Evert Aether-Physics and –Philosophy

01.	Introduction	In retrospective, here are added my judgements on the chapters and some hints for the readers.
01.01.	Objectives and Approach	What are the subjects of the new Aether-Physics and -Philosophy? Philosophic background and Theory of Science.
01.02.	Real and Abstract	What's really existing and what's only an abstract expression? Essential distinction of terms for unravelling and mental understanding of real processes.
01.03.	Real Certainty	What were / are real essences of the universe? How mysterious the common sciences are working. Recalling at axioms free of doubt. One MUST read!
01.04.	Everything and Nothing	Can Nothing really exist? Absolutely TOP: you sit at back row at a philosophic- colloquium and listen curious the discussion about possibilities for cognition of the being.
01.05.	Space and Time	Reality or only abstract expressions? Finally understanding Einstein! Inclusive a literary highlight! MUST study!
01.06.	Boundary or Boundless	Are there parts or is there only one Whole? Dammed hard demand: forget thinking by particles! Searching for particles makes no sensed. One must see the whole as a unit. MUST read! Even real understanding might come up some later by concrete examples.
01.07.	Special Terms	Meaning and usage of special expressions. Is often neglected: without clear definition of all terms - it's only blathering. Here the terms are well defined (and detailed once more at later chapters). Well done!
01.08.	<u>Summary</u>	Results of previous considerations. Strenuous attempt to convince the readers (and sciences in general) by that understanding of the aether. Mental reservations however might decrease finally after explanation of some phenomenon. These new ideas are just too demanding - however, what could be more exciting!

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01.01. Objectives and Approach

Aether-Continuum-Theory

At considerations to rotor systems came up some questions concerning inertia, mass, weight, acceleration and deceleration. The results of experiments didn't fit to common definitions. So I made up considerations by my own, concerning these fundamental terms of physics. At my website were published a Fluid-Technology (written in 1998 and up to 2002) and a Rotor-Technology (2000 to 2002), proposals for Perpetuum Mobile (2001 to 2003) and a first Aether-Continuum-Theory (2001).

Common understanding of physics only knows materia and 'fields'. More and more however, the old term of Aether (Aristoteles, 350 BC) again is discussed. At these consideration commonly is assumed there would be materia at the one side and besides this an aether, respective an aether would exist between materia. Prevailingly, aether is thought as a 'gas-like or fluid-like substance'. By that understanding the aether should behave like an ideal gas, on the other hand should show extreme hardness.

I examined the appearance of inertia and I found, mass not only should consist of its material part but should include some 'phantom-body' of aether. It took some months to leave the 'thinking-by-particle'. Finally at later chapters, I managed to think all occurrences are only expressions of movements of aether within aether.

The logical conclusion was, there can exist only one single matter (really existing, thus by material sense). My 'bold' conclusion was, this single matter should have a unique property (what's permissible as no comparable matter exists). This matter not again can be build by parts (otherwise logically same question would come up: which matter should exist between aether-parts).

So logically, aether must show the property of partlessness, must be a real continuum, whole universe one piece of aether. Often, aether was described to be 'like a continuum'. However, nowhere I found an understanding the aether would not only be 'similar to continuum' but by itself is a really existing continuum.

When one imagines the aether as a real continuum, all physical occurrences (materia, forces, radiation etc.) are only expressions of aether movements. On the other hand, this aether well can be the medium for all other occurrences (spirit, soul, ideas etc.). It's the intension of that Aether-Theory to show the unity of materia and spirit, unified by the mutual medium of aether.

Even more 'painful' for me to realize the further consequence: we also - with our material like 'astral' body - are nothing else than 'only' a vortices-structure of aether. One even does not exist by a certain part of aether - only a 'whirlpool of ourselves' wanders through the aether.

Physics and Philosophy

The nature-sciences made major progresses and produced useful formula as basis for our modern technical civilisation. The physics offers explanations to most different occurrences, outstanding physicist Richard Feynman however stated lots of facts which are not explainable up to now.

Above this, known physics work with terms (e.g. 'field'), which are defined only vaguely or even not at all. At Relativity- and Quantum-Theories one even is proud to work with facts and processes, which are beyond understanding by 'normal' intellect or beyond common experiences.

I don't doubt, known formula represent physical realities in useful manner resp. allow sufficiently technical calculations. With my Aether-Physics however, I just want to point at 'phenomena' not explainable up to now (or not even talked about). My objectives are to allow an easier understanding of physical occurrences and to learn their true essence.

Thereto I describe a physical theory at pure 'materialistic' bases, using only simple expressions of everydays experience. I present alternatives to common explanations of many physical occurrences and I offer quite new understanding to some phenomena.

A theory is the more 'true' the less axioms are assumed (opposite to common theories, where mostly assumptions are implied unconsciously or not named explicitly). I assume only three axioms apriori and name these precisely. I deduce these axioms from material facts of normal experiences. By strict logic, all other facts and processes are to deduce of these few assumptions. I will pay attention, no additional assumptions are implied occasionally resp. I ask readers to point at eventual logical errors like this.

Up to now I got the impression, nobody really shares my 'extreme' understanding of the aether. I must accept, many people can't imagine movements within a material block. Indeed, within that block no longer are possible all kinds of movements - allowing only the 'laws of nature' resp. determines these laws by itself.

It's difficult for readers without good imagination of space to get impressive picture of these (invisible) movement processes. However I'll do my best to visualize and to describe the complex movements of aether within aether. Naturally it's hard to work with quite new ideas. However I'll use only simple terms of common speaking.

This workout is also called a philosophy, because a world-view (also pure materialistic) always is a mental subject. Just within last years, philosophy at western world made enormous progress and opinions of many people did change fundamentally, e.g. by many activities concerning 'esotericism'. However, also there are used expressions merely to understand and lots of confusing theories were produced.

Opposite to these 'spiritual' developments (nevertheless rather positive), fundamental other developments are a prior expression of western understanding: ruin of ethic values. Turbo-capitalism and selfishness boom as never before, 'cleverness' is the maximum idea, life seems worth to live only by 'events'.

By this Aether-Philosophy I want to point out, also 'spiritual' occurrences not at all are nebulous aspects within fictive 'dimensions' anyhow within misty 'networks', but are based at a concrete matter - within the real existing (in technical sense) aether. It's true, besides 'coarse-matter' occurrences there are also 'fine-matter vibrations' and both are only different movements within one single, real medium.

So it should become obvious, relation between materia and spirit (with dispute of priority for hundreds of years) is a real fact, both existing parallel and mutually. If one realizes the direct relationship of everything with everything, everyone with everyone, thoughts with handling and results, this conviction has immediate consequences for ethic behaviour of everyone.

So at second part of these workouts, I'll try to explain also some 'spiritual phenomena', for at least some easier understanding. Naturally, these considerations are more speculative than considerations about well known physical occurrences. Nevertheless, some readers might take some valuable hints of my 'philosophic' points of view.

01.02. Real und Abstract

Thinking Abstract

Humans are proud to be the most 'rational' animal. Indeed, our brain is able to mentally digest our sense impressions, to plan further actions, critically judge the results, consider carefully and decide next step. Indeed, during the day our wide-awake brain is talking monologs steadily, thinking continually (however most in circles). Indeed, we became a most successful species by these facilities, at least for submitting the world to human's rules (even with side-effects).

Our special ability is thinking in abstract terms, gathering common characteristics by abstract collective names. That's helpful for daily routine like for description of physical occurrences like for philosophic considerations. As an example might do these sentences: food is cheaper at countryside. Fruits are essential for health. Mass shows property of inertia and weight. Gravity is attracting force between bodies. Men feel sympathy or antipathy mutually. Egoism is opposite of charity.

Only by using abstract terms we can untie from concrete single case and come to statements in general respective to judgements universally valid. This makes easier the daily decisions, allows the understanding of general laws, is practically prerequisite for any communication (like the upside examples exclusively used abstract terms).

The ability of mental abstraction is extremely advantageous. However there are exceptions, for example: lawyers are talking and thinking only within their special terms (out of touch), scientists mentally handle only 'empty words', aesthetes have their head in the clouds.

Strange enough, philosophers use abstract terms, however can explain it only by examples of everyday occurrences resp. material facts and relations - or please try to define e.g. egoism or love purely abstract (and when using abstract terms for definition, explain these without concern to simple realities).

Opposite, scientists not at all describe reality only by terms (names) for real occurrences, but work with pure mental expressions - or please define e.g. attracting-force or electric-field (exclusively by terms of absolute sure knowledge of reality - where formula allow calculations however don't explain anything).

All these abstract terms exist as (more or less) common agreements, however only at this mental level (of brain-work). These terms have no own real material existence. It's remarkable, just the scientists nearby exclusively are working with these abstract (not-real) expressions - up to total abstraction in shape of only mathematically relevant formula (inclusive 'imaginary' factors).

Real Existence

In reality, there exists e.g. no food nor fruits, no mass nor gravity, no antipathy nor charity. Real existing e.g. can be only (one, concrete) apple which you eat at this moment, or that apple falling onto your head at this moment, or that apple you throw onto the head of the ugly man, or that apple you present that nice lady.

Really, there are no men, really there might be that man with red pullover over there or that man with red hairs next to. Mentally, we use abstract collective words - however in reality, exists only one concrete single case.

It might seem like 'lawyers splitting hairs' - however just jurisprudence shows disastrous results when terms become independent of any real relationship.

The sciences however need generalisation in order to come to general valid statements (laws). Nevertheless also here it's dangerous, if terms become established and are loosing the relation to reality, e.g. when used only formally within mathematical transactions. Above this, it's dangerous if preliminary installed terms no longer are questioned in order to get to the bottom of it's really basic essence.

Theory of Gravity

By example of the falling apple above, I will explain this 'danger' resp. will comment this 'most far reaching abstraction men's brain ever made' (so Richard Feynman).

One was enthusiastic, as Johannes Kepler got calculated the orbits of planets and Jsaac Newton described the laws of gravity in general. Above this one well knows, 9.81 is the acceleration of free fall at the earth and

Upside three digit number are MeterEachSecondBySquare and is the 'defined constant' value - even measurements at different locations and also at same location at different times, practically show different results all times. This upside second 42-digit value are KilogrammBySquareDividedByMeterBySquare and this exact rate was measured already two hundred years ago by torsion-string-scale. Only by this method, the mass of earth is determined.

Mathematically it's no problem, based on these both 'earthly' values, to extrapolize into universe for billions of light-years. However it's absolutely the question, if based at these two questionable values, results could be close to the reality out there.

By Kepler/Newton-Theory was founded, 'attracting-forces' exists resp. a 'gravity-field' must exist. In reality however, only the occurrence of weight at earth was made calculable (approximately). Already within sun-system, corresponding 'attracting forces' are affecting between each celestial body concerned - and mathematics are not able to calculate forces between only three concerned bodies in motion. In reality (but not often spoken about), even our well known planets don't bother about calculated tracks. So calculations beyond sunsystem are not only purely theoretical but must be called pure fiction.

Above this, Richard Feynman (sorry, I have his book at my table at the moment) reports 'up to now, nobody could tell something about basic mechanism of gravity'. That's not quite true, however alternative statements (besides Einstein's 'bended spacetime') were not considered. As one doesn't know real foundation (above pure formalism), one can't assume an abstract general validity of this gravity hypothesis.

Real fact is the knowledge about mass-inertia of a body at earth: if in movement, the body will go on moving same direction by same speed. If the track of that body should be redirected, a sideward force is demanded, e.g. a body hanging at a string, circling around an axis.

It's a real fact, this body must be pulled towards the turning axis steadily. However, it's pure theoretical assumption to transfer that matter of fact of this mechanical example analogue to the mechanism of celestial bodies. Never ever anybody could make out an attracting forces - one only can register the occurrence 'as if' the earth is guided at a string, turning around the Sun.

By rash defined term of gravity-field, the science did withdraw from the task to find the real 'mechanism' of this effect. Official science didn't check considerations analogue to movements of bodies within fluids, did not even take notice of presented, precise discussions based on fluid-technology (the real essence of gravity is discussed later in details).

Model of Atom

In spite of that unsolved problem, previous mechanism was transferred onto most small dimensions, as diverse electrons (planets) turn around the atomic nucleus (suns with different masses by rather same diameters) in common understanding of atom model.

Negative electrons keep distant based at repulsion of likely charges, at the other hand negative electrons are fixed at sphere-like tracks by attraction of the positive protons of the atomic nucleus - and everybody well knows the phenomena (no, the unsolved dilemma), that all likely protons of the atomic nucleus keep together by incredibly forces, instead of flying off immediately.

Also there, one well knows many 'natural constant values' and is able to calculate mathematically exactly. However again, one introduced the 'electromagnetic field' as an abstract term, estimated its purely abstract definition and its (limited) possibility of calculations - however one 'forgot' to search for real the background.

Just with concern to electromagnetic waves, meanwhile the idea of 'light-aether' came up. However, experiments were designed wrong and results were interpreted insufficiently, so lastly the aether was superfluous by Einstein's bended spacetime (and Einstein's later arguments for existence of an aether officially is not noticed up to now).

Outsiders well could have the impression of some strange humour: the physicians keep the secrets untouched, so the following generations have a chance to solve the problems.

Connection to Reality

This chapter pointed out, for rational (brain-like) worldview we are bound to use abstract terms. Nevertheless we must differ situations, where we talk about concrete reality and where we mentally handle only abstract terms.

As soon as results of considerations are no longer approved by direct real facts, it's not allowed to extrapolize further on or to transfer analogue to other subjects. Mathematics are helpful, however each step of calculations must fit completely to real experience, otherwise it's not allowed to calculate further steps.

If there is only the 'appearance' of an effect, it can not be considered as real fact - and not at all can be considered as established fact if analogue transferred to other cases. At least, if assumed effects (e.g. the attractive and repulsive forces above) are contradictory within smallest dimensions (like at atom model above), reality and abstract terms are mixed up totally wrong.

Previous examples demonstrate the damage which comes up, if abstract terms are installed too early, 'became independent' and were extrapolized and analogue transferred to other problems, so wrong results are produced inevitably. These hypotheses of the gravity and the atom are graved deep into the brains, so other explanations are rejected before thinking about. Steady usage ('naturally' but un-reflected) of terms like these, prevents researches for basic realities.

Naturally I will show at both examples, which results are possible by an alternative approach and above this, I will show explanations to many other problematic 'phenomena'

01.03. Real Certainty

Appearance and Existence

An esoteric bended aesthete might enthuse about: 'there is confidence, hope, life, will,

substance, motion, power, reason and effect'. A real materialist is terrified about that stuttering and asks: 'what, by which, how, when, why and what for'. A scientist soberly states: 'there is material matter, energy, movement, power and no effect without cause'.

Scientific correct approach is to check previous statements: what's certain experience of real existence and what's only mental, abstract 'representative' expression (a term commonly agreed with explicitly defined meaning or only an 'empty word'), so to differ between real and only mental 'truth'.

'Ex oriente lux', truth is coming from eastern enlightenment, even western world likes to 'limit' that source at old Greeks. Astonishingly progressive e.g. seems Demokrit, who saw everything based on atoms. Opposite, Aristoteles looks rather old-fashioned with his four elements of earth, fire, water, light plus fifth 'Quint-Essenz' of his aether. Heraklit's 'panta rhei' again sounds up-to-date, like steady flowing, appearing and disappearing. Platon became rather unpleasant by putting us into a cave, riddling and discussing about shadows performed by a reality not visible for us. Even more worse the unreasonable demands of fareast world view appears, as they are claiming all estimated reality would be nothing else than illusion.

Material Parts

One scientist 'relieved' us from the illusion of air being an 'esoteric element', by his approval of material air-pressure by two half-spheres. An other scientist put off candle-light by simple glass, thus discovering nitrogen. Water no longer is considered an 'esoteric elixir of life' since discovered as H2O (even this mixture of two gases still is wet).

Unlimited variety of material occurrences lastly was reduced to some 80 'chemical' elements (plus some few more, some less durable substances).

This clarity of different substances again was reduced decisively by the knowledge, finally all atoms are based at different numbers of few elementary particles. So everything is constructed only by both stable particles of electrons and protons, plus some neutrons. Electrons turn around nucleus at different tracks, also the nucleus shows steady turning motions.

For some short time, the world was organized by simple structures, materia (resp. also the 'esoteric element earth') was reduced to few real existing 'bricks'. Same time, everything is in motion, thus materia in reality is never resting.

Even 'esoteric element of light' was discovered as photon - even up to now it's uncertain, whether there are parts moving ahead or only waves are spreading within space (thus it's still the question, all electromagnetic occurrences are real parts or 'only' waves). Besides lots of detected radiations, now is assumed resp. probably approved also neutrinos are stable particles.

Quarks & Co

The 'intact' world of old atom-model was disturbed soon by the detection, also elementary particles finally are not the really basic constructional elements of all substances. At first, some 'quarks' were detected, afterwards more and more, now more than hundred are known and there is no end. Previous elementary particles now represent only a special mixtures of these new basic 'bricks'.

However, practically all of these 'stones' have extreme short lifespan, are changing from one shape to the other in a steady metamorphosis (like old Greek told). The lifespan of some particles takes some seconds, most parts however 'exist' only nanoseconds or much shorter.

So it's a general question, if short-running occurrences like these can be considered as real existing substances at all. Above this, these 'constructional elements' are defined by properties absolutely insufficient for description of real substances: up, down, strange, charmed, bottom, top (those terms however would fit well for the description of movements, especially for steady 'interplays').

Unsharpness and Probability

Completely destroyed was the impression of a concrete materia, build of real particles, by the detection of Heisenberg's Unsharpness-Relations. Electrons around atomic nucleus can not be determined exactly. Only their momentary location or only their momentary speed can be measured, never both values same time. So remaining are only probabilities - instead of certainty.

Mathematically all that stuff is managed without problems, all values of all atoms and particles are determined exactly, everything is fitting, all 'natural constant values' are approved by multiple counter- and cross-calculations. Nevertheless, every calculator well knows, 'useful' constructed sets of formula allow everything to calculate and every given basic factor reversibly becomes confirmed. The possibility for calculations about any subject, by itself, doesn't approve whether the results are related to reality.

So the sciences did search for real existing constructional elements of all matter - however finally didn't find anything than abstract values of probability-calculations. So it seems rather 'courageous' to consider these understandings as most possible true picture of the reality.

Something in Motion

By criteria mentioned earlier, one must differ strongly between terms describing a certain real occurrences versus abstract terms, which are useful only for mental handling and communication. By this point of view only two facts can be considered as certain knowledge about their real existence: 1. there is something and 2. there is motion.

These are two of three axioms, I mentioned earlier. First: a substance is one real perceptible fact. Second: movements are the second real perceptible fact.

Third axiom is based at the fact, nobody can tell why - for heaven's sake - something should exist or should be in motion. As homo-sapiens we are not able to assume existent things without cause for its existence. As homo-faber we are not able to assume existent things without its production process. In concern with that general dilemma, commonly is use the term of 'God' as founder and producer of the universe. Even some don't like to use that abstract 'empty word' (cause we are not able to define it more precisely, based at our limited view), this assumption still remains unexplained. So the third axiom is: existence exits anyhow.

One Thing and many Movements

It's the question, how many different kind of substances are existing. By 'chemical' view, there are as much substances as chemical elements, its variations and all possible combinations of. That's the enormous variety of all material occurrences.

Searching for basic original substances, this number was decisively reduced to few different elementary particles, afterwards however extended to probably numberless different sub-elementary particles.

By earlier mentioned criteria respective a general agreement, that theory is the best, which needs the less input values. So instead of assuming many different substances, best solution would assume only one single thing as basic substance of all occurrences.

The obvious huge variety of occurrences (also below elementary particles) thus can be assumed to represent the unlimited possible forms of movements of that unique substance.

First however, the previously introduced 'empty word' of this 'single-one' is to define more exactly. By statements above, valid is only one fact: there is some-thing and some-motion. If now I claim, this some-thing is only one-thing, so this is a pure mental abstraction.

However, just the knowledge of Quantum-Physics approve this logic conclusion by two occurrences. First, sub-elementary particles change shapes within shortest times. While these most short intervals, no real distinguished 'substances' can really be build, but well could one real substance change its movement's characteristics within these short intervals.

Second, there exists unsharpness while watching electrons, based on Heisenberg's Theory, today however well known by real 'pictures' of atoms, showing 'cloudy' shapes. This unsharpness would not exist, if different and separated substances would really exist. One single real existing substance, differently occurring only by locally different movements, indeed would be hard to locate sharp, but these movements would produce unsharp wandering reflections, thus would result the known 'blurred photos'.

So it's to assume as a real certainty, only one unique substance exists, which however allows most different variations of movements. This Aether-Theory is based at these two axioms (plus above axiom of 'God'). As described later, this basic understanding allows to describe clearly physical phenomena resp. explains occurrences as inevitable consequence of these properties. These assumptions of that Aether-Theory are also approved by well knows effects.

01.04. Everything and Nothing

Table and Apple

Everything and Nothing are basic philosophic terms. Elementary requisites of philosophers are a table and an apple. The esoteric aesthete of previous chapter immediately enthuses the harmony of colours and the charisma of the apple. The real materialist of previous chapter is hungry and takes the apple - the apple disappears, nothing is left. The scientist of previous chapter states, the materialist obviously did satisfy his urge (however he refrained from explications about real chemical-physical processes of this emotional process).

The real philosopher however needs real processes not at all. He imagines that table and this apple by pure mental force. He is conscious of thinking about this constellation. He doesn't doubt about the certainty of the existence of both objects (if they would be real instead of only imagined by his fictive experiment). He draws the evident conclusion, also he - as the watching subject - objectively is existent, not only fictively but really.

Meanwhile, the esoteric aesthete enthuses about beautiful grained table and the wonderful materia of the wooden table. Now the scientist explains, wood is no 'materia' but exists of cellulose, mostly of hydrocarbons etc.

Based at previous chapter however, I deny the real existence of that table and that apple, because only that unique something produces the appearance of both occurrences. Indeed, that's the most extreme abstraction: really existent is only that one-thing and its most different movements are resulting the impression of all different stuff.

Pattern of Movements

Different occurrences differ only by different pattern of movements. The movement-pattern of material bodies can't mutually penetrate each other (the apple keeps lying at the table,

regardless of his weight). Material bodies show different stability (if the apple hits hard onto the table, apple-mush could result). Also molecules resp. atoms are mutually impenetrable pattern, however can be mixed up (e.g. gases of air or mixture of fluids).

Above this, there are physical movement's pattern, which can penetrate into or through other pattern or are reflected by other pattern, e.g. electromagnetic waves. The sun-light e.g. is reflected by the table like the apple, by the way into the eyes of viewers (and / or warms up the material). On the other hand, x-rays e.g. could penetrate more or less material parts of the table like the apple. Electric flux however can not run though dry wood but well through wet apple.

So only by different shape of movements of the aether, different physical occurrences will result, e.g. the different density of material bodies, the real effects of physical forces of mechanical or other kind.

All

These statements are not only to understand as pure philosophical matter. At the main sections of this workout, each pattern of movements will be described in details, as totally real motion of that totally real substance. A philosophical extreme abstraction however is the statement 'All exists of that One'. This single substance, at the following is called 'aether' (at the moment as provisional 'empty word', until this term is defined precisely further down).

So now we come back to the original subject of this chapter. The apple above - regardless of its real existence of aether - as a subset could be included into superior abstract terms like food, plants, living-beings, earth, sun-system, galaxy, universe. Each of these subsets resp. abstract hierarchies however are embedded in collective term of 'all' (more than every things), thus 'all' includes the maximum of real and abstract range.

Nothing

There is only one term with even larger contents, the word 'nothing' which already appeared upside. After the hungry materialist had eaten this apple, nothing was left at the table. This statement is not correct. Correct statement would be, now no longer an apple exists at the table.

It's allowed to negate, e.g. 'it exists no fruits'. This limited negation however means, there is all - besides fruits. General negation of unlimited 'nothing' however excludes all - not only existence of real facts but also existence of abstract terms.

By this meaning, 'nothing' includes more than 'all': it even excludes 'existence' or 'being' resp. possibility of 'it is'. Philosophical respective by strong logic, 'it is nothing' is contradicting by itself.

So it's to state: as soon as there exists certain knowledge of 'there is some thing', i.e. 'there is being', then the statement 'it is no thing', i.e. 'there is not-being', no longer is possible. These considerations might look like 'lawyer splitting hairs'. However, the un-logic of 'nothing' is easy to demonstrate by concrete examples.

Vacuum

Modern science of physics called the considerations about the existence of an aether a 'naive mechanistic'. These scientists replaced the concrete aether by the abstract terms of 'fields' or 'space-time'. By modern physic-theories, the universe is 'filled up with vacuum', so the universe is a space with at least extremely diluted materia, practically some softer definition of 'nothing'.

Within this 'relative' nothing, electromagnetic waves are wandering. It's questionable, whether there are particles running through the space or waves. For safety's sake the abstract term of part-wave-dualism was designed and commonly accepted. At any case, modern scientists deny any real medium would be necessary for the spreading of electromagnetic waves.

By naive mechanical understanding, waves are movements. Now, any movement logically demands the motion of something. Even if the statement 'it is nothing' (within vacuum) would be accepted, the statement 'it is moving nothing' speaks for itself. If mechanistic thinking is called naive, that 'courage for abstraction' of common nature sciences must be called voluntary fiction, lacking logic like real foundation.

Opposite, if instead of a waves would run a concrete real existing particles (photons, neutrinos etc.) through the 'empty' universe, two questions comes up: of which substance a photon is part of respective is build? First: photon-parts are a part of all materia, like a brick is a part of a house. Second: bricks are made of loam - and photon-particles are made of 'nothing'?

Even the statement 'photon-particles are made of nothing' would be accepted: why should this 'assembly of nothing' not dissolve immediately into the rest of nothing of universe-wide vacuum? Common answer is: cause attractive forces of atomic nucleus keep the electrons together. However, photons have no nucleus. So what ever should a photon-wave or a photon-particle protect for diffusing into the nothing, not only by square of distance, but immediately?

Attractive Forces

At previous chapter, attractive forces of gravity already were mentioned. Corresponding attractive forces (however much stronger) are defined as a property of electric fields between likely charges. Above this, strong nucleus-forces hold particles together (again essentially stronger) and are the essential property of atomic nucleus. All these abstract terms of attractive forces are based on - insufficiently interpreted - naive mechanistic.

Analogue to gravity effect, as an example, was mentioned that ball turning around an axis, guided by a string. A force is demanded into radial direction towards the fulcrum - however this force not at all must be a pulling force (like done by the string). If this ball would roll inside along a round wall, the ball would be pressed into circled track likely.

So not at all it's the compelling consequence, circled movement or keeping-together could only be done by 'attracting forces'. Opposite, it's a mental arbitrary act to assume attracting forces as exclusive possibility - analogue to mechanical processes. However, that's only one of diverse possible solutions.

By the example of the string it's imaginable, pulling forces could really exist. At later chapters however I will describe, this holding-together of materials (until breaking point) in reality is the result of pressing-forces of the aether.

If now however, the attractive forces of gravity, electric charges or of atomic nucleus should affect through 'nothing', over distances, that's quite impossible to imagine. It's not allowed to introduce abstract terms, besides collective terms for realities. If there is nothing else but the 'appearance' (working likely to simple mechanism) - attractive force is nothing else but an 'empty word', an unjustified fiction.

Pressing Forces

There are clear alternative solutions, as shown upside by mechanical example of that ball rolling along a round wall, thus pressing the ball into a circled track. There is an other

example, totally real and important, discussed intensively at my Fluid-Technology: effect of suction. Suction is a shape of (apparently) attracting force within fluids or at solid bodies within fluids.

Suction is an area with relative less density - however the suction by itself doesn't affect anything. Any movement exclusively comes up, as the particles of neighbouring areas of higher medium-density fall into the relative 'vacuum'. However, in sum no stronger movement (no higher kinetic energy) results, only the directions of movements are other kind (by majority showing into same direction) and the distance of each molecule movement becomes some longer.

The appearing force (only towards outside) is caused by steady given, normal molecular movements within gases and liquids. The effect of a forces comes up - however the energy (sum of kinetic energy of all movements) remains constant. Only that little redirection of the normal movements of concerned molecules results the appearance of 'attractive forces' of suction - which in reality however is based at normal pressure forces within the medium.

Physical Fields

Known 'fields' of different kind are a mental matrix, where the direction and values of physical forces are marked (resp. are calculated by the compressed shape of corresponding formula). This abstract arrangement is useful for calculations about effects of these forces.

However it's not allowed to draw logic back-conclusions from abstract mental tools onto the real effect of forces and to assume an abstract nothing as medium. This empty word 'field' was introduces provisionally, only because one was not able to define the properties of a medium corresponding to the real identified effects of forces. As the abstract calculation-techniques produced sufficient results, one 'forgot' to search for the basic realities. However it's not useful to install abstract terms like 'nothing' or 'vacuum' for searching the truth of the real background medium and processes.

Space-Time-Continuum

As an essential progress was celebrated the abstract design of a 'bended space-timecontinuum' in 1905 by Einstein, where the existence of an aether was declared 'superfluous'. Totally 'forgotten' resp. neglected are Einstein's later publications, e.g. of 1925: 'There are grave arguments for the aether-hypothesis. Complete negation of aether would mean, empty space no longer would show any physical qualities ... based at General Relativity Theory the space has certain physical properties; so by this sense there is an aether existing. Based at General Relativity Theory, space without aether is unthinkable'.

So also Einstein recognize logically clear, by 'nothing' indeed will remain just nothing in total. It's remarkable, the space 'based' at his theory should show this or that property (so also he deduced from abstract terms to reality, like above at common interpretation of 'fields'). It's logically not quite understandable, that it should exist aether only 'by this sense' - if at next sentence space-without-ether is called 'unthinkable'.

The old term of aether as the name for a real substance was 'cancelled', cause one could not find nor define the proper properties of that medium for diverse physical occurrences. (Supposed) negative experiments for approval of aether like all theoretical considerations are based at one, not mentioned but steady present assumption: here is materia resp. are particles and around these 'matter' of facts is - probably - an aether.

This permanent demarcation respective thinking-by-parts blocks the researches for a 'proper' aether up to now. However, today it's no longer quite naive to think about a real substance instead of thinking about the abstract nothing.

01.05. Space and Time

Space-Time-Continuum

Thinking about space and time is superfluous as everybody knows we live within a bended four-dimensional space-time-continuum. Everyone knows the picture of a dented plate and planets are falling around the Sun at circled respective elliptic tracks. However one may doubt, if anybody - inclusive Einstein - could imagine this nice picture really in total. Appropriate sciences generously renounces to imagine concretely also a fourth dimension. As a substitute, three space-dimensions mentally are reduced to two in order to make time-dimension 'visible'. So a totally abstract operation is necessary for 'concrete' understanding.

This worldview is the generally accepted opinion, regardless of various criticism and precise hints to inconsistency. Presented approvals for relativity-theory were also 'relativated' by many authors. I won't add further comments of this kind. However, I will discuss Einstein's statements of 1925 (see previous chapter), where he made three findings (by these words):

- The total negation of an aether means, the empty space no longer would have physical quality.
- Space however has physical qualities, so by this sense aether is existent.
- Space without aether is unthinkable.

Previous 'by this sense' is only to interpret that kind, Einstein's space has physical qualities, which all are contributed by an aether resp. which all are represented by the aether. For space by itself, thus only physical quantities would remain (because it's common understanding, quantity is the single complement for quality).

These are most interesting aspects and it's only the question, which physical qualities the aether contributes to that space-aether-construction and which physical quantities (besides common length-width-height) space by itself contributes. 'By this sense' (using Einstein's words once more), one simply has to state: there is an aether with certain properties within a totally normal three-dimensional space.

One could follow unrestricted these - rarely published - findings of Einstein and probably everyone could imagine this simple reality - if the time is not added as fourth 'imaginary' dimension.

Reflected Being

Men however don't like simplicity - because we all are philosophers. Our brain, by his selfconsciousness, puts itself steadily outside of surrounding nature as 'objective' viewer. Brain continuously makes conclusions by abstract terms. It's a most difficult exercise to be pure spectator, to switch off thinking (like eastern wise men recommend), in order to realize 'qualities' of being directly, i.e. un-reflected).

Air has a quality - however we pulled it to pieces, to nitrogen and oxygen and other particles. Water by sure has special qualities - however common sciences did find nothing else than H2O. Time has a quality, earlier or later for diverse actions - however we cut time into days, hours, minutes, seconds. By this quantity-viewing we forgot - at least at the western world - to realize real qualities of real being.

We (western men) practically live only for planning - and to 'pass away' schedules resp. check-off life. Continuously we think about best coordination of all facts and next activities, thus practically we 'live' within the future and forget to live the short (however steady given) present moment. If reality of life occasionally conflicts with our plans, we withdraw into past times and 're-live' loved memories.

Real Being

Here I make sober-minded considerations to current physics. For a short moment however, I ask the readers to feel qualities of 'old elements' (and not to reflect about). Please imagine this scenario:

You feel the air at your skin and the air is flowing and wavering. You see clouds moving and bubbling up. The Sun is shining through cloud's gaps and illuminates the clouds and the earth by fantastic colours. You sit at a warm stone at a beach and the water mirrors the light rays. Waves come and go by unsteady movements, nevertheless by unlimited repeating motions. A fire burns at the beach and flames leap up, even higher fly some sparks. Everything is in motion, most different and same time by great harmony.

If you managed to realize these feelings - that's real being, to look at and take it without contribution of your brain. My abstract words were only necessary, because you was not really there at this place and that time. That real being described above, however, is completely independent of the abstract names, which we assign to things. That real being is independent of our collective words we need for easier communication.

Real Aether

Once more I ask you for a short moment, to realize quality of the age-old element aether. Please imaging this scenario:

You still sit at that stone and still observe this spectacle of nature. Only one fact has changed: you look through things, into a transparent and pervious matter, which exists real and continuous, and everything exists of and is included within that substance.

Air, clouds, sun, water, sand and stones, burning wood - all exists of this matter. However, at each location this substance is moving other kind, molecules appear like twisting tiny pearls, multiple embedded into others, partly far reaching movements. All is turning, never straight ahead, only by spiral tracks, narrow curves or wide ones, slower or faster, everywhere nothing else than swinging motions on unlimited including tracks. Also the light is nothing else than some special movement of this substance, is reflected by other movements or is penetrating into and accelerating other motion's pattern.

The aether is anywhere, there is nothing else but diverse variations of movements of that single stuff. Naturally you by yourself are also a rather complex whirlpool of aether, not outside of but totally integrated within. You can see, but must not view, because no motion ends anywhere. Your aether-whirlpool can feel every pattern of movements, no matter how far its core might be, large or small, from all sides you directly get the impressions of everything.

It's like a bath within an unlimited surrounding sea with unlimited various waves of all kind. Each single movement one can filter-out, depending only on the focus, no matter were this special vortex was, no matter how long time ago it was most intensive. One even can imagine inevitable further development of some movement's pattern, practically viewing into the future. Everything and everybody continuously gives his 'vibrations' into this unbelievable variously moved sea, makes input by actions or thoughts, no matter if conscious or unconsciously.

It's only that single matter, anywhere in steady most different movements - thus that One produces an unlimited variety of all appearances, each of other kind, nevertheless all appearances mutually are connected by direct resonance of the all-including medium.

This report might not be misunderstood as enthusiasm of an esoteric aesthete (however spiritually 'touched' readers will understand better). This report describes rather concrete

physical qualities of the real fact of aether, like mentioned above by Einstein's quote. For example, Einstein did well find the necessity of bends - however he called the inevitable curved aether movements a quality of space (only at his early workouts, much later he corrected this misunderstanding).

Space

Once more I ask 'realists' for patience and to listen to 'a short story of space'. A group of young people invaded that beach, marked a field and installed a net for volleyball. They probably were students of physics, amusing about quotes of their professor. Everyone talked about x- and y-coordinates, which must show 'normal' angles, also z must show perpendicular, all scalar values must correspond to the norm, because only by these prerequisites objectively reproducible results of planed experiment could be measured with certainty.

This discussion obviously enjoyed everyone more than the ball-game by itself. They commented each of their movements and every (miss-) stroke, by constant of impulse and kinetic energy, gravity and ballistics, heat and entropy, velocity and vector, twist and momentum etc. etc. etc., thus in reality they made up a competition about best handling of physical terms.

What happened to that scenario, viewed before and realized directly?

Before, there was only the reality of that single substance of aether with its reality of unlimited and various movements, resulting the variety of diverse appearances. Also these occurrences were real, however they have no stand-alone reality as separated stable bodies or 'physical force-particle', but these occurrences are only the result of aether-movements. 'By this sense' occurrences have no primary, substantial reality, but are a secondary 'kinetic' reality, existing only as aether-movements. It's only (primary) existing the aether with (secondary) existing aether-movements.

Which 'reality-third-kind' now brought these (future) scientists into that game?

They restricted their interests at only some few occurrences, as they observed only the elements demanded for their game. They introduced abstract terms, by which they thought and communicated. They reduced their attention to observing and judging only physical occurrences. As they didn't include primary nor secondary realities, they practically discussed only the outer criteria of the appearances.

Lastly they produced the 'space', measurable by three planes right-angled to each other with voluntarily chosen coordinates and voluntary zero point. Within that space they acted, were able to measure distances and speeds, to calculate and judge events. They used stable bodies for marking their space and they observed movements of bodies - however the abstract term of space, lastly was (and is in general) only necessary for exact counting, measuring, weighting and calculating.

If this group would have been interested in the ball-playing by itself (and not in 'scientific word-game'), they would have needed only a ball (no 'field' nor 'space' and no discussions with (empty-) words). With that word-game they made up their own 'abstraction third kind'.

Just this is the relation between the reality of the aether and the exclusively abstract term of space: the aether simply exists and plays its 'game of movements' - and this reality for itself is not depending on any abstract term, thus existing regardless of the term 'space'. The universe (as synonym for 'all') is the aether, simply existing by this substance, totally real and totally independent of any abstract term. 'Space' is a human invention, a mental tool for

brain's understanding - reality however is not affected by abstract terms, so 'by this sense' the aether exists without space.

Time

Primary, material reality is the existence of aether as the unique substance universe-wide. This reality exists completely independent of our abstract term of space (nevertheless, aether naturally is also the 'storage-medium' e.g. for our terms, thus indeed their exists 'reality third kind', described much later). Space is a mental 'stage' for description of certain location, relative to voluntary chosen zero-point of a coordinate-system and voluntary fixed planes, however right-angled to each other.

Secondary (above called 'kinetic') reality is the existence of steady movements of aether within the aether. A movement means changing of locations (to describe relative within a coordinate-system) and speed is a movement within a time-unit.

Again, really existing is only that motion of aether. This movement will occur totally independent of our mental measurement-tool of 'time'. Reality is only the motion of aether. Only if we want to determine 'exactly', how fast a portion of aether is moving from one location to an other - then we need time-units.

We do hard with time-measurement, just because time doesn't exist as an original reality. Naturally it gets lighter and darker and we call this day and night - however these are indirect appearances (resp. abstract terms), while reality by itself are only some movements of aether. For time-measurement, we only can take a seemingly constant motion resp. constantly repeated event as comparison, build fictive time-intervals and thus 'measure' (compare) the speed of other movements.

At the one hand, time-measurement is a technical problem, at the other hand it is based only at the 'relative' exact repetition of comparable events, third however it's only a pure mental tool for observation or prediction of movement processes resp. events.

The aether moves this very moment, did move before and will move further on. We name this before-now-afterwards as past, present and future. Nevertheless, also these are only abstract terms for mental handling and communication - while regardless of these considerations about time, there is the only reality of moving aether on and on (moving ahead or circled, never backwards, so 'backward-directed-time-arrow' would be 'double-fictive' term).

Fictions

It's true, a 'portion' of aether can't be accelerated relative to surrounding aether on and on. Relativity Theory now tells, change of speed (near light-speed) would change the time. This is a mixing up reality (of the aether and its limited possibility of movements) with an abstract term (mental tool of time) - that's miss-understanding basic logic, so that's pure fiction.

Time-measurement lastly is nothing else than comparing different movements. There is no reason given, why high accelerated motion here could have any influence to an other motion there, far away, used for comparison. There is no real nor logic cause, why signal speed of light should have any influence to both motions.

It's true, the possibilities for aether-movements are limited that kind, the motions are done only at bended tracks. However, any bending can only by stated by comparison with mentally, absolute straight lines of an abstract coordinate-system. Nevertheless, common science calls Euclide (straight lines) superfluous and claims a bended space. However, that's mixing up reality (the aether movements at bended tracks) with pure mental tools (of abstract coordinates). That's why it must be differed strictly between real certain knowledge (respective terms for real facts) and only mental tools (abstract terms resp. collective terms without direct relation to real facts). Absolutely certain are only facts of the aether and its movements. Besides this, abstract terms are absolutely necessary and useful. However, mixing up both 'worlds' inevitably results pure fictions.

Certainly it will be hard for many people to accept space and time as pure illusions and 'looking' at the invisible aether as single real existing substance, above this to 'visualize' the aether movements. However, Euclide's Space and any voluntary time-unit will do. So all we need for considerations about reality, are three rods right-angled to each other and any chronometer (both showing / going straight ahead) as mental tool (and some people are able to exist, some even to live without these tools).

01.06. Boundary or Boundless

Outer Border

The universe is immeasurably wide and we really can't imagine billions of light-yeas. These distances are far beyond the horizon of men's normal experiences, which are 'naturally' limited to the range of millimeter to kilometer.

On the other hand it's astonishing how easy we escape natural boundaries. For example, we can draw a circle, symbolically representing our universe. Aside of we draw other 'universe-circles' and ask hypothetically, whether a God would have liked to put one or diverse universe into the state of existence.

By this 'divine' distance we even are able to ask, whether outside of our universe (or between diverse universes) really Nothing could exist. Each Something thus would border to Nothing. These questions are of real 'divine' dimension and it's illusionary to speculate about possible answers. Nevertheless, the question about the border of our universe is relevant anyway.

One attempt to answer (or bypass) this question is the hypothesis of a bended space: a hollow body bended back into itself would have no starting and no ending point, like a circle, however three-dimensional. By previous 'divine' view however, also such a (twisted) torus still has an outer boundary surface. So for us by view from inside it's still the question, why the aether-inside should not disperse into the nothing-outside.

Cohesion

The substance of aether could be gaseous, however gases expand into areas of lower density respective pressure, so a gas-universe immediately would disperse into surrounding areas of pressure free nothing.

The substance of aether could be liquid showing much more cohesion. Based on the tension of surfaces at least come up drops. However, within a minimum outer pressure, the fluids vaporize. A universe of a liquid aether thus would also disperse into surrounding nothings.

Within stable bodies finally, the parts keep together based on diverse mechanism (as described later), e.g. a clean crystal keeps a stable shape even within extreme vacuum. So our universe could show a stabile outer-surface, if the aether would have the consistence of an extreme hard crystal.

That's the point, where searching for properties of an aether (and aether by itself) commonly was stopped. Based on recognized, real give, rather smooth movements within the universe like at the earth, the aether must behave like an 'ideal' gas: extreme soft and elastic

respective compressible and expansible. Opposite, the aether must show the character 'harder than steel' - otherwise the dubious appearance of extreme attracting forces should be necessary to avoid the flying-off into the void.

Dividing and Assembling

Our normal experience of everydays problems and our limited horizon hinder to find the solution of previous problem. At the one hand we are 'mentally limited' as we can concentrate only at one fact at one moment. We experience and consider and discuss - however only one special topic, at one time by one point of view. We know well, comprehensive knowledge will come up finally by 'holistic view', by integration and (especially modern) by networks overlaying all subjects. However it is to state in general: as long one thinks by parts, assembling is necessary.

Second we practically handle with parts all time: all materia can be divided into parts. There is nothing within our material world of everydays experience, which is one whole piece (and if it looks like, it's still made by diverse separate chemical compounds or molecules or atoms etc.). To handle by parts is normal usage because all products are made of parts. As soon as anything 'big' shall be achieved, parts must be assembled and must keep together.

Whole

Previous question was, how the aether of the universe could keep together. The answer is totally simple, seeming just like a 'piece of juggling'. However remember, lots of incredible hypotheses, wildest speculations and pure fictions within all sciences are rather 'tricky'.

My deduced answer simply is: no parts must keep together because the aether is one whole, coherent by itself. An aether with that property can not disperse, because there are no parts of aether anywhere. So my conclusion of previous basic problem: the whole universe is one whole piece of aether.

This claim naturally provokes opposition, cause un-divisibility is contradicting to all normal experiences. At everydays life we only handle with parts and just Quant-Physics did demonstrate, even elementary particles once more are divided into sub-elementary particles and no end of divisibility is to see.

I agree completely, because concrete experiences reflect the great variety of physical occurrences. Naturally, at scale of material bodies there are separated parts, one scale further down naturally there are separable molecules and atoms. However material bodies of different kind don't exist of diverse 'materias'. Each elementary particle or each subelementary particle does not exists of an own substance. All these 'parts' are occurrences of each other kind - of aether movements. Various occurrences show most different properties, e.g. one is the possibility building separated appearance (as a single 'whirlpool' within aether).

As in reality there is only one unique materia, that matter of aether, logically is not to compare with other kind of 'matter'. So the aether well can show the solitary property of undivisibility. Opposite, occurrences can be situated more or less dense to each other up to completely separated appearance of an isolated single part.

The aether of the universe is one whole and its part-less cohesion is its essential characteristic. The aether thus must not be hard like a crystal. Opposite, the aether can be totally soft and still totally cohesive. Indeed, the status of a 'gel' is a good comparison: a gel keeps together like being one whole, based at adhesion of parts (however gel appears only like a whole, only the aether really is one whole).

Thinking by Parts

Previous question concerning outer boundary of the universe got an answer by previous conclusion. However, also by microscopic view an aether as one whole is the inevitable logic consequence.

Quite certain, all elements of atoms finally are nothings else than movements. Even the largest machines of nuclear research plants finally show nothing else than a photo of spiral ending motions when a 'particle radiates into energy' (remarkable usage resp. a mix-up of terms: supposed reality of a material particle converts into the abstract expression of 'energy'). Materia like energy lastly are any kind of motions. Motion however can only be a movement of a something. Here that something is called aether.

However most explorers (event those who honestly think about the existence of a primary matter) regard the aether again being build by aether-parts. So one discusses the density of aether, assumes materia to be condensed aether, speculates about different speeds of aether particles, so about hot and cold areas of aether etc.

However, thinking by particles transforms the established understanding (inclusive inherent problems and unsolved phenomena) from the level of material bodies and their parts onto the level of aether and its parts and sub-particles etc. That kind of 'alternative' physics is really superfluous, because there is no progress. The discussed problems about the gaps between suggested aether-parts and inevitably about something / nothing are completely the same than before. So thinking by aether-parts is in vain, because only shifting words.

Billardballs

Thinking by Parts includes the existence of gaps between, no matter how narrow 'billardballs' are placed at the table. If one ball is pushed into certain direction, cannons by most different angles will result, so the originally directed motion is spread chaotically, lastly diffuses into 'heat'. If the aether would exist by parts, the universe already would have suffered the 'heat-death'.

On the other hand, 'signal-speed' within a medium of parts is rather limited. The particles of air e.g. move by some 450 meter each second, so sound moves ahead by some 330 meter each second. The molecules of fluids are more dense and transport the sound correspondingly faster.

If however the speed of light within (earlier assumed 'light'-) aether should be possible, its parts should be packed incredibly dense (previous 'harder than steel') - and other movements within the aether would be quite impossible. That's why one decided any medium for high-speed motions would be superfluous.

At the one hand, real energy-constant (instead of energy levelling) is only possible, if forward directed movements are running without losses. On the other hand, high speeds of electromagnetic occurrences demand an extreme 'dense' medium. This was the unsolved problem up to now. At that common understanding again is implied an unpronounced assumption: the density of a medium is only achieved by most compact package of separated parts. The same effect is automatically given, if a medium by itself is not a compound of parts but it's implied to be a real whole (like at common physics lots of properties are defined to be 'inherent', strange enough - even to nothing).

Right-Angles

Only if the aether is assumed to be a whole, an impulse within this medium is transported without loss and delay. Nevertheless exists no 'time-less' fast signal speed. In addition, each electromagnetic wave does not only run straight ahead but 'induces' right-angles other 'fields'.

Why should electromagnetic motion not move timeless-fast within the vacuum? Why should electric fields generate right-angled magnetic fields, mutually again and again? These are major questions, however not pronounced by common sciences. Just that phenomenon of simultaneous, inevitable, additional and right-angled effects are a clear evidence for the indivisible gapless aether.

One 'portion' of ether can not simply move ahead, because there are already other portions, without gaps between. These second portions must move aside, if the first portion wants to move ahead. That second portion getting out of way, by itself demands siding of a third aether-portion. So lastly all portions must make place right-angled for each other, every lateral-movement demands simultaneous motions to left side - resulting the well known basics of electromagnetism.

Naturally aether never moves by right-angled-edges anywhere, but all is turning at spiral tracks, around wandering fulcrums with differing radius, multiply overlaying, by differing and varying speeds - and only as an appearance results the extreme fast light-speed of electromagnetic waves. Naturally there is no 'portion of ether' hunting through space, like no waters flow over the ocean, even the waves produce the impression of stormy seas running ahead (as will be described next section).

Laws of Nature

Here at first it's only to state, within parts (billardballs) never would exist steady compulsion to each right-angled additional effects (because separate balls can move as they like it, e.g. get out of way in all directions - like parts of fluids do). If the universe really would be build up by parts, chaos would exist indeed, because within parts every motion is possible, e.g. anything can move alongside boundary surfaces into any direction.

Only if the aether is assumed to be one whole with swinging motions within itself, the possibilities for motions are limited respective they are resulting inevitable follows of movement processes - like recognized as essential physical occurrences.

The remaining possibilities for motions are still of huge variety, however only within that frame which is determined by laws of nature - or vice versa: finally these restrictions (based and only demanded by a gap-less aether) result strong limitations respective the mutual relationships of physical factors, i.e. these restrictions are the laws of nature by itself.

Strange enough - and logically same time - that strong order within the system of universe will only come up, if there are no internal boundaries but everything is immediate connected with all next, most direct possible kind, as really one whole. Because the aether is no assembly of (bulky) parts, the motions within that 'soft' aether can take place without problems, however only by 'mutual coordination' of neighbouring areas, within that frame in practically unlimited variety.

01.07. Special Terms

Language

Workouts of the Aether-Physics and -Philosophy uses expressions of common daily talking (thus should be understandable for everyone). However the following terms might have different respective special meaning as defined here.

Really existent

As certain knowledge are only assumed two facts: first there is something, second there is movement. That Something is named 'Aether', real moving is only any pattern of aether motions.

Mentally abstract

Naturally also 'aether' and 'movement' are mental terms, however these are names for real facts. Naturally above this, lots of mental expressions and terms here are used for summarizing likely appearances. Such quite abstract collective terms are required for communication. At logical conclusions however, real facts may never be mixed up with pure mental tools.

Substance

As a matter resp. as a substance real existing is only the aether, which by this meaning is the only 'materia' (in common understanding). Regardless to this fact, the term of 'materia' or 'material world' is still used in sense of common understanding.

Occurrence

Diverse kind of aether movements result various occurrences, which thus produce 'towards outside' (with regard resp. with effect to other occurrences) the appearance of being real existent. As 'occurrences' here are called e.g. solid bodies, atoms and diverse physical forces, however also mentally and spiritually appearances. The differing between the aether and its movements versus their resulting occurrences is necessary with concern to the difference of real facts versus abstract terms and with concern of logic conclusions at both levels.

Whole

Opposite to all considerations of sciences, inclusive common understanding of the aether, here the aether is regarded as an un-dividable, gap-less substance, as an indeed really existing continuum. As there are no parts nor gaps between, e.g. terms like density or heat are not applicable to the aether (but only at the level of occurrences). So here the understanding of the aether is like it's told age-old: the real One of which All is 'made' of.

Space

The term of 'space' here is used exclusively in sense of Euklide, thus only as a mental tool, existing of three right-angled planes resp. coordinates, which mentally are thought absolutely straight, with voluntary chosen place of the zero-point. This mental tool exclusively is used for exact definition of a location by x-, y- and z-coordinates.

Aetherpoint

If aether would exists of separated parts, movements of the aether could be describes as change of location of aether-parts. As there are no separated 'portions of aether' with demarcation borders, a certain location of aether is named an 'aether-point' (as pure mental tool) and its movement relative to previous (pure mentally) coordination-system is described. However words like up, down, left, right, front, back, upward, downwards etc. are sufficient.

Time

Time here exclusively is uses as abstract term, which has no own reality (because real is only the aether and its motions). Time here exclusively is a mental tool in order to follow the aether movements resp. also to determine the speed of movement resp. describe changes of speeds. Words like steady or constant, faster or slower, progressive-accelerated or slowed-down etc. are sufficient.

Physical Terms

All other common terms of sciences, like e.g. mass, inertia, elementary particles, electromagnetic wave etc. are used corresponding to common understanding (so regardless of the fact, real basic of these occurrences only are the corresponding aether movements). Also the term of materia or material-world are used commonly (thus regardless, the aether is only real matter).

Example Inertia

At proper time however, definitions of many of these physical terms will be described new, in order to express the 'true' essence of each occurrence most best. This might seem arrogant, because e.g. everyone knows and accepts, 'inertia is mass inherent property'. So the question might be allowed, whether inertia is 'mass-inherent-property' or 'motion-inherent-property' or (secondary) occurrence of movement (that case also in case of 'resting mass'). Later chapters will show many different approaches for searching the truth.

Courage for Gaps

Might be, my definitions seems too courageous or too banal or differing too pedantic. Please compare my statements with the up-to-date status of cosmology (and watch the terms used), e.g. like reported at Neue Züricher Zeitung at 12. February 2003, with this shortened content (start of quote):

Courage for Gaps - New Worldview of Cosmology mostly is based on unknown Physics

... 'dark' energy contributes some 70 percent of total energydensity of universe ... materia assembled by common atoms contributes less than one fifth of remaining 30 percent. Dominating part of materia is invisible and like dark energy of unknown nature ... a model is established, which is based by 95 percent at unknown physics ... passed through by mysterious energy, which affects negative pressure ... same likely, whole space could be bended, as locally near neighbouring celestial bodies is real case ... an exact analyses however did approve, photons are running straight through space and time ... what it might be ... candidates are exotic elementary particles like neutrinos, supersymmetric parts or axions ... the only problem is, most of these parts up to now are only hypothetically existing ... dark energy to assume same as energydensity of vacuum ... calculated value however is too large by at least 40 scale-units ... to associate with a quantfield, which is interacting with materia ... connected with hidden space-dimensions ... so cosmologists, whether they like it or not, will have to live with a worldview at the one hand successful, at the other hand full of gaps. (quote end).

One can't deny the courage - but what's the mentioned encouraging success?

Ranges of Scale

Finally the frame of arrays must be marked by the following relevant terms (which might be detailed at later chapters):

Universal - Whole of aether within the total universe, which mostly exists of 'Free Aether'.

Galactic - array of a galaxy, which is the maximum extension of 'Bounded Aether' and same time showing a typical pattern of movement - also beyond its visible parts.

Sun-System - for example our well known Sun-system and we also know its extension reaches far beyond the planets. Again, we normally watch only the nucleus and these few 'dirty pieces' rotating around. In reality however, it's a 'massive' whirlpool moving by laws of Bound Aether.

Solid bodies - that's the normal world of our experiences, within which the laws of mechanics are valid - however the essence of solid bodies is most different to common understanding.

Molecules and Atoms - where molecules are compounds of atoms. The motion pattern of atoms is described in details at later sections.

Electron - is here used as name for the most elementary shape of movements of Bound Ether, where an electron is the most smallest edition of a pattern, analogue however are shaped the electromagnetic waves and radiations.

Spiralcluster respective Free Aether - is the basic movement of all aether of the universe, where movement distances are anywhere at quant's dimensions. This movement pattern is running within the whole universe, however locally with modifications.

Bounded Aether - is the summarizing term of all movements at larger scale than the tracks of Free Aether movements. The distances reach from the scale of photons up to galaxies.

Fine-matter - this term is used for movements representing mental and spiritual contents (while previous Bound Aether represents the occurrences of material world). These 'vibrations' (in reality not simply swinging ahead and back) are multiple overlaying other occurrences by most various pattern.

Astralspheres - this term in general is used for the occurrence of fine-matter vibrations. At the one hand they are concentrated locally, at the other hand they are extendable or extended at spheres of diverse circumferences, e.g. in extensions corresponding to all stable bodies (making these to living beings). Opposite to the compound of material bodies, these spheres however can vary nearby unlimited, depending on the 'focus' they can intensify at voluntary locations.

These 'spiritual' occurrences (which are also special movement pattern within the unique existing medium of aether) are described much later. At first must be discussed and described precisely the 'simple' movement pattern of known physical occurrences.

01.08. Summary

Chaos

The newspaper-report of previous chapter presented a quite serious picture of actual status of astrophysics. There are listed results of most complex and precise calculations, based on accurate observations with enormous expensive equipment. If there it's told however, abstract terms are able to 'interact', such crazy hypothetic fictions must result. This 'world-view' concerning the universe states, only five percent are 'common' atoms. So one might doubt, the common world-view concerning the atoms might fit to reality by also five percent.

In order to leave the disastrous chaos of the abstract term mixture of modern physics, it's absolutely necessary to base the considerations exclusively at totally certain knowledge. These are only two facts: there-exists-something and there-exists-motion., The demanded properties of that 'something-in-motion' (called aether) can be deduced from the observed occurrences. Based on these properties can be analysed, which possibilities of movements are given. These possibilities are strongly limited, the movements show a complex structure, however never chaotic like the mental confusions above, but are according to laws of nature respective are these laws by itself.

Assumptions

Understanding the new ideas is essentially limited by two (un-spoken) assumption: thinkingby-different-materials and thinking-by-parts. The considerations about the aether didn't come ahead because one assumed, there would be aether between material bodies. And it's (again un-spoken) assumption, materia would exist of diverse (sub-elementary) substances. With the demanded properties of an aether one won't come ahead if it's still suspected, the aether by itself would also be build of aether-particles. The aether mostly was described 'like a continuum', however never was regarded as real continuum. Only if the fixation on these two assumptions is given up, one can come to the understanding of only one unique substance of aether (as age-old worldviews tell) and this aether universewide is one single real Whole (like many worldviews also tell and basic understanding of nature is - until western sciences started analysing and dividing). So the final conclusion must be: All is build of that One.

At my first version of Aether-Continuum-Theory, 'naturally' I started with the conviction, there are material bodies and around these should be an aether, building a 'phantom-body' (in order to describe terms like mass and inertia).

Painful

Mentally, it was a long and hard process, no longer to think by parts and particles but thinking only in motions of one single substance. Rather 'painful' was the understanding, oneself is 'only' some whirlpool within the aether-sea and above this, one doesn't even 'possess' an own portion of aether.

So one well can understand the 'pain' for scientists to give up illusions e.g. of attractive forces or about fields, even of space and time respective to re-confirm, these are only mental tools and purely abstract expressions without any 'own' reality.

Above insight concerning 'oneself' mentally means some giving-up an 'own body' in favour of going into some Whole resp. being-embedded within All, i.e. its a relative loss of a standalone existence. Opposite however, tracing-back abstract und hypothetic terms onto the medium of aether, means the physically foundation on a substantial real basis, offering new explanations of all occurrences. So both 'pains' allow new and well founded possibilities of insights.

Whole

Especially hard is the mental challenge to accept one 'whole' as real existent (even e.g. Relativity-Theory, Quant-Mechanics or astrophysics ask for more 'goodwill' resp. explicitly renounce understanding).

Unfortunately I earlier said, universe would be a single 'aether-monolith' and wanted to point out the high 'density' of rocks and same time the 'heat' of steady motions within. Nobody however did follow that idea, a rock within a rock could move anyhow. Upside now I said, the aether is like a soft 'gel' or even would be 'gaseous-soft, compact-hard Whole'. Movements within aether are transferred much more direct and lossless than it would be possible within hard steel. This directness within the aether is possible because it shows no gaps. The motions within the aether are done as soft as within gases. However, the aether inherent property of un-divisibility limits the possibilities of movements by strict rules - corresponding to nature laws.

As the aether is unique substance in the universe, it well can have unique characteristics. Nevertheless it's a mental challenge to accept 'inherent' properties of whole-ness, i.e. gapless-ness and un-divisibility - nevertheless it's a rather modest challenge in comparison with the strange ideas 'inherent' modern physics.

In principle, it's only our brain thinking-by-parts which hinders thinking-by-whole. We well know, all these parts must connect anyhow - however to understand that direct cohesion as real primary characteristic of all being - vehemently refuses our 'partly and temporary working' brain.

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