - it is possible that from the embryo more than one human develops (identical twins). From this time on this is not longer possible, humans remain up to their death an indivisible, singular personality, whose development and purge run in a continuous curve up to death. This temporal sequence of the procreation is already suggested at the beginning of the Old Testament in the second report of creation (gene 2,7: *And the Lord formed man, of the dust of the ground (generation) and breathed into his nostrils the breath of life (inspiring). And man became a living being*). These our knowledge of the procreation and the development of humans let it appear therefore probable that the soul seizes possession of its body at the latest at this time, thus stepping from the four-dimensional WORLD (spacetime) into the time of our three-dimensional space (Figure 4)

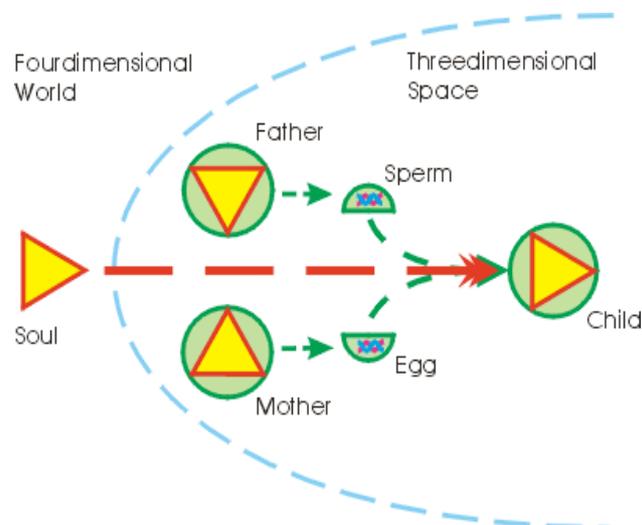


Figure 4: With procreation, the body of humans will be created similarly as with animals and also with plants, by the unification of the maternal egg and the paternal sperm. But additionally the soul created in the four-dimensional world of God (yellow triangle) takes possession of its body (green circle), by stepping from the four-dimensional world (on the left of the blue-broken line) into the time of our three-dimensional area (on the right of the blue-broken line).

It requires an enormous faith to state, humans develop in the uterus from the embryo as a not human nature. Develop itself can only, who is already present. This happens in the gradual call of information, which is contained in the hereditary property. There is no outstanding time, at which an event occurs, which would be alone crucial for the beginning of humans, there exists rather a heterogeneous continuum from the embryo to puberty. The birth is a highlight in the historical life of humans (the environment changes, their fellow men sees them for the first time), but only one of the many steps in the development of humans. Soul and body develop together, first in the uterus, then in the family, then in the community of humans.

Humans are not only created by development, education and experience; they develop as humans in a continuum from the generation to death. We can measure and understand the development of the body, the development of the soul however, we experience at their works and influences.

Would the embryo be deprived of the dignity, if inspiring would only take place at the settlement into the uterus? No! The Inspiring of humans in the three-dimensional space is a procedure in the time. But in the four-dimensional WORLD humans possess a comprehensive four-dimensional "wholebody", which forms one unit from his generation up to death. Thus the fertilized egg is entitled to the same protection of his dignity as the adult human. Since however, doubts will always exist over the embryo being already a complete human, according to the principle: in dubio pro reo (in the doubt for the accused), the embryo has to be recognized as a full human. That is presupposed in the German law for the protection of the embryo: Each interference at embryonal cells is an interference in the developing human and therefore unlawful and punishable. The embryonic cell is part of a human and therefore part of its dignity from the outset (Sonnenfeld). Each human has a right of disposal and possession over his embryonal cells, from which he will arise. This means, also the embryo has a claim on the dignity of the human developing from him. That is, the embryo may not be exposed to the arbitrariness of others or differently expressed, it may neither for research purposes be produced or used, nor may it be for therapeutic purposes as stemcells for replacement abused or manipulated or cloned.

Cloning is already dangerously, because biology is based on variety, clones however lead to simplicity, which is at the end of evil. For the same reason marriages under the next relatives (e.g. brothers and sisters) are not permitted since long times. Due to cloning however results a still closer family connection than among brothers and sisters. A further problem with clones exists, if the clones come from older humans. That means however that the age of the clone corresponds to the age of the donor and therefore the cloned human ages early.

It is not foreseeable, what cloned humans will feel, if they experience that they are not generated but where bred through clones after the will of other humans. Thus embryos are not to be used for the purpose of oneself or for the purpose of others. Embryos may not be made available, even in the earliest stage of their development, thus by the fusion of the gametes, for other humans. It may also never be that people are procreated for the healing process of others, also not for the production of spare organs. In addition it is not well known whether embryonic main cells are better suitable than adult main cells (for example from the bone marrow) for the production of spare parts. The use of totipotent embryonic cells offers the danger that from them not after the Transplantation only the desired organs for instance nerve cells, but also other organ forms as for instance cartilage cells are build. An advantage of the adult main cells is that donors and receivers can to be the same person and so no repulsion reactions may be expected. A short and good-understandable statement for the pro (Rolf Heumann) and the contra (Regine Kollek) of the use from embryonic main cells to the organ replacement appeared in the Biospectrum.

The former German federal President Rau expressed this topic just recently in such a way: *If there is the possibility, to produce children artificially or to test the genetic plans of an embryo – does then not easily an attitude develop that everyone, which wants to get own children has also the right for this - even the right to healthy children? Where unfulfillable desires become fulfillable or to appear fulfillable, from there it fast develops an appearance of right. We know however nevertheless that there is not such a right. A genetic dictatorship can develop very fast from the genetic manipulation.*

Humans are more than the sum of their genes. Each identical twin, who is after all a natural clone of its twin brother, is its own personality with its own soul. In the same way, cloned humans, who came out from the transfer of a cell nucleus of an adult cell into an embryonic cell, will be its own personality, although he has the same body as another one and whose age corresponds to the age of the donor (see above). His soul however has he from God. The question, whether a clone is a pure copy of another human, is thereby unnecessary, not however the question, whether it corresponds to his dignity that he was produced artificially by cloning, according to the will and the desires of other humans (Bader, 2001).

What humans can do, they will do. After they picked now the fruits of the mechanisms of reproduction and genetics from the tree of the realization (gene 2.9). The decision is given to them to determine over wrongly or correctly the consequences developing from this realization. Therefore it is necessary to create rules (ethics, laws) for the protection and use of the future generations. *The sin carries out itself in recognizing* (Hegel, the Christianity). What humans recognize however, they can steer to the good one or to the bad one (*you have the free choice, and everything, which humans want to do in human things, they can also achieve, is it bad or well.* Maimonides, part of 5, Kap.5,3). Naturally it always concerns the high honour of the science and the best for the future of mankind. But nobody knows, how this future will look like. The experience teaches us however that from all inventions and realizations of mankind such as fire, wheel, machines, sources of energy (oil, electricity, nuclear power) or medicine (drugs) both luck and misfortune for humans developed.

From the experience of past successes with clones of animals it results, that all cloned embryos are damaged. Many do not survive the embryonic state, others perish during the pregnancy, only about a fifth are born living. However all are apparent somehow damaged. That starts already from recognizable physical damages at birth, up to apparently healthy animals, which age however then promptly (see chapter 4.A. Age of human).

From the new acquired realization develops the burden for the descendants to have to decide from this inherited realization on good or bad. However this is the nature of the original sin (Genesis 3). Instead of hereditary sin one should say better hereditary load, from which the sin arises. This hereditary load becomes only then the sin, if humans conclude and do from their realization the bad (wrong) instead of the just as possible good (correct). And humans will have realizations, as long as they live and exist. Therefore we have to live with our hereditary load and try again and again to issue just laws to their accomplishment.

F. Pregnancy

According to the remarks made in the preceding chapter (generation), fundamental considerations result for the pregnancy and its abort. The conflict, which results from the new life in the mother body, is as old as mankind and just as old is the search for ways to solve this conflict. Here is to differentiate between right and punishment to live i.e. the right of the child to live, which may be taken from him by abortion, and punishment, which is imposed with the refusal of this right. The German legislation managed it by the fact that in § 219a, Abs. 1 and 4 BGBB circumstances are specified, by which an abortion for the pregnant woman and the physician is for a certain time after the nidation indeed illegally, but exempt from punishment. The decision for or against the life of the child is thereby a decision of the conscience of the involved ones, the pregnant women and the physician. The father of the child unfortunately finds thereby no consideration.

The pregnant woman becomes by the prescribed consultation (§219a, Abs. 1, NR. 1 BGB), which must be proven by a certificate, imposed at the same time the role of the plaintiff (impairment of their personality by the child) and the judge (death by abortion). After her verdict she assigns the physician as an executor, who accomplishes the abortion and thus the killing of the foetus. This contradicts everything that we understand otherwise by jurisdiction. Therefore in § 14, paragraph 1 of the regulation of occupation for physicians is specified: *The physician is obligated in principle to save the unborn life. The abortion is subject to the legal regulations. The physician cannot be forced to conduct or omit an abortion.* After all the conscience of the pregnant women and that one of the physician decides on the fate of the child.

An absolute weak point of the §218a is the section 2. Here the abortion is called not illegal, if danger for the life of the pregnant women does not only exist by the child, thus self-defence similar to § 32 StGB, but also, if the danger of a serious impairment of the physical or mental state of health is to be turned away (medical indication). Under these conditions an abortion is not illegal up to the time of the birth without preceding consultation.

Serious problems result: On the one hand, the indication for a mental impairment by the expected child is not definitely to be placed, since the correctness of the data of the pregnant women concerning a future serious impairment of her quality of life can only be based on good faith and on it (correct or wrong) depends the diagnosis of the physician. In addition the maternity naturally always means an adaptation of the woman upon the additionally existing new human. That is however nothing unnatural or pathological, but in the true sense of the word the most natural in the world. Just so our laws do not make it possible to kill humans because they represent a physical or mental impairment of their state of health for others.

On the other hand the possibility exists that by the abort a child capable of living is born. In the case of the abort after the 20th Week a higher percentage of the foetus survive, the later the abort is affected. In addition, the possibility of the damage of the child may result. Here the demand consists by the medical profession, to limit the exemption from punishment period of the abortion, except with danger for the life of the pregnant women (self-defence), at the most up to the 20th pregnancy week. If urgent reasons speak for the fact that the pregnancy is based on a sexual crime, than is according to law an abort up to 12th Pregnancy week not illegally (criminological indication). Here the problem results, no matter how one stands to the abortion, that representatively of the act of a sexual offender the witnessed child is punished with death (the death penalty by the back door).

To the sexuality does not only belong the reproduction functions according to the law of nature for the preservation of the kind, but also the social function as possibility of intensive inter-human relationship in the marriage in the execution of the unit of spirit and flesh, of body and soul. Someone who maintains a sexual relationship with a partner, - without prejudice to the moral evaluation of this relationship - should avoid a procreation, which cannot be answered for. The medicine is in the meantime so far progressed in preventing a pregnancy that an abortion is an outdated method, which should not be accomplished any longer. If one witnesses however new life, both parents must stand to it, father and mother. The state and the churches have the task to help, both materially as well as psychosocially. With actual physical, mental or other impairment of the pregnant women the adoption should be facilitated and preferred for an abort.

After considerations implemented above an abortion should only then not be illegal, if the case of self-defence is given. That is only and alone the case with danger for the life of the

pregnant women by the child. An abortion for all other reasons is killing as long as it is not perfect and scientifically proven, that the Foetus is not human. This proof is however hardly possible, as was implemented in the preceding chapter. It is left to the legal entity (the state) to grant for certain reasons an exemption from punishment. The debt of an act however remains with the causer. That can be the pregnant woman, but often enough also the producer or the community.

Special problems arise by the fact that it is possible by the progress of the medical science to determine already before the birth by pre-implantation diagnostics (PID) or by prenatal diagnostics (PND) whether genetic errors show up with the child, so that it is born as a handicapped or diseased child. This raises most serious problems for the future. On the one hand, it may be possible, to correct the genetic error and heal the child. On the other hand, is it permissible to prevent the birth of a handicapped child by killing of the embryo or the Foetus? Are handicapped humans inferior and not worth living? Which handicaps make a life worthless? Were the lives of Toulouse Llautrec or prince Eugen, who both were handicapped, worthless? Is our spastic paralysed child, who stands self-confident and successful in her professional activities, life worthless? According to the above said, this is to be rejected with decisiveness. Up to now the pre-implantation diagnostic is forbidden by the law for the protection of the embryo (still?), however, the prenatal diagnostics is permitted by the pregnancy paragraphs of the penal code (StGB). This implies however, if someone wants to prevent the birth of a handicapped child, he (the physician) or she (the pregnant woman) lets it develop up to the foetus and kills it then unpunished. Here one law contradicts the other one. In addition the possibility of causing a damage to the embryo up to the abortion exists with both interferences. The physician should deliberate himself here particularly upon the hippocratic oath, which demands as the highest requirement: *Primum nihil nocere* (above all do not harm).

From the said it is evident, that the pregnancy paragraphs of the StGB are a piece of muddle legislation, which is not construct on logic but on opinion. They are a kind of general store, from which everyone can take himself, what fits him. Here, rightfully and illegally, punishable and unpunishable, but also the intended periods for interruption of pregnancy (from the implantation of the embryo on, 12 weeks or 22 weeks after conception or up to the birth) are mixed up. This is completely in contrast to the law for the protection of the embryo, which protects the embryo from the conception against interferences. In addition the civil law book (BGB) §1 says: The legal capacity of humans begins with the completion of the birth. In contrary in §§ 844 (claims of others with killing) and 1923 (hereditary title) it is determined that the legal capacity of humans already begins with the conception, assuming that the producer dies before the birth of the child by natural or by unnatural death. Thus the inheritance and the maintenance of the child are to become secured. Why does this apply however only with a dead and not also with a living father? Since all humans are equal, it is to be also demanded that all humans become equivalent legally responsible.

That means, both the embryo law for the protection and the pregnancy paragraphs of the StGB and the BGB must be seen in connection and coordinated, whereby the clear and logical embryo law for the protection should be model for the vague and illogical pregnancy paragraphs of the penalty code and the civil law book. Not overlooked should be the fact that the dignity of humans is untouchable (German Grundgesertz, article 1). That applies from the outset to handicapped humans exactly the same way as for the non-disabled humans.

Parallel to these problems at the beginning of the life, stand the problems at the end of the life, if it comes around death grant (see below chapter 4.). It is to be hoped that humans deliberate themselves after four hundred years scientific progress to think again upon the fact

that they are humans created by God according to his image, who differ by their soul from all other organisms.

3. Where is the Soul?

The soul cannot be found in the body of humans, even if one looks ever so long with our scientific methods for it. The soul is not to be measured with the senses, but only recognizable by its work, by its liberty and relationship to God. For recognition the soul avails itself of its senses. The acts of humans work beyond their death. They can be good or bad. Since the ideas of humans continue furthermore after their death, also the soul of humans must continue.

A. Body and Soul

One can illustrate body and soul of humans as a computer. The computer, the so-called hardware, is comparable with the Anatomy of humans. Both are machines, which obey physical and chemical rules. The program of the computer, its software, is to compare with the senses thus the human information system. For that purpose belong not only the Platonic five outside senses (seeing hearing, smelling, feeling tasting), but also the internal senses such as information systems (genetic apparatus, nervous system, endocrine system), repair systems and defence systems. Anatomy and senses form the body of humans, which they have in common with the animals. Thus life is possible.

Beyond that they have a soul, which is equal to the owner of the computer, who orders over it and programmes it. The soul enables humans for a conscious, creative, free life. Similarly, as the owner decrees over the computer, the soul decrees over the body. From this it results, that one can find the soul exactly as little by studies of the body, as one can recognize the owner with the investigation of a computer, even if one analyses the hardware of the computer intensively divides it into all individual parts and its software. Likewise one can investigate and understand the construction and the functions of the human body, which are necessary for life, thus the conversion of the fortunes of the soul to the reality, not however the soul itself. It is not an organ of the body, it is not situated at a certain place in the body, but forms a unit with the body (Wolfgang Beinert).

Since body and soul of humans are one, it is imperative that the motions and actions of the soul in the biological part of humans, which are the body and the senses, are provable and registerable. However, in which way does soul cause a reaction, which then shows an effect in the body, for example the intentional movement of a finger? Possibly Kornhuber and Deecke found in the so-called Bereitschaftspotential (readiness potential) such a physiologically provable interaction. About 0.8 seconds before time 0 of a movement, actually implemented by the will, for example flexion of the index finger, appears a "Bereitschaftspotential" which is followed by an action potential of the pyramid cells 0.05 seconds before the movement. This action potential leads then physiologically to the contraction at time 0. The „Bereitschaftspotential" released by the will could be the physiological effect of a spiritual action.

As the body is connected with remaining nature by the regular exchange of its components, the soul is connected with the eternity (see preface). It lives on in the memory of humans, it perpetuates its ideas in history, it affects by its acts the future and it is connected by love, faith and hope with God. By its formative activity it exerts in addition influence on the run of nature in the good one as in the bad one. As a descriptive example the listed literature at the end of this book is mentioned. Over thousands of years the thoughts and ideas remained alive from long deceased humans and they still have today validity. Their body decayed, their spirit however lives among us.

Body and soul appear as two from each other separate terms only in the timeless instant of the three-dimensional presence (Jäger), on which the idea of dualism is based (Descartes, Med. VI, 13 and 19, Pascal, IV, II, 316-318). In the four-dimensional space-time (Bader 1995, see above), in the past and in the future, however only the unity of body and soul exists. In contrast to the relationship of the computer to its owner, the soul forms a unit with the body during the human life thus. Not only the soul affects and controls the body. The body affects likewise with its biological organs, whose function and working are fixed by the genes received from parents, the soul. That is, pathophysiological loads (somatic illnesses) affect psychosocial parameters just like psychosocial loads (psychological illnesses) pathophysiological parameters affect. The dignity with its weakness is subject often enough to the wants of the senses.

The abilities of the spirit depend during the life primarily on the function of the brain. The human brain is the most complex organ in nature. Only so it can become fair to the abilities of the soul. The soul is dependent on the body for communication with other humans and the remaining world. That means however, communication can be disturbed, if the body is disturbed. That is of special importance, if the error lies in the central nervous system. By the loss of certain brain centres a peaceful human can become maliciously or, turned around, a malicious human can become good-natured. A simple reversible example is the alcohol intoxication. It can become irreversible with illness- or loss of a brain area (for example accident-caused, with the schizophrenia or with the Alzheimer disease). That resembles then the problems of the owner when operating its computer, if certain programs are incorrect. The jurisdiction confesses decreased responsibility to humans concerned in the case of mental errors too.

At the end of the life the soul leaves our three-dimensional space, or differently expressed, the death of humans is characterized by the fact that the soul enters from the present into the eternity. There it is connected with its four-dimensional space-time body (Bader 1995, see above). Humans can throw their computer away and buy a new one. However, humans cannot throw their bodies away and replace them with a new one, since soul and body are one. They can only replace particular organs. If a human throws his terrestrial body away (in the suicide), he will be dead. His soul lost its presence.

B. Present past

By the finiteness of the speed of the light of approximately 300,000 km per second, we do not see objects as they are simultaneous in our present, but as they were in our past. Those are in our closer environment only nanoseconds later, the sun we see however already eight minutes in our past, fixed stars and galaxies only after years. Likewise, the transmission of sensory impressions in our body like the sight, the smell or the hearing need physical transmission mechanisms, which run off in a pre-determined speed and thus need time to be recognised.

This delay of the recognition of things is caused by the fact that the signal, which reaches the associated receptors at the body surface must be led first over nerve fibres to the nerve centre to be recognized with consciousness. This speed is, depending upon the nerve fibres, between 10 to 100 meters per second. That means however that the delay of the recognition after reaching the body surface (receptors of the senses: Seeing, smelling, tasting, feeling, hearing) lies within the range of milliseconds. Finally this means, everything, that we recognize

with our senses, is already past. Turned around, this is also valid for all decisions, which we make with our consciousness as for example speaking, handling, working, driving a car, giving orders, playing, making music, thinking and so on. For all that nerve fibres with their transition delays are needed.

If we experience in spite of this fact everything what is led over our nerve courses as simultaneous, it is because the body possesses the ability, to recognize events, which take place within a few seconds, as simultaneous. For example, the acoustic waves reach the two ears of humans according to their direction at different times, depending from which direction they come. The hearing determines this from the different times the two acoustic waves reach the right and the left ear. From this difference of time the nerve centre recognizes then the direction, where the sound came from. The consciousness experiences this whole happening as a single simultaneous sound, which comes from a certain direction, for example at a passenger crossing, if a car is coming from the right.

This means, we recognize our environment and our doing, far or near, not in the present, but from the past. Only our consciousness is in the present. As implemented further above (Chapter 2.C. Timespace: WRLD - ALL - PLERWA) apparently our presence moves as a three-dimensional space disk with the time through the four-dimensional WORLD. All points on this three-dimensional space disk are thereby in the same presence. However, since the recognized is always already past, it can lie not on this space disk, but on a curved disk bend into the past. This curvature of our three-dimensional space into the past, which we have before us for example through the view into the sky, resembles the surface of a ball.

One pole of this ball is our present, the other pole is at the beginning of our three-dimensional space, the so-called big bang (Hawking 2001). The surface of this assumed ball is our in the time curved three-dimensional space. The events since the big bang go thereby from one pole of the assumed ball at its surface in all directions to the other pole, to our presence. All these events can be seen today therefore distributed over the whole sky, whereby the events of the big bang itself are to be observed as the so-called background radiation.

If we look at the sky at night, we see not our familiar three-dimensional space, but a cut out of our four-dimensional WORLD, which we had experienced in the past. The view into the sky offers us, so to speak, a long cut of our four-dimensional WORLD into the past. The presence is in contrast a cross cut of the same WORLD. This curvature of our visible space described here into the past is independent of the curvature of the space-time, which is caused by the distribution of the masses in this space-time, as it is described in the general relativity theory by Einstein.

We cannot return into the past. However, we can call the past into our presence. For this we use above all the language owned by humans in their written form. Humans formed already very early signs, which they cut into durable material, for example rock. These signs had certain meanings. Out of them humans finally formed letters, which offer in certain order an infinite possibility of forming words. So things or activities could be named accurately.

If thoughts or happenings are written down, they are already past. The writing can be read however again and becomes then the presence while reading. Once specified by writing, we can in such a way recognize the events of the past in our presence. From this own sciences where developed like the archaeology or history. During reading, however, the past is not only gotten into the present consciousness. Thereby at the same time also own thoughts of the

presence flow into the reading, is it to interpret, to explain or to change according to own desires. Thus the past cannot be changed, however, the knowledge attained in such a way from the past can be manipulated to the good one or to the bad one for the future, what is the them of the sciences of oecology and politics.

We cannot change the past any more, but we can learn from it for our future. And nevertheless we make again and again the same errors due to our apparent ' better knowledge ', although we know that this ' better knowledge ' led in the past again and again not only to inventions and discoveries, but also to disasters. .

C. Individual and collective

One can only believe the soul. With all our scientific knowledge and know how one cannot prove and substantiate the soul, and just as little its none existence. This leaves only two possibilities: One can believe either that there is a soul or one can believe that there is no soul. But no matter, which from both one believes, humans have dignity and spirit. However, to use and to endure these two fortunes they need the fortune of the grace: Faith, hope and love. Without them they would be lost. Their dignity distinguishes humans as individuals, which is the area of the psychology. Their spirit however forms the collective with other humans, which is the area of the sociology (S. Freud).

Humans possess their dignity from beginning to end of their life. It is their most characteristic possession as an individual. It can be suppressed or negated, however it cannot be taken from them. Humans cannot accomplish themselves by themselves, but only in their next ones. They are not alone, they live in the community with other humans. As individuals they find only in the community their dignity. This means also the old saying: "One heart and one soul."

The spirit affects all and becomes in such a way the people's spirit (Hegel). It connects humans with all other humans to the collective. Since ever humans have tried to develop communication systems in order to spread their thoughts and ideas also over political and state borders. That culminates today in the Internet with its World Wide Web. A thought, once expressed, can be taken up, used and transformed by all humans. Thoughts are free in the truest sense of the word, both in their emergence and in their use (Teilhard de Chardin 1959). Each language of mankind can be translated and understood into any another. The memory originates from the acts of all humans and is owned to all humans in the same way, even if one does not have it always directly ready and notices only later that one had known it nevertheless.

The intellect of each individual human concerns not only himself in its effects, but everyone in a group and possibly in the long terms finally the whole mankind. Outstanding examples of this are for example the invention of the petrol engine, the invention of the bulb, the understanding of the nuclear fission, the realizations over the mechanisms of the genetics or the idea of Marxism or Fascism. In the good one or in the bad one, the finally affect everyone, the entire mankind. In order to make it for individual humans possible, despite the natural general possession of the fortunes of the spirit, to have individual rights of exploitation (both idealistic and material) for the products of their spirit, the community created own laws, as

for example patent law, copyright, author right or press right.

As each individual (person) has a right for dignity and ethos, then also the collective (people) has the right of dignity and ethos. That means among other things:

You shall not kill	you shall not wage war,
You shall not lie	you shall keep agreements and contracts between states honestly and fulfill them,
You shall not steal	you shall not exercise power over others.

As the killing of a human can be justified only in the defence against an attempted assassination, a war is justified only, if it is led as defence against war of aggression. A war is not justified, if interests of the own people stand in the foreground, if thereby the criminal dictator of another people is to be switched off, or if it is led as a so called holy war, thus as a war of faith. Such wars do not justify the death of thousands of innocent people, which may be killed thereby. The murder of a tyrant was hard discussed during the Second World War, when it concerned the removal of the million fold mass murderer Hitler. Such murder of a tyrant was regarded as justified, if thereby no innocent ones are involved.

Into the range of the collective spirit belong also the Meme described by Richard Dawkins (Susan Blackmore). Meme are talents, inventions, fashions and other more, which are spread by humans and who are taken over by other humans by imitation. However, the Meme are like the genes thereby subject to an evolution. After taking them up, humans will interpret them by their own spirit and thus they are subject to continuing changes. The worldwide propagation of telecommunications by the internet and by cell phones expresses the human collective clearly. Everyone can, so he wants, communicate at each place of the earth and at each time with every other human and can be called by every other human. But these communication systems show also, as each manmade system, susceptibilities and errors, of technical kind intrinsic or systemic, as for example the emerging viruses and worms show in the World Wide Web.

From the characteristic of humans to be simultaneous individual (I, person, homo sapiens) and collective (we, society, people, nation, homo socius) tensions will result. By the entire human history, it was tried again and again to direct and solve these tensions by group and state formation. The intention thereby is, peacefully or martially, to summarize all humans into one unit, although that fails again and again. At present we experience ourselves such attempts of unification, politically in the United Nations or the European union, economically in world-wide companies, communicative in the internet, scientifically or sportive in world unions. Everything can be everywhere produced and sold, everyone can converse with everybody in the internet. All these unifications and communications have the idea to use them in the competition and the striving of each one to the best of everyone. Parallel to the globalisation we experience however at the same time an individualizing of the society. Examples of this are the institutional criticism of the 68er years, the urge according to self experience, self-manifestation or self implementation or the desire for ever more sophisticated benefits and desire gains.

The state is for each particular of advantage. If humans for themselves would live alone without contact to other humans, they would have to manage all for their life necessary performances themselves. Now however, humans have very different talents, not everybody can make everything equivalent good. The one can better deal with its hands, the other one better with its head. The one is a good craftsman, the second a good storekeeper, the third

can calculate well, the fourth is proficient in languages, the fifth is a good teacher and so on. That means however, a group of humans can profit from the mutual talents of each other and thus obtain a higher quality of life than an individual, who must make everything by himself, even if he is not suitable for everything (Platon, *The State*, II, B, 369-373). One can illustrate that at an organ: A pipe (individual human) can have a still so pure tone, this however never becomes a concert. Only many pipes (humans) together in the organ (the state) result in a concert, presupposed that the organ is played according to appropriate harmonious rules (laws). Just as the individual state needs rules also the community of states (for example the European union or the United Nations) need them. Only then humans with their different history and genetically caused talents, their spirit, their dignity and their different developments, who build the community, can lead a lucky life. Only by rules of the Society, conflicts and wars, but also the destruction of the lithosphere or the biosphere can be prevented (Hans Jonas). *And this doesn't close out - one thinks only of energy crisis, nature exhaustion, population growth - a self restriction of humans and their liberty in the presence for their surviving sake in the future: therefore an ethics is demanded in concern about the future and in reverence before nature* (Hans Kueng).

The group and state formation pursue finally the purpose to let humans exist as an individual in the collective of humans. *The democracy, in which everyone has a voice for the common well being, in which finally the majority decides without suppressing the individual, is the expression of the collective spirit, the people spirit* (Hegel). It is the good, the centre between the two evils anarchy (everyone against everyone) and dictatorship (one over all). The bases are standards, which develop on the divine right. They form the ethics in their whole, from which the laws are formed. The smallest collective unit of the state and the most important is the family: Father, mother and children. From there the state regenerates itself again and again anew, because the future and security of a state lies in the hand of its children, who come from these families. Without children the state is lost. Therefore it is also important, that the state turns its special welfare service to the family and grants it a special and larger protection, as other human communities, both idealistically, substantial and financial.

The role of the individual spirit (the individual as leader and ruler) and the collective spirit (the people, the group) continual occupied Tolstoj throughout his novel *War and peace*. Finally he came to the realization that history develops finally from cooperation of both. An erroneous trend despite best intentions was the Marxism (communism), which concentrated completely on the collective, but failed however to consider humans as individuals. Finally it failed because of this and became a dictatorship (bolshevism). A negative example of the globalisation is the international crime and the cross-linking of the Mafia. Due to the individual dignity and the collective spirit of humans (see above) one can in modification of an old proverb say: *Humans are together their fate own blacksmith*. In particular does this apply in the future to the gene sphere, after in large diligence work the human Genome was deciphered, even if the clearing up will probably still last some time.

The world-wide growing together of mankind by communication, technology, trade, spare-time, science, traffic and much more besides requires also and almost insight into to a better understanding of the different customs, of religions, communities and peoples. That can lead for all to success only with one another and not against each other. We all sit in one boat, which is called earth. Success must be like the peace again and again aspired to and worked for. Otherwise the success becomes to ruin, the peace to war, the ideal to illusion and the virtues to misfortune. *Nothing will be good, nothing perfect, before the humans are it not themselves, and up to then it has still a while* (Thomas Morus).

Tolstoj is of the opinion: *The heads of the people are from an infinite diversity, which causes that no truth presents itself to also only two humans in the same way* (volume 2, 3. Part, VII). On this diversity of single humans also the fact is based that the whole of humans did not change with the time by their history and will also in the future not change. Only each particular, the individual, can change in the course of his life, to the good one or to the bad one. In contrast, the society, the collective, the state has continuance over the lifetime of its individual members. After it changed to the good one, it turns again and again back to the old evil and vice versa, since the sum of good and bad of its individual members does not change over the time. Today, as before hundreds and thousands of years, peoples live alternating in war or peace, anarchy or democracy, nationalism or liberalism, communism or capitalism, against each other or with one another. All this happens in the name of the peoples spirit: Fatherland, homeland, municipality, republic, monarchy and so on. The one generation will learn from the former one. But the next generation knows it then even better. and drops back into the old evil. We Europeans still make the same errors, as the old Egyptians, Chinese, Greeks or Romans had already made. The memory of the spirit of the people (spirit of the mass) is short. The paradise on earth is even not from duration and must be acquired again and again from bad experiences by new.

Humans, the largest mystery of nature, are often enough humans largest enemy (Augustinus, God state, XIX, 5), but in addition, also their best friend. The best cannot live in peace, if it does not please the bad neighbour. Each human longs for peace. Since this longing is connected however again and again with the fact that peace depends on his own desires, but desires of humans differ, there will be again and again discord (war) (Augustinus, God state, XIX, 10. 20). This became frightening evident with the enormous destruction of the World trade centre of New York at the 11. September 2001 by suicide commands (a shaking repetition of Holocaust and Kamikazi 60 years ago).

Everything does have once an end, nothing will lasts eternally on earth. In order to keep the peace, one must work for it (fight) again and again. If one says, it does not work, then it will not work. If one says in the contrary, it will work, it is not secured that it also really works, but the first step to success is done. We react to things not as they are, but according to the conception, which we have from them. If we change our conceptions, we can get a new entrance to things. *Aren't we that, who award a daemonic character to nature, because we as the experiencing necessarily transfer our kind and condition on to the experienced?* (Joseph Bernhart, Chaos and Demon). One never knows, to which is what good or *everything in the world at is its place well* (Augustinus, God state, XI, 22). The strength of the faith develops from the always-lasting hope of humans for final peace in an eternal peace after death.

Death, force or injustice are not the last word in history. Although the chain of human hostile ideologies does not tear off until today, all religions fulfill the hope for peace and reconciliation, often camouflaged with religious zeal. However, God stands over everything. That expressed Mahatma Gandhi in clear words: *How can we please God, how can we praise him? By serving its creature: the human.*

D. Man and woman.

The history of creation of man and woman in gene, 2.21-2.23, in which God formed the woman (Eve) from a rib of the man (Adam), is represented mechanistically relating to a craftsmen and anticipated a future knowledge out of the faith. Our current knowledge of biology and genetics makes it possible for us to explain closer to reality this happening, due to

which the man should have one rib less (which does not apply): We know today that the man possesses in its 23rd chromosome pair one not complete chromosome, the y-chromosome, which represents only about a third of the other pair portion, the x-chromosome. On the other hand, women have all chromosome pairs complete, also the 23. chromosome pair with 2 complete x-chromosomes (Jegalian, K. and Lahn, B. T.). In addition, this part of the DNA, which is situated in the mitochondria, will be passed to the children on only by the woman, since the sperm of men don't possess mitochondria.

This may be suggest by genesis 2.21-2.23, if one puts the word chromosome (which was not known at that time) in place of the word rib, so that God, the ruler of the universe (see chapter 2.C. God), didn't take from Adam a bone, but a part of one x-chromosome, which became the y-chromosome. Only by eve, the complete human, the continuance of humanity was secured, because only she and afterwards the other women bear the children, who secure the future of mankind.

The creation reports in the books by Moses of the old Testament are not eye-witnesses or factual reports, how we know them hopefully from our newspapers. They are rather parables, similarly as Jesus taught them in the new Testament, which are based on hundreds of thousand years old memories of mankind. Here often somewhat is stated symbolical, which was not provable at that time, but whose fundamental correctness however should become once explainable with the progress of the knowledge of humans.

Is the soul of man and woman the same human soul? Or are there similar differences between the souls as thus with the body, a woman soul and a man soul? God breathed the soul into humans (gene 2.7). Since God is neither man nor woman, thus also the soul cannot be female or male, the soul is from God. It is created, not fathered. What makes humans man or woman, is therefore their body and not their soul. Thus man and woman have the same divine soul, but in each case a male or female body (catechism). From this results that woman and man exist equally in the human society with same rights and obligations.

The woman is the central figure of the family, which provides for its future and thus for the future of mankind. The man is the protector and guarantor of the family, who provides for its well-being. Man and woman together are as the smallest collective responsible for the existence of the family and thus mankind. Outside of the family they are independently equal according to their abilities and knowledge.

Is a virgin birth possible? Successes in the genetic engineering make that possible; because now the man is no longer necessary for the generation of a child. By appropriate gene manipulation is the production of a y-chromosome from a x-chromosome predictable. However, what humans can do, God could do already forever, so he wants. Mankind knows however since old times that a too close relationship of parents leads to errors with the children. Therefore the marriages of brothers and sisters and of close relatives are not permitted nearly with all nations.

However, in our current highly developed liberal society, which developed on a large treasure of scientifically founded knowledge and which has written the equality of man and woman on its banner (US declaration of independence, chapter 1.A: board 1, German Basic Law, Charter of the European union), the man feels himself still superior of the woman in almost all forms of our society, is it the area of the sciences, the economy, the policy, the technology, philosophy or theology. One can experience that again and again, for example with appointments to a chair at the university, in trades and high finance in occupation of

leading positions, in parties and choice committees, in the industry and the handicraft, particularly however with the religious communities, be it Buddhists, Christians, Muslims, Jews or others. Possibly this arrogance of the men is caused by the unconscious confession about the imperfection of the male body (y-chromosome, see above) opposite the body of the woman.

That does not mean however that now the women take over guidance everywhere, where so far men had the saying. Rather this means equal rights for man and women, the same rights and the same obligations with the same possibilities for both sides according to their abilities with the assumption of tasks for the public and the particulars.

4. Where does the soul go to?

It seems, our life takes place in the area of conflict or transition between space dimensions and time, whereby time and space are only two conditions or viewpoints of the infinity. The singularity at the origin of our world, the Big Bang, is possibly the time without space. The time always runs from the origin toward perfection and results finally in a completed life. At the beginning of our life we dive into the stream of time, at the end of our life we emerge again into the eternity. Both, the time of the beginning of our life – from the penetration of the sperm into the ovum up to the first cell division pass approximately 12 hours -, and the end of the life - from the stop of the heart to stopping of the brain, the today recognized but not absolutely safe death sign, pass several minutes - is not exactly assignable. Both are indistinct (Bader, 2001). Similarly as we don't submerge instantly with the jump in the water, but in one, although short time interval. Death does not only terminate the life, with death the life of humans is for the eternity completed. The human being itself is in a hardly conscious continuum from birth to death. Humans are a four-dimensional spatiotemporal nature, which live in a three-dimensional space.

The question is, can life be completed, if death came by impact? As the Requiem by Mozart or the cathedral of Strasbourg, are accomplished works of art, although they were terminated premature, human life will be completed, even if it were terminated by force. The dignity of humans (see above) is unique each time of its life and does not become by death (natural or by force) to a fragment. Since either the beginning nor the end of life are to be defined exactly, these definitions are subject both to the legislation by the state and the faith and conscience of each particular.

A. Age

The history of mankind has shown, that the maximum age, which humans can reach amounts to about 100+-20 years. In earlier times however only few reached this age, because many are fallen already to the victim of diseases and outside events (hunger, poisoning, accident, war, illness) at younger age. Nowadays the average age in the western world rose to approximately 80 years due to the medical progress, the hygiene and the standards of living. Thus humans can reach a life expectancy, which is higher than of all high-standing animals. In the meantime hope is already fed by successes in the area of the genetics, that, by appropriate interferences into the genetic hereditary property, in the future an extension of the human life-span could become possible, as it is already accomplished with low animals (worms and insects) (Henschel).

By certain structures at the chromosomes of the genes, the teleomeres, the divisibility of the body cells is limited. So collagen producing cells can divide only about 50 times during the lifetime of humans. These cells are absolutely necessary for the repair of damages of the body, as for example of wound healings, since they supply the necessary collagen for the repair. A 50 time cell division is sufficient for approximately hundred years of life. That equals the mean maximum age attainable for humans. The idea is now to extend the division of these cells by manipulation of the teleomeres of the chromosomes by a multiple and to extend concomitantly the attainable maximum age of humans. It stands to that however in the way that the age of humans depends not only on biochemistry and biology of their bodies, but also on their biophysics and biomechanics.

An outstanding example of this is the main artery of the body, the Aorta. It serves the circulation as a buffering chamber. That is, by the strength of the elasticity of its wall it

transforms the intermittent bloodstream caused by the pumping action of the heart into a continuous bloodstream. The large elasticity of the Aorta of a grown up human (enlargement of the interior volume quadruples from 0mmHg onto 200mmHg blood pressure) is caused by its elastic part. The collagen part prevents a further stretch beyond 200mmHg. Starting from the 20th Year of life the elasticity of the Aorta decreases continuously, so it will reach the elasticity of a relatively rigid pipe at 100 years of live (plus minus 20 years). That comes off by the fact that the flexible elastic fibres degenerate by aging and increasingly cannot fulfill their task any longer. They will be replaced by less flexible collagen fibres (Bader 1967 and 1983).

With the loss of the elasticity the Aorta however loses its buffering chamber function. Thus the working load of the heart will be increased, the bloodstream will become less continuously, necessary materials can no longer sufficiently be supplied to the organs and waste materials not be eliminated any longer in time, which leads finally to death. Investigations at human and animal Aortas showed that their continuous reduction of the elasticity is apparently not age-dependent, but time-dependent (Bader and Kapal). Aortas of animals, which do not have a higher life expectancy than of 15 to 20 years (cats, dogs, sheep), show no reduction of the elasticity of their Aortas with age. They behave up to their death like juvenile human Aortas of the same age with similar flexible characteristics. Apparent the human repair system functions so perfectly that it keeps and corrects the vital functions of the body upright as long, until the mechanics of the body set on the beginning of the life do not function any longer.

In order to extend the life expectancy of humans over the well-known maximum age of approximately 100 years it would be necessary thus to search for a better elastic system. However, for this an interference into the hereditary property at the beginning of the life would be required. The scientific proof of safety of the success or failure of such an artificial life extension of humans would be very difficult because by their already existing long life span, which covers about three to four generations. Besides it would be ethical problematic by the necessary interference into the hereditary properties. It is questionable, whether an interference is desirable into the equilibrium between the generations (children - parents - grandparents), which is now existing for hundreds and thousands of years. An extension of the number of generations being present at the same time probably would create insurmountable problems of psychological, social, economic and political kind. This may then lead again to life shortening due to the developing situations and conflicts by force. The consequences of mental disturbances, which are to be expected by the next to each other of so many generations with most different ages, are not foreseeable and probably also not desirable. Turned around, it is to expect that humans, who are produced by cloning would have only a shortened life span, since they would inherit the age of the donor cells and therefore would only have the life expectancy of the donor of these cells

B. End of the life

The eternity is the infinitely dimensional ALL and the spaceless ONLY-TIME. This eternity contains our entire history. The body develops and passes in our three-dimensional space with the time. But the soul rises from the infinity into the time and dips from it again into the infinity. For us in the time the three dimensional body will pass after death, in eternity the soul is united with the four-dimensional body of space-time. Resurrection in death and resurrection on the last day take place only for us three-dimensional natures at different times, in the timeless and spaceless eternity they exist next to each other. Death and resurrection appear for humans in their space-time at different times, before God in the eternity however they are one. Jesus suggested that, if he said at the cross to the repentant criminal at his side: *Today*

you will be with me in the paradise (Luk 23, 43).

Luther is of the opinion: *Because there is now before Gods countenance not a calculation of the time, then thousand years must be for him, as if it would be one day (2 Petr. 3,8). Therefore Adam, the first human, is him just as near as the one who will be born at the last day... Thus the human dies, his body is buried and decays, he is lying in the earth and does not know anything. If however the first human will arise on the Last Day, he will think, he was hardly laying an hour... Therefore you should be prepared for the Last Day, because it will come for everyone soon enough so he will say: See, I only now died. (WA 14, 70f).*

With the resurrection after death it is to differentiate from which view it occurs. The resurrection takes place for us living humans after death in the far future with the Last Judgment, because we live in the three-dimensional space and experience the future with the time. For the dead one resurrection takes place with death, because he goes out of the time into the eternity, in which there is no past, present and future, but only infinitely dimensional space without time. The resurrection of Jesus and the glorification of Maria does not contradict this. It means for the faithful, that Jesus and Maria are arisen and clarified for us already at present in our time.

Our physically seasoned time in the three-dimensional space is not existent for the dead one, he is in the eternity. The Last Day occurs thus for him with his death. Resurrection takes place with death via entering eternity. The Coming of God on the Last Day (with the Last Judgement) happens for mankind finally with the death of the last human, for each particular however with his death, since there is no time in the eternity and therefore there can not be a time-difference between his own death and the death of the last human. Only for us humans, who we live in the limitedness of the three-dimensional space, there is a time-difference, since the time is given to us, in order to experience the WORLD.

Now figure 4 in chapter 2. E: Procreation can be completed (figure 5). In procreation the soul steps with the merging of sperm and egg from the four-dimensional WORLD into the three-dimensional SPACE und forms together with the Embryo the new human. This grows to the child and further on to the grownup. At death of this human the soul rises again into the four-dimensional WORLD or even higher dimensional spaces: The empire of god. The body remains in the tree-dimensional SPACE, but is now seen from the four-dimensional WORLD as a whole body from procreation till death.

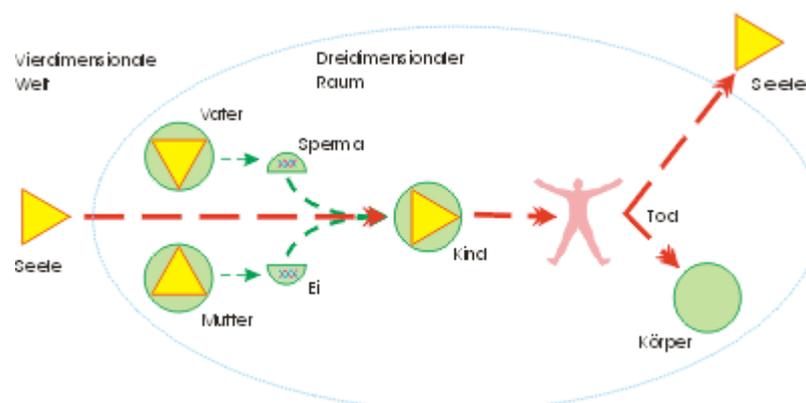


Figure 5: The Life of humans in the three-dimensional SPACE from procreation till death. Description see text.

The body of the resurrection is not the body, which died. It is that body, which we know from the time of our life in its changing shape with the time. It is our passing body, which represents the whole, from birth to death or like Albertus Magnus wrote: *a resurrection with numerical the same body as now* (I, 4, 57). The soul however is the same. So we have on earth a body-mental entirety with a terrestrial, temporally itself changing body, in the eternity however with a four-dimensional spatiotemporal whole body comprehensive from the birth to death. Paulus stated this in the first Corinthians 15.42-44: *So also is the resurrection of the dead: The body is sown in corruption, it is raised in incorruption. It is sown in dishonour, it is raised in glory. It is sown in weakness, it is raised in power. It is sown a natural body, it is raised a spiritual body. There is a natural body, and there is a spiritual body.*

Death does not only terminate the life, with death the life of humans is completed. It does not lie in the discretion of humans to decide when a life is completed. That means however, humans may not cause their own death or the death of another one according to their own discretion. This is the basis the penal laws over death and is the subject of the hippocratic oath. The dignity of the human is singular each time of its life and does not become a fragment by death (natural or by force). However, the problem of the debt at death remains. If death is caused by force without co-operation of humans, for example by natural catastrophes, infections or cardiac infarct, it is to be attributed to the power of the destiny. Thus the sense of death by force is extracted from our understanding and comprehension. Only the faith remains that this power is finally the omnipotence of God. If death is caused by force of humans, this humans have to answer for this death. This responsibility is subject to the laws issued by the community based on existing ethical standards. A debt assignment takes place in the context of these laws. Independently of it the conscience of the culprit decides on his debt. This conscience is formed by all the influences, which made this human to the human, who he is.

The modern medicine as well as the development of the general health welfare service made postponement of the must to die possible, however it makes the dying capability to a problem. With technology and medicaments one can give the life additional years, but not however the new years a new life (Schipperges 1988). In former times, death was determined by the loss of circulation and respiration. This led sometimes to the frightening apparent death (*vita minima*). With the help of the reanimation, these humans, who would have been explained in former times for dead, can lead but possibly again a normal life. Today death is therefore determined by the end of the brain function. After stop of the brain blood circulation, coma (faint) occurs within 3-12 seconds, after 30 seconds the bioelectric brain activity expires, after 3-10 minutes the coma is irreversible. This criterion of brain death is based on newest scientific realizations, it is however only one indication of a dying body and no proof for us of the still unknown time of the death of humans, the *exitus letalis*. This is the time, at which the soul leaves the body (*exitus*) and goes from our four-dimensional space-time into the timeless infinite-dimensional space (see above). That means for humans the death (*letalis*). The point of time of death does not have an expansion and no time like the presence, it is dimensionless (Augustinus, XIII, 11).

By the progress of the medicine and the technology the case arises ever later in the course of an illness, that nothing more can stop death. Successes of the medicine can extend not only the life, but also the dying. In addition, thus suffering will be extended. The healing art can stop dying, which does not eliminate death however. It must be decided therefore ever consciously, to where the medical-technical expenditure is meaningful. New possibilities of treatment need increased responsibilities. The discrepancy between acting and justification is the discrepancy between technology and ethics. The decision over death is in the case of the

end of treatment no longer with the fate, but with the treating. It is always a decision, which must depend on the patient and its situation, it cannot not take place after rigid rules or defaults. The measure is the preservation of the dignity of the patient (Bader, 2001).

This preservation becomes senseless, if the patient becomes by the treatment only a living automat, i.e. that medical measures do not extend the life, but the dying. Pope Pius XII said to it on the occasion of the first international congress for histopathology of the nervous system 1952: *Thus, for example, a man cannot perform on himself or allow doctors to perform acts of a physical or somatic nature which doubtless relieve heavy physical or psychic burdens or infirmities, but which bring about at the same time permanent abolition or considerable and durable diminution of his freedom, that is, of his human personality in its typical and characteristic function. Such an act degrades a man to the level of a being reacting only to acquired reflexes or to a living automation. The moral law does not allow such a reversal of values. Here it sets up its limits to the "medical interests of the patient."*

A renouncement of life-extending measures may not take place against the will of the patient and with the agreement of the patient only then, if otherwise an unreasonable extension of suffering were the result. Life preservation is a temporal measure, dignity preservation lasts eternally. With uncertain prognosis and the chance of the return of consciousness first the maximum therapy is indicated. In dubio pro vita - in the doubt for the life. The decision over the end of a treatment, which leads to death, should never meet a particular, but a concilium of the involved ones (physicians, nurse, clergymen, relatives) should decide over it.

The end of treatment by the physician is ethical justified, if the medical hopelessness is recognized with sufficient certainty and if it does not happen against the will of the patient. Clearing-up and information about the consequences of a treatment or no treatment stand in the foreground (death, pain and so on). If the patient rejects a treatment with full knowledge of the state of affairs, the treatment obligation of the physician expires. The physician has the obligation to heal, not however the obligation to extend a suffering. Healing is called to improve the life of the patient. To the life belongs dying, which naturally terminates the life. The task of welfare of the physician consists at the end of the life therefore of facilitating a dying of the patient in the sense that of *ars moriendi*, the art of dying. Here the technology, which makes the preservation possible of a destroyed body, can be obstructive. In the context of this order for welfare the physician may not cause however the death of the patient, since thereby dying is not lightened, but is terminated (104th German congress of physicians 2001). The physician is to accompany the dying of the patient, however he may not determine it. Dying company (dying assistance) has as goal to facilitate for the dying the physical and psychological emergencies of dying by care and ministry. The pain easement is here the centre of attention for the physician. It is to be demanded also if thereby death (e.g. breath depression with opiates) is accelerated. However, if this side effect is the principal purpose of the treatment, this is death grant and contradicts the hippocratic oath and the law. Death grant has the death of the patient as a goal and fulfills therefore the facts of killing.

C. Past and future

From the whole of the past and the presence of a human we try to make ourselves a picture over him to get an idea how his future will look like. That becomes clear for example with an application for employment: With the application for new working premises above all his past is important apart from the appearance of the applicant in the presence: his personal record,

his training, his abilities shown in former times, his evaluations. From this his possibilities and his behaviour in the future are concluded and his application is accepted or rejected. Not humans in their presence, but humans in their four-dimensional space-time are here important. The same happens, if we meet an acquaintance: At the same time with its recognition in the presence we conclude from our knowledge over his past whether we like him or not and judge perhaps of his future: He may have a bright future, or: That one takes a bad end. We see humans and in addition also other things, never only in the present, but always in connection with the past, as far as we know it. Simultaneous we make ourselves, even if usually unconscious, a conception over their future. Although our body lives in the three-dimensional space, our spirit always is, without that it is conscious to us, in the four-dimensional space-time. For this reason humans furnished a special science: the science of history. The meaning of history is the internal-worldly representation and reconstructed repetition of outer-worldly and over-worldly reality (Alfred Delp).

The past, on which we look back, never stops to be old and new at the same time, because in future generations the point of view of the memory and the basis of the intensification change themselves. The future can bring never beings, but it will be based on the always being past and future, and what may have the appearance of the repetition, will be understood by future lineages as fruit from one seed, and they will believe themselves as actors to sow a new future (Joseph Bernhart, de Profundis, P. 70).

Why do humans try to work by their acts or thoughts to provide again and again for their posthumous fame to be existent in the consciousness of the society after their death? This can be nevertheless only, because these humans do not only believe, but know that their works, whether good or badly, and thus their innermost, their soul, will live on. And which human does not have ever remembered, that he lives on in the thoughts and in doing of other humans, above all their children? An indication of this are the cemeteries existing at all places of the earth inhabited by humans, which become in the science of history the most important witnesses of the past. Funeral ceremonies, obituaries, local designations, monuments and so on are examples of an internal knowledge about the continuing after death, even if the intellect means to know that this cannot be. The fame and honouring craze of humans are expression of their certainty that they possess a soul, even if they don't believe it.

Why do we remember only the past and not the future? In the four-dimensional WORLD, in witch our time becomes the fourth dimension, past and future are simultaneous. The time in our three-dimensional space has a direction into the future, by which we can experience the four-dimensional WORLD. However we remember only that, what we have experienced, and that is the past. But we have by our memory the ability to notice everything experienced in the past and to run it off in our memory in arbitrary order or simultaneous. So the past becomes the four-dimensional WORLD.

Dietrich Bonhoeffer described marvellously before his murder the simultaneous presence of the past at the present time after nearly two-years Gestapo-imprisonment in his last letter of 19.12.1944 to his fiancée: *It is, as if the soul trains organs in the isolation, which we hardly know in the everyday life. Thus I felt at no instant alone or abandoned. You, the parents, you all, the friends and pupils in the field, you are always completely present with me. Your prayers and good thoughts, Bible words, long past discussions, music pieces, books get alive and become reality like never before. It is a large invisible realm, in which one lives and one has no doubt about its reality.*

For the future we have the foresight instead of the memory. Humans are in their

responsibility given to them by God actors in the presence. Due to our ability to plan, being based on the experience from the past, we are able to arrange things in the present in such a way that they become effective in the future. We can provide prognoses for the future, because we learn from the experiences of the past and acquire by our understanding a ever larger knowledge over the procedures of nature, which we use then for our more or less correct prognoses for the future. An example is the weather forecast, which was one hundred years ago straight enough for the forecast of the weather on the same day, today however it is already relatively good for three days due to our progressive research.

Our ability to learn from the past and investigate in the present the nature of the things, gives us the possibility of acting for the future. This acting is supposed to give us a better future. We scheme plans for the future (training, occupation, family, vacation, purchase of a car), set goals (associating examination, diploma, dates) for us, and provide for our age (insurance, will). From experience we know that much of it also occurs and takes place. We mark out goals in the future to reach them. The way there is the fourth dimension of the WORLD. Acting into the future can reach from excessive doing to nothing doing. It happens between the two extremes: "All the same as, main thing that" and "It is not of use for anything, anyway one can not change it". In the run of the future we can, for the good one or the bad one, intervene by our understanding, but we can not change the past. For that we can remember the past by our memory, not however the future. But we are able, to imagine the future with our so called sixth sense.

5. Further questions about the soul

After the attempt, to answer the questions about which, from where, where and whereto of the soul, still the questions about who and why of the soul remain.

A. Who is the soul?

The answer to the who results from the answers to the which, wherefrom, where and whereto: The soul is the owner of its body, with which it is one, over which it prevails after the best of its belief and around it worries itself (chapter 1: Which is the soul?). The fate of the soul in space and time is intimately linked with the fate of its body (chapter 2: where does the soul come From?), as the fate of the body depends on the activity of the soul (chapter 3: Where is the soul?). Both are for each other certain from generation to death (chapter 4: Where does the soul go to?).

The Soul itself is not the consciousness of humans. On the contrary the soul is it, which makes the body of humans themselves conscious. Whereas the soul is eternal, consciousness depends on the time. The soul needs above all the central nervous system for consciousness. This develops at the latest with the time of the implantation of the embryo into the uterus, when from the pluripotent cells of the embryo the unipotent cells of the Foetus develop (see chapters 2.D: Generation). From then on consciousness is formed and completed, until it reaches its full ripeness with the conclusion of puberty. In addition, it is solidified in the further life by learning and experience, but can also be limited due to diseases. Such restrictions manifest themselves among other things in the so-called mental disorders.

B. Why is the soul?

This question is as old as humans are. It is the origin of philosophy and the basis of theology. It is the always-lasting question about the I and about God. Whereupon the religion tries to give an answer since ever. The soul is, because it is and because God wants it. All these questions about the soul do not apply to those, which do not believe that there is God or a soul. Nevertheless these questions remain as questions about the human, on which finally all science turns around. Perhaps the small story gives an answer, which one tells of the great scholar Augustinus:

Humans stand in the tension of the goods of their soul. In order to arrange live together in the society, at all times rules were set up. Those are laws of the state, contracts in business, statutes in associations, agreements in meetings and so on. These rules follow old hand down wisdom, which worked satisfactorily for living together. From this wisdom religions were formed as a superior order. Heinz Schroeder had this forcefully described on the example of commerce and industry.

To the one, who does not believe, that there is god or a soul, this questions over the soul are not existent. Notwithstanding, this questions remain as questions after the human, about what in the last end all this questions are concerned. An answer may give a little story, which is told about the great scientist Augustine:

Augustine, who was 1700 years ago bishop of Hippo in today's Algeria, went walking gladly at the beach of the Mediterranean thinking about God and the world. There he saw once a child, who dug a pit into the sand, then it scooped with its little bucket water from the sea and

poured it into this pit. When he returned again on his walk, the child still filled water from the sea into the pit. And each time, when Augustine went past, the child was busy with the drawing of sea water into the pit. Augustine was surprised at the child and asked:

“What are you doing there?”

“I pour the ocean into my pit.”

“But my child, this will not work. Look, the large ocean does not fit in your small pit.”

There the small child answered the great Augustine:

“As God does not fit into your small brain.”

And suddenly the child had disappeared

We can not seize God and its realm, the ALL, with our brain, but only with the faith of our soul. And therefore we have a soul.

Epilog

At the end still another word may be permitted to me to the relationship of spirit and natural sciences. As an emeritus member of a scientific university I can sing of it a special song.

We get a notion of the time bound in this life, if we regard the stars in the sky at night. What we really see is the past of millions and billions of years. The stars in our present however are for us furthest future. Our terrestrial binding to the time prevents us to see the stars simultaneous. Debt to it is that the light is bound to the time, and has a finite speed as everything, which is perceptible by humans. In addition Kant says: *Two things fulfill the mind with always new admiration and reverence, the starry sky over me and the moral law in me.* (Kr. pr., resolution, 288). But the moral, which every human owns, is God in myself, that is the expression of God through me.

As in the quantum theory and in the cosmology physics becomes philosophy (Metaphysik, Frank Steiner), so at the beginning and end of the life biology becomes theology. The borders between physics and philosophy or biology and theology can change however with progress of the human knowledge and recognition. The border between physics and philosophy or biology and theology only indicates, where our knowledge ends in the context of the infinity. This border however is for humans difficult to recognize. That is once because of the fact, that everyone, also physicists, philosophers, biologists or theologians, see this border from their point of view, on the other hand in addition to it, that everyone is anxious to preserve his once learned, experienced and acquired possession. This leads again and again the to emerging lack of understanding between physicists, philosophers, biologists and theologians and can only be overcome by insight, being based on communication in the continued controversial discussion with one another. Lack of communication leads inevitably both sides on erring ways, which happened in the course of the time often enough and also happens still today. For all however nature pushes to an incomprehensible border in the black hole and the singularity of the Big Bang. That, what happens before beginning of the life and after death, is for us just as inaccessible, as the happening in a black hole of the universe. Here our laws of nature end.

Physics and biology have their domain in the framework of space and time in the material world, whereby they continue to increase this framework by their research ever. Here applies, which demanded Roger Bacon of the science: *Knowledge must develop on experience, experience will be won by the experiments, with which the theory is examined for its truth, before it becomes knowledge.* This knowledge applies however only until it is disproved by newer investigations. Whether such falsifications of the present truth is possible, we don't know, however we must accept it. That leads back to the wisdom of the Sokrates: *I know that I do not know anything.* The domain of the human sciences is the mental world. They try to form a basis for the interpretation of the future with the wisdom acquired from the realizations of the past. They must experience however again and again that the acquired knowledge in the past may be often enough questioned and replaced by newer realizations from the mental and the material world. Often enough thereby human and natural scientists talk past each other. They are however part of the same world and affect each other mutually.

The How of philosophy, the What of theology and the Why of the natural science must find to each other to one science to arrange our common future. I like to call this science **Cosmosophy** to follow and combine the natural science Cosmology and the human science Philosophy.

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