

OUR SENSELESS TOIL

The Cause of the World Crisis Progress Through Transformation of the Atom—Not Its Destruction!

VIKTOR SCHAUBERGER, Vienna, 1933

Foreword

Progress through transformation of the atom—not its destruction!

By means of only slight variations in temperature I have succeeded in decomposing various substances (elements and their compounds, minerals, metals, etc.) into their constituent parts, and subsequently to rearrange and recombine them. At present the scope for practical application of this discovery cannot be assessed, but it would undoubtedly imply a total reorientation in all areas of science and technology. Using this newly-discovered conformity with natural law I have already constructed fairly large installations in the fields of log-rafting and river regulation. They have functioned faultlessly for a decade and today still present insoluble enigmas to the various scientific disciplines concerned. Present systems of forestry, agriculture, water and energy resources management, as well as many theories and tenets of physics, chemistry, botany and geology will have to undergo a radical departure from basic principles. Even medical science will not be left unscathed by this discovery.

In this way it is possible to generate any amount of energy in and from water itself and to regulate watercourses over any given distance without embankment works. It is possible to transport timber and other materials down the central axis of flow, even if these materials (ore, stones, etc.) are heavier than water. It is possible to raise the height of the water table over a whole region and to endow the groundwater with the full spectrum of elements required for the prevailing vegetation.

Furthermore, timber and other materials can be rendered incombustible and rot-resistant. Drinking water and spa-water of any desired composition and therapeutic effect can be artificially produced for man, beast and soil, in the same way that this occurs naturally. Water can be raised vertically in pipes without pumps. Electricity and radiant energies of any magnitude can be generated almost without cost. Soil quality can be improved and cancer, tuberculosis and nervous disorders healed.

The Disrupted Cycle—The Cause Of The Crisis

Today a yearning for living naturally is on the increase. This craving for a strong, peaceful and healthy Nature is an inevitable symptom of the present age and the counterbalance to the inorganic civilisation we erroneously describe as culture. This civilisation is the creation of humanity, who high-handedly and without consideration for the true workings of Nature, has created a world devoid of meaning and foundation. Now she threatens to destroy him, for through his behaviour and his activities he, who should be her master, has disturbed Nature's inherent unity.

Today we are standing helpless and perplexed before all that we have created; increasingly forced to recognise that our work, with all its problems, merely serves our own self-destruction. With no glimmer of improvement anywhere in sight we feel hopelessly propelled towards a forlorn future. It is quite understandable therefore that an increasing number of people are sick and tired of this insane activity and now seeking ways to return to Mother Nature.

The human is a being created according to Nature's laws and is therefore dependent upon them. In the

course of time our magnum opus, our self-created pseudo-culture, has become a meaningless and incoherent monstrosity. Through the immense power of technology it has reached such gargantuan proportions that it almost equals the power of Nature herself. At the very least it is already able to interfere destructively with her great life-giving functions. Humanity represents but a small spark, a mere micro-organism in Nature's great panoply of Life. Encouraged by a short-lived, illusory success, humanity has embarked on a course that is beginning to disrupt the great coherence of Life. Not only this, but it is also about to put an end to all high-quality growth and production on our macro-organism, Earth.

Despite our accumulation of material wealth, humanity is now engulfed by a widespread economic collapse. Many areas of production exhibit regressive trends so that visible epicentres of decay are growing on all sides and threatening humanity itself.

Despite all the research no means can be found to prevent humanity from decaying alive. This is no more than the just and legitimate consequence of human activity. Knowing nothing of Nature's omnipotent laws, and with mindless greed, humanity claws into the life-giving organism of Mother Earth. She is now, with elemental power, beginning to paralyse the wanton hand that dared disturb the forces that serve all Creation.

This unique law, which reigns supreme throughout Nature's vastness and oneness, expresses itself in every creature and organism. It is the Law of Ceaseless Cycles that in every organism is linked to a definite time-span and a particular tempo.

If some intervening force should either accelerate, retard or altogether arrest the tempo of this cycle (wherein every event is governed by the action of the preceding one) then it can no longer serve the legitimate purpose for which, in common with all of Nature's creations, it is destined. The affected organism lags behind, thrust aside from the main evolutionary stream of Life. All those organisms whose life or death are dependent on it are also condemned to death, ultimately causing the demise of the foolish, interfering hand which is to blame for it all.

The causative force is our mind and the soulless technology it has spawned, including our lawless and mind-destroying technological culture. These are jointly responsible for disrupting the circulation of the Earth's water and blood. Moreover, if everything this mechanistic civilisation has created should perish in step with such development, then the breakdown is in no way a passing crisis. It is the inevitable collapse of a dizzily-high, foundationless cultural edifice, whereby whatever is left of genuine culture will also be swept away.

Nature Protects Herself

Nature's most effective protection is the frailty of humanity, its work and its activities. The consequences of its activities must sooner or later bring about its own demise for the greater part of its present endeavours contravenes every principle of Nature. Hence, it is merely a question of the efficacy of humanity's activities and of the attainment of a particular level of culture which determines when the reaction sets in; when all that has been built up with so much care and sweat must once more collapse upon itself.

Once humanity has reached this point, Nature will rid herself effortlessly of her greatest enemy and with renewed energy will rebuild all that humanity has destroyed. If as a result, more and more people are to be found today who fear this fearful mayhem, they do it less out of a love of Nature than for their own self-preservation, which still remains a natural force in people. There are a few individuals possessed of great foresight, who are still in touch with Nature and are able to perceive the insanity of our work in its true light. Their ceaseless efforts are a solemn, though sadly-unheeded admonition to

their contemporaries. The latter are preoccupied with the exigencies of day-to-day existence and incapacitated by over-specialisation. They are no longer able to perceive the minute and fragile processes through which all Life in Nature is organically created and maintained, pulsebeat by pulsebeat. Unfortunately, the warnings to come to our senses are in the end but cries in the wilderness.

Nature Operates Only Indirectly

“How else should it be done then?” is always the immediate question. The answer is simple: Exactly in the opposite way that it is done today! Very simple observations reveal that Nature’s ways are always indirect. It is through our sheer intransigence that we always find it necessary to adopt the most direct approach. Therefore we should not complain if as a result we are constantly at odds with almighty Nature.

All we really need to do is adapt ourselves intelligently to Nature’s marvelous order: To understand that it is indeed both foolish and futile to fight against her forces and to realise that if left to itself all would otherwise happen of its own accord. Moreover the recovery we so fervently desire would then come about quite automatically. Nature constantly indicates the right paths to take. Most certainly these new ways will lead in the opposite direction to the one we are wont to take. This is only to be expected, because it is the present direction that has led to our undoing. All those who seriously wish to travel this new road should take note of the following explanations.

The Nature of Water

The upholder of the cycles which sustain all Life is water. In every drop of water dwells a deity whom indeed we all serve. There also dwells Life, the soul of the primal substance—water—whose boundaries and banks are the capillaries that guide it, and in which it circulates. Every pulse beat arising through the interaction of will and resistance is indicative of creative work and urges us to care for those vessels, those primary and most vital structures, in which throbs the product of a dualistic power—Life.

Every waterway is an artery of this Life, an artery that creates its own pathways and bridges as it advances, so as to diffuse its dawning life-force through the Earth and elevate itself to great heights, to become shining, beautiful and free. Standing at the highest level of evolution, and above all being blessed with mind and reason, humanity constantly does the most idiotic thing imaginable by trying to regulate these waterways by means of their banks—by influencing the flow mechanically, instead of taking into account the fact that water is itself a living entity.

The assumption behind this absurd practice is that the riverbank shapes the watercourse, whereas the riverbank is actually the secondary effect and water the primary. To regulate water by means of the riverbank is truly to fight cause with effect. It should be as inconceivable to a thinking engineer to reinforce the crumbling bank of a watercourse with rammed piles and brush-wood bales, or to smear over cracks with cement, as it would be for a doctor to patch up ruptured capillaries with needle and thread. Astonishingly, though, it still happens! The condition of all our waterways demonstrates just where these measures have led.

In not one single case has the desired object been attained—namely the achievement of a normal channel-profile. On the contrary, all such river regulation has provoked further damage which far outweighs any local or short-term advantages. Large rivers such as the Danube, Rhine, Tagliamento, Etsch, Garonne and Mississippi bear witness to the failure of such complicated and costly river regulations. Quite apart from the tremendous damage caused in the lower reaches by their strictly mechanical regulation, these rivers are stripped of their most valuable assets, their great physical

qualities.

The present dirty grey, muddy brew known as the Blue Danube, upon whose bed river-gold once gleamed, and the Rhine, the symbol of German identity, where Rhinegold flashed in bygone days, are tragic testimonials to these perverse practices. The mythical ‘Gold of the Nibelungs’ originated in the golden glow given off by pebbles as they rubbed against each other while rolling along the riverbed at night—for when there is a decrease in water temperature, the tractive force increases, causing the stones to move. If two pebbles are rubbed together under water, a golden glow appears. This yellowish-red fiery glow used to be mistaken for the flashing of gold, thought to be lying on the bottom of the river. Today this ‘river-gold’ lies heaped up in huge mounds of gravel, shifted hither and thither by the force of the sluggish and murky water-masses flowing above them. They no longer imbue the water with energy and soul, as once they did. Instead they assist in ousting the soul-less body—water—from its badly-regulated course.

Our clear, cold mountain streams have become wild torrents. Full of the vigour of youth, these lively streams used to be surrounded by burgeoning vegetation and consorted with every blade of grass as long as man did not interfere. Today they can no longer be confined even with metre-thick concrete walls. Wherever we look we see the dreadful disintegration of the very bridges of Life, the capillaries and the bodies they have created, caused by mindless mechanical human acts. These actions have robbed the Earths blood—water—of its soul. It is therefore inevitable that the larger and more expensive these regulatory structures become, the greater will be the ensuing damage. In the lower reaches of the Danube almost a million hectares of valuable farmland have been lost due to the regulation of the upper reaches. Similar conditions apply to all other rivers.

Even today the river engineer fails to understand the true nature and purpose of water. The harder he tries to conduct it by the shortest and straightest route to the sea, the more it will tend to form bends, the longer will be its path and the worse its quality. The flow of water down a natural gradient obeys a sublime, inner Law whose power our hydraulic experts are quite unable to comprehend. In the absence of this inner conformity with law, all flowing water ought to accelerate faster and faster until it ultimately transfers to a vaporous state. Science maintains that water is braked by internal and external friction, though it is well known that friction is associated with the generation of heat. However, it can be shown that the temperature of fast-flowing water decreases, which leads to an increase in tractive force and internal friction. This simple observation invalidates certain essential propositions in the complex of current hydro-mechanical theories.

Where then is the real secret of steadiness in the flow of draining water-masses? The force that brakes the flow of water down a gradient is a resistance which acts against the force of gravity, a circulation of energy operating in the opposite direction to the current. This is also true of all metabolic processes and gives water its character and thus its soul. Contemporary systems of river regulation inhibit this vital function. The logical outcome of this is the loss of waters inner braking power. The water becomes soulless, without character and therefore aggressive.

The Cancerous Decay of Organisms

The more extensive regulatory works become, destroying waters naturally-ordained inner functions, the greater the ensuing danger to the riverbanks and the surrounding area. Now characterless, the water breaks its bonds. Having become unstable, it seeks to regain its soul with one last supreme effort. The water-masses abandon their proper course and countless water-borne energy-bodies are dropped by the exhausted water. Disoriented, it now turns on these organisms and robs them of their life-force. Deprived of their souls, their sources of energy, they begin to rot. Bacteria develop and the Earths arteries are suffused with cancerous decay.

Sinking into the ground, this diseased water now contaminates groundwater. As it rises through the capillaries of the soil and vegetation, this very Blood of the Earth carries the embryo of this fearful disease with it up into the widest variety of plants. This leads to the qualitative degeneration of vegetation, principally in the internal decay of forest trees. As a further consequence, it leads to a regression in the quality of everything in which water circulates. Ultimately in accordance with a law which operates with awesome constancy, it will slowly but surely come around to our turn. The spreading of the most terrible of all diseases—cancer—is the inevitable consequence of these unnatural systems of regulation. It goes without saying that specialists in other fields also have a hand in this work of destruction.

The Forest

Foremost amongst the various professions is modern forestry, which for a century has unsuccessfully attempted to transform the highest plant organism, forest, into a timber factory. Trees are set out in rows and the preconditions for the natural regeneration and intermixture of species are altered arbitrarily. Nobody has any idea what happens in the interior of a tree. Or why, contrary to all the laws of mechanics, water can rise with its various substances to the very top of a tree via its capillaries. Some talk of osmotic pressure, while others speak of root-stimulation. All agree, however, that the Sun is the ultimate driving force. What none of them know is how.

This research is carried out with the aid of mechanical equipment. So their attempts to find out are coloured by mistaken thinking and are therefore useless. In the first place every pump requires a motor. Secondly, it is not enough merely to tickle the trees' toes. Thirdly, it is a well-known fact that trees cover themselves with branches, a sure sign that they desire to shield themselves from the Sun and its direct warming influence, for they are only able to benefit from sunlight indirectly. But what does the forester care? He simply plants 'shade-demanding' trees in the light, and lo, they grow more readily! Unfortunately even this magic is short-lived. The structure of such trees becomes looser and more coarsely-knit and ultimately the identical process begins that is now apparent in our increasingly filthy river-systems.

Discoloured blotches initially appear in the cross-section of the trunk. Then the rotting process sets in, spreading from the centre outwards. In the interior of the tree a multitude of alien life-forms develop—cancer—to which the macroorganism, the tree, gradually falls victim. Various microbes are now eagerly collected, receive Latin names, and many people are gainfully employed in documenting the innumerable diseases which from year to year and in ever greater number assail the tree's prime asset, its health. All fail to see that the much sought-after instigator of this alien life-form is the forester and his absurd practices.

Agriculture

Hand in hand with the forester works the landowner. The blood of the Earth constantly deteriorates, the fertility of the soil decreases and happily the need to fertilise is there! Forward strides the chemist and strews his salts! Unfortunately this good man neither has any inkling why and how these salts are dissolved, nor what processes enable the development of the energies required for thriving plant growth.

Success lasts only a few years, after which the soil very quickly becomes clogged with artificial fertiliser. Once again Man has worked against Nature, by cheerfully plugging up the last sources of food, the capillaries in the soil. At a complete loss, the farmer now stands bewildered in his field, which for a short time rewarded him very handsomely with quantity at the increasing expense of the quality of

his produce. As a result he actually harvested less in the long-term, although short-term his harvests were almost unlimited in quantity. Instinctively seeking vital substances in the Earth, he gets out his deep-cut plough and destroys the soil's capillaries.

The same thing now happens to agriculture as is happening to the forests. Superficially everything appears to blossom and flourish. These are but false blossomings, which are nurtured by rotting marrow. More than ever before they now begin to bear the fruits of decay—cancer. Cereals lose their starch content, the meadows become overgrown with mosses and the fields with weeds. All that increases is the labour and the expense. The end is the loss of soil, house and home.

The Energy Industry

The energy-technologist is the true ringleader in this merry-go-round. Where still available in sufficient quantity, coal (the Earth's Bread) and water (the Earth's Blood) are used to produce various forms of energy. Enormous quantities of energy are being produced, electrical energy in particular, but even today nobody knows what electricity actually is. The possible uses of electricity are enormous. How it comes into being, the consequences and the after-effects of present methods of its production, remain unknown however.

Humanity has wallowed in this fortuitously discovered wealth for only a few decades. The water to drive its machines will become increasingly scarce and of worsening quality. The catastrophes which beset the Earth will also become more and more violent, for humanity has stolen carbone (her bread), water (her blood) and energy (her soul). Untiringly, humanity labours on and plunges deeper and deeper into abject misery.

The First Doubts

The more that exact science, the very foundation of such practices, begins to shake, the greater will be humanity's mistrust of it. The deeper the groundwater sinks into the Earth, the worse the climatic conditions will become, and the more forlorn the future and the more characterless the people. Hardship and hardship alone will increase. Gradually mothers will begin to sell their love and their souls in the streets. Fathers will begin to beg, contemplating robbery and murder, and the political situation will become increasingly fraught. The greater the stench of this deranged and lunatic industrial society, the paler the cheeks and the more garish the artificial rouge.

The more terrible the weapons of war, the greater the fear between one people and another. Every statistic bears witness to the increase in the ultimate and most dangerous disease—cancer. Doctors stand helpless and perplexed before this unbridled development. The victims of this terrible disease are without number. Blindly the knife hacks away and overcome with pain, people rot away in hospitals. Nobody understands why this hideous disease is reaching epidemic proportions. Everything is registered and organised. Innocent animals are tortured in the search for the virus of our most dangerous enemy. They will never find it in this way, for it is inherent in the very nature of the way we work.

Questions For Science

Since the very beginning of time the Sun has stood above everything, staring down in icy silence at the frenzied activities of humanity, who regard it as a fiery orb. How could it be otherwise, such is their direct mental approach towards life? Yet the closer we approach this source of light and heat, the colder and darker its face will become. The nearer we are to it, the brighter the stars will be. As its light

diminishes, heat, atmosphere, water and life will also disappear.

- What serves the Sun as a carrier of light and heat, if, in the view of our learned scientists, space is a vacuum?
- Why is the light and heat in the tropics more diffuse, and at the poles the Sun's light more intense and its radiant heat less?
- Why is water at the poles warmer at the bottom?
- Why is the sunlit surface so icily cold?
- Why doesn't the warmer, lighter bottom-water of the sea rise upwards?
- Why are water temperatures at the equator so warm?
- Why is it that it gets colder with increasing depth, and why does it get warmer again below the boundary layer of +4°C (+39.2°F), and why does Life begin there anew?
- Why do the magnetic lines of force run from south to north, and why does the Earth rotate from west to east?
- Why does a top stand upright when it is spun from the side?
- Why is the desert so dead despite all the heat?
- How is it that the warm Gulf Stream can push cold seawater aside and wend its way for thousands of kilometres over ocean mountains and valleys in a reversed temperature-gradient, without the assistance of a mechanical gradient?
- Why does groundwater in wells rise far above the surface of the ground?
- Why don't wooden posts rot under water, but above it always?
- Why do damp tiled roofs dry out from the eaves towards the ridge?
- Why can rising cold water pierce through the hardest rock?
- Why doesn't the Earth's warm air rise?
- Why is it so cold at the top of a mountain—nearer the Sun?
- Why is it warmer nearer the ceiling and colder at the floor in our houses when an artificial source of heat is used?
- Why do gases condense with a decrease in temperature, and why don't the fiery gases of the Sun, with supposed temperatures of over 6000°C (10,832°F), stream out into space?
- Why does marble expand with heat, and why doesn't it contract again with cold?
- Why do west-east flowing water-courses fertilise their banks?
- Why are the banks of east-west flowing rivers so barren?
- Why are the banks of south-north flowing watercourses fertile on one side only?
- Why do rivers flowing into cold seas migrate laterally to the north?
- Why does the salt content of the seas vary?
- Why do herrings migrate northwards in winter?
- Why do deep-sea fish glow?
- Why do cold-blooded animals carry fever-inducing poison?
- Why does a cold fever occur in the tropics? Why does a warm fever arise from a chill?
- What is fever anyway?
- What is temperature? What is heat? What is cold?
- What is energy?
- Why does the heart beat in our breast?
- Who gives this muscle its impulse to move?
- Where is the motor for this pump?
- Why does blood circulate in our blood vessels?

- Why do we breathe day and night, when asleep and even when totally unconscious?
- Why do the fluids in a chicken's egg circulate without a heart?
- Why does a stone suffocate when we cut off its air supply?
- Why do light-demanding timbers have a thick bark, and shade-demanders only a thin one?
- Why does a trout stand still in a raging torrent, as if by magic?
- What is it that keeps the Earth floating in space?
- Does the heart beat because we breathe, or do we breathe because the heart beats?
- Where is the heart of a plant?
- Why does water pulsate and breathe?
- Why does groundwater manage to remain on the sides of mountains and why, growing colder and heavier, does it rise upwards?
- Why does it frequently spring from high peaks?
- Why do deltas and estuaries develop?
- What is evaporation? What is vaporisation?
- What is dissolution, what is combination, what is absorption, and on what effects are these processes founded?
- Why is our body-temperature sub-normal when climbing a mountain and above normal as we descend?

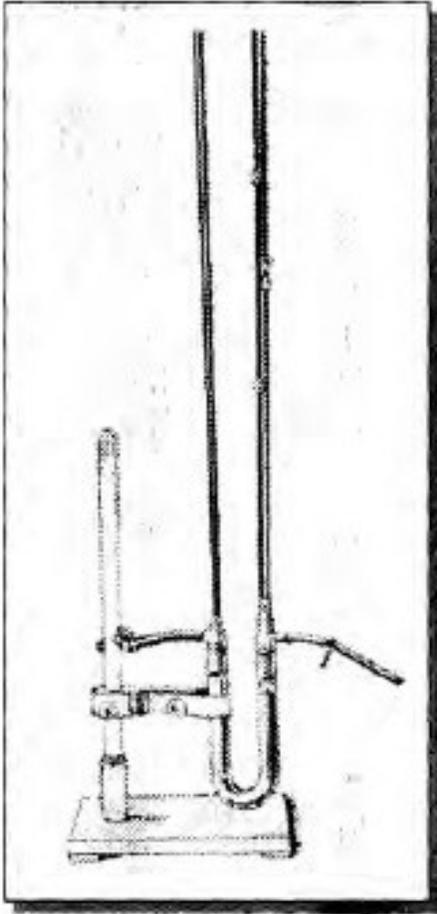
The Error of Civilisation

Is there really such an enormous difference between the breaching of a riverbank and the bursting of our blood vessels? Is it really necessary that the last human being must rot away alive before we all become consciously aware of the errors of our ways? Why can we not admit to ourselves that it is our senseless activity that is killing us? Do we actually have the right to stuff such worthless knowledge into our children, when science has already led us to the very brink of disaster? Where does our knowledge begin and where does it end?

Does anyone still dare to speak of science and culture in the same breath? Are our children actually wrong if they refuse to be instructed by their parents and teachers, and choose to go their own way? Is one seriously to believe that hunger can be appeased by political phrases and bayonets? Are there really still people who believe that improvements can be achieved through coercion, when work undertaken of their own free will has already brought such unspeakable misfortune?

If this be true, then let Nature quietly continue to so prevail, for she will then do great and noble work. Nature is simpler in her effects and more complex in her functions than our rational minds can conceive.

An Experiment



A small and unassuming experiment reveals a great law.

Take a vessel, fill it with sand, insulate the sides and the base from the effects of external temperature. By placing ice at the bottom of the vessel a temperature of $+4^{\circ}\text{C}$ (39.2°F) can be produced artificially—conditions will be created which are to be found inside the Earth.

Into the vessel thus prepared, insert a U-shaped glass tube into which is placed a quantity of pure quartz sand, which is almost chemically neutral. This sand should then be infused with saltwater. Both legs of the U-tube should then be filled with good water, enriched with absorbed and dissolved carbonous matter which has not been exposed to sunlight.

On the open ends of the U-tube place two glass caps, onto one of which are braised two capillary tubes, and onto the other four capillary tubes. This must be very carefully done to ensure that the openings of the capillary tubes are not blocked in the process of being fused to the U-tube.

When this has been done, expose the surface of the sand bed to the Sun's rays. When the water reaches the anomaly point of $+4^{\circ}\text{C}$ (due to the ice-cooled sand bed at the bottom of the U-tube), and when the surface of the vessel reaches a temperature of about $+20^{\circ}\text{C}$ (68°F) as a result of the Sun's heat, then the water, known to attain its greatest density and weight at $+4^{\circ}\text{C}$ (39.2°F), begins to lose its equilibrium and rises up one leg of the U-tube if both legs of the U-tube are connected to the capillaries with suitably

tapered unions.

If air is now entrained through the inlets on either side of the U-tube, as occurs for example with boreholes or wells driven into the Earth, the higher-rising water-column on one side sinks, and the water levels itself out in both U-tube legs, in accordance with the Law of Communication. If both side-inlets are once more closed to atmospheric influence and the cold of the surroundings again begins to take effect, then after a while the water will once again begin to rise.

Why does the water subside as soon as it comes in contact with the entrained atmosphere?

If both openings are once more closed to atmospheric influence and the cold of the surroundings again begins to take effect, then after a while the water will once again begin to rise.

At night the process is reversed. In the capillaries in which the water previously rose a state of rest exists due to the effect of light and heat, whereas in the other capillaries the water now rises. The rising product of the alternating processes of equalisation exactly represents the different phenomena of night and day.

This simple experiment shows us why the substances that rise in plants during the day are different from those which rise during the night, and why the various types of blood circulate in our veins. Moreover it reveals many things to us about the secret of Life and its coming into being, which can only be achieved through contrasting conditions of heat and cold.

At the same time, this experiment also demonstrates the stupidity of the purely mechanical and thoroughly one-sided activities we call work, and how little we are aware of the underlying conformities with the laws of Nature and their processes. It would be beyond the scope of the matter at hand to explain all the necessary details and preconditions for the success of this experiment.

The development of all Life and the associated formation of structures is not merely a process to do with heat, as is assumed today, but also to do with cold—for Life can only be born out of differences. It is not possible to describe the subtle differences in the processes of decomposition and transformation that take place during growth, or which are necessary to transform such energy-bodies as coal, metals, minerals and elements and their compounds. It would likewise take up too much space to elaborate all the ways in which it is possible to accumulate dissociated energy-particles and coalesce them into an immaterial body.

One thing can be stated however: our learned scientists should quietly give up all ideas of violently splitting the atom in order to obtain free energy from the matter thus released. These attempts are both purposeless and absurd. Nature shows us in every blade of grass how it can be more simply and intelligently achieved.

The Road to Free Energy

More energy is encapsulated in every drop of good springwater than an average-sized power station is presently able to produce. These energies can be generated effortlessly and almost free of cost if we follow the path which Nature constantly shows us and abandon the blind alleys of conventional technology.

Happiness and health are available to us just as near cost-free as unlimited energy, if we but once realise that in water dwell Will and its Resistance, Life. We struggle so hard for these today, because in all our endeavours we constantly rob the bearer of all Life (water) of its noblest possession, its soul. The Will of Nature serves all things and expresses itself in growth by way of atomic dissociation and transformation. It is only through our obsession with atom-destroying work and our selfish over-exploitation of her resources that we encounter Nature's resistance.

The only possible outcome of the purely categorising compartment-mentality, thrust upon us at school, is the loss of our creativity. People are losing their individuality, their ability to see things as they really are, and thus their connection with Nature. We are fast approaching a state of equilibrium impossible in Nature. This equilibrium must force us into total economic collapse, for no stable system of equilibrium exists. The principles upon which our actions are founded are therefore invalid because they operate within parameters that do not exist.

Our work is the embodiment of our will. The spiritual manifestation of this work is its effect. When such work is properly done it brings happiness, and when carried out incorrectly it assuredly brings misery. Humanity! Your will is paramount! You can command Nature if you but obey her. Do not complain if you must become her slave!

The Achievements of the Twentieth Century

We have today become accustomed to the fact that millions of people can no longer earn their daily bread by honest labour. They must obtain the necessities of life by scavenging from refuse heaps like animals, by begging, robbery, fraud or even murder. Having lost faith in present methods and customs, and viewing education as an exercise in futility, our children are banding together, arming themselves and preparing to secure their rightful place in society by force.

Under conditions where hospitals and refuges for the homeless are overcrowded, where the clientele of drug addiction clinics and lunatic asylums is increasing and where cases of suicide are growing; it is understandable that no sane-minded person any longer gives credence to the empty promises of our leaders. It has long been apparent to thinking people that, if no radical departure in current economic doctrines and practices occurs, then only an enforced decimation of the overlarge population, a well-organised mass-murder or, expressed more aesthetically, a modern war, might perhaps cut this Gordian Knot.

The most remarkable aspect of the matter is that neither the instigators of this apparently inevitable war (who seem concerned only for their own skins) nor our young people (who seem determined to fling away what they perceive as their futureless, worthless lives) have recognised that this sacrifice is totally uncalled for. In other words, the ghastly, almost suicidal annihilation of the despairing masses with poison gas or other weapons is absolutely unnecessary.

Both parties are unable to perceive that this scenario, which is impossible to equate with any cultural development, is only the entirely natural secondary effect of the intervention of a much higher power. A power with completely different means at its disposal. Means that are more fundamental, and more importantly, work much more drastically than all the weapons of war human brains have ever devised. If we were being honest, these were the very brains that we all had hoped would find a way out of this chaos.

Let members of the older generation philosophise, drawing attention to their reductionist knowledge and its hollow clichés. Let them rant and rave over these developments, for in the final analysis, the rising generation is absolutely right no longer to place any trust in the ability of its forebears, which has borne such bitter fruits. They are right to refuse to follow the false dictates of our intellectual leaders, who have brought such wretchedness upon us. Despite its supposedly high technological culture, the civilised world has reached such an ethical nadir that it has become incapable of perceiving that this physical and moral decline is none other than a progressive cultural dissolution.

Humanity's most sacred possession, its freedom of subjective thought, action and feeling, will be literally trodden underfoot by people who were never really in a position to intervene in a positive way. In such a situation the colours under which these leaders choose to march is quite immaterial, because the same oppressive drive exists everywhere. Generally, the inner perception as to the true causes has been lost, and consequently, the last chance of really effective help. Moreover, those in positions of power, who are incapable of forming their own opinion, must constantly rely on the advice of so-called experts who are themselves victims of a universally inferior education. As a result, they are unable to realise that it is precisely their advice, and the actions arising from it, which will inevitably transform this Earth into a hell, when it could be a paradise.

If humanity does not come to its senses soon, and realise that it has been misled and misinformed by its intellectual leaders, the prevailing laws of Nature (with poetic justice) will reliably act to bring about a fitting end to this ineptly contrived culture. Unfortunately the most frightful catastrophes or scandalous disclosures will have to happen before people realise that it is their own mistakes that have led to their undoing. These can only be rectified with great difficulty precisely because they were principally committed by the authorities. Rather than pass judgment upon themselves, these institutions and individuals, who are ever protective of their own interests, would allow millions of their fellow human beings to perish before they would ever admit to their mistakes.

In discovering the causes, however, only one small step has been taken, because a host of so-called experts is arrayed against any systematic attempt to put these errors right. These experts are obliged to advocate the course they have championed, because it is their livelihood and they wish to be looked after until the end of their days. Yet, even this obstacle might be overcome, if the mistakes could at

least be restricted to a particular branch of industry. A thorough investigation into the most common mistakes made over the centuries reveals the enormous spread of the malaise arising from fallacious precepts and perverse practices. It reveals such grave cultural, technological and economic transgressions that no branch of industry is left untouched by it. No even partially unaware expert, can absolve himself of his complicity, whatever his chosen field.

When it becomes evident that the job-security of nearly every expert would be threatened under these circumstances, it will be quite futile to expect any support from such circles. At the outset a powerful opposition must be reckoned with. But this obstacle should cause no alarm, for we are not concerned here with the livelihood of a few, but with the existence or non-existence of the whole of hoodwinked humanity. The behaviour of our young people today certainly provides clear evidence that humanity is still morally healthy. They militate vehemently against the signs of decay emerging everywhere and refuse to continue to trot mindlessly down the road to war that has led us into an economic and cultural cul-de-sac.

Opposition alone, however, achieves nothing. Our youth will only achieve any practical success in their struggle when the causes are identified and the errors are revealed that were made by us and previous generations, plunging the world into misfortune. For this reason it will become a sacred duty for all those who perceive the full extent of what has happened, to put aside all personal advantage and enlist for the final putting-to-rights of these many errors. The same is also the duty of everyone whose inner feelings admit the mere possibility of wrong-doing.

The most effective way of doing this is to inform the general public of the great dangers of defective reasoning, and the futility of pursuing the present goals. Rich and poor, high and low alike, must become seized by doubt and well-founded mistrust. Affecting ever widening circles, this will ultimately kindle an inner sense of self-preservation in the broad mass of people. Once awakened, this inner sense must not be allowed to rest until the people (and therefore God) have made their verdict known. They will then begin to work at a grass-roots level and bring about the necessary change for the better. It may indeed be a thankless task to inform the broad mass of people of the coming dangers which it neither sees nor wishes to see. However, regardless of the possible futility of revealing the fearful Menetekel hovering above them, the attempt should still be made. At least our children and those dying helplessly in hospital should be made aware that they are the victims of history and the present culture arising from it.

Therefore the purpose of the following discourse is to arouse this inner sense of self-preservation in the public. If an instinctive premonition of the enormous dangers ahead, coupled with the mistrust latent in every human being, can be successfully awakened; then neither the problems affecting the Establishment's prestige nor its fears for its future will significantly impede humanity's final rescue from self-destruction. It is not the purpose of these general explanations to elaborate on the many indicators brought to light in a one-thousand year-old review. These are referred to briefly only where they have a profound significance and their correct understanding is necessary for comprehension of the whole. Naturally with such understanding, much will also have to be discarded. Once humanity perceives the wonderful conformity in natural law, and the uniformity prevailing throughout Nature, it will gain ethically and renounce any over-reliance on outward appearances.

If we want to influence the course of our own existence positively, an existence now constantly imperiled by the re-emergence of alien life-forms, and if we wish to safeguard it against further degeneration, we must allow Nature to take command. Or, if we do wish to intervene, we must first become conversant with the simplest principles of Life. Every living thing is ultimately a bridge towards the build-up of the whole. Similarly the various religions and world-views merely represent spiritual bridges (often in primitive form) and so must make way for better ones, once the ethical upswing of humanity has overtaken them. Indisputably the mightiest bridge of all for the evolution of

life is represented by the entity WATER.

Science views the blood-building and character-influencing ur-organism, water, as a chemical compound, and supplies millions of people with a liquid prepared from this standpoint, which is everything but healthy water. All efforts to make science acknowledge the serious errors it has made are useless from the start, because for it to make such an admission would surely be to condemn itself. Of necessity, therefore, it must adhere to its present doctrines. All those still possessed of healthy common-sense should categorically refuse to continue to drink water prepared in this way. By continuing to consume such water they will inevitably degenerate into cancer-prone, mentally and physically decrepit, physically and morally inferior individuals. Let the experts and scientists, who are heavily attacked in what follows here, examine everything objectively and refute, if they will, the many criticisms presented.

Those best placed to judge whether these assertions are well-intentioned or not, are the farmers, already struggling so hard for their native soil. Let all those who are forced to work in the great cities seriously contemplate what would happen if, in addition to their bread becoming increasingly scarce, expensive and of worsening quality, their water also disappeared. This danger will be all the more dreadful because the remaining reserves of water will become an unquenchable source of that most frightful disease, cancer. Cancer is constantly on the increase and, if too far advanced, has no really effective cure. Therefore let all those not fortunate enough to enjoy a cooling drink directly from a healthy spring consider where their water comes from, how it is distributed, and what artificial additives are used to make it drinkable.

Those unfortunates who are forced year-in and year-out to drink sterilised water should earnestly consider how an organism will be affected by water whose naturally-ordained ability to create life has been forcibly removed by chemical compounds. Sterilised and physically-destroyed water not only brings about physical decay, but also gives rise to mental deterioration and hence to the systematic degeneration of humanity and other life-forms. The same is equally applicable to all forms of vegetation and all other preconditions for life in Nature. The reason people mistake their cultural and economic decline for a passing crisis and strive in vain to master the increasingly widespread misery, lies mainly in the intellectual deterioration of humanity. Conforming to natural law this deterioration is followed or preceded by physical degeneration. Only a penetrating study by intuitively gifted people can fathom the innermost nature of the life-giving substance, water. Only through a painstaking investigation of the materialised ur-substance, water, will it become possible to show a mentally and physically degenerating humanity the ways which will once more lead us upwards.

Deep-Sea Water

Were our learned scientists to investigate deep-sea water more thoroughly, they would discover that the material composition of the air absorbed by it differs substantially both in quality and quantity from that contained in extreme surface water. This fact also explains why deep-sea fish can glow and impart electric shocks. In its fundamental structure, the air absorbed by deep-sea water exhibits a similar composition to that still found in a few isolated high altitude springs. It is the high content of physically-dissolved carbonous matter and the lack of oxygen, coupled with the simultaneous exclusion of light, that gives this water its peculiar character.

Seawater at great depths cannot absorb gases by diffusion or convection. Therefore where the oxygen has also been consumed by living organisms, such seawater can actually be locally completely devoid of oxygen—or even fresh. Because the carbon dioxide content of the atmosphere is less over the sea than over the land, the conclusion can be drawn that the surface of the sea also absorbs carbon dioxide directly from the atmosphere.

Deep-sea creatures can be distinguished from their counterparts in shallow waters by their size, their strangely-constructed eyes, the different consistency of their bodies and, to a large extent, by their particularly original body-shape. The external environment stamps each individual with its own characteristics. Hence there are certain contradictions which can only be explained by understanding the nature of the water in which these organisms live.

One would tend to think that, owing to the water-masses pressing upon it, an organism living in the deep sea would have a correspondingly more strongly-built body. However, in contrast to the fish with robust skeletons and strong muscles found along the shoreline, deep-sea fish have extremely delicate, paper-thin, almost weightless skeletal frames. The fact that these creatures burst open when they are brought up from the depths is also attributed to the physical structure of their bodies. This purely mechanical explanation is a serious error. Just as the organisms brought up from the deep sea regularly explode, the same occurs with water raised from such depths. It will warm up relatively quickly with the addition of the requisite quantity of oxygen and highly complex carbons (such as oil) or will burst its container if this is sealed.

A great many natural phenomena occurring in the depths of the ocean could easily be explained were the experts aware of the inner nature and character of deep-sea water. This holds particularly true for the phenomenon of ebb and flood, whose true nature will be described in a later chapter.

For the same reason, our energy-technologists would abandon contemporary methods of generating electricity if they but knew that this can be obtained directly from the deep sea by means of the simplest apparatus. Contemporary apparatuses and instruments would rapidly become obsolete because humanity has no need to go to such lengths to obtain light, heat and other forms of energy—it could be obtained in any desired quantity almost without effort or expense.

The Quantitative and Qualitative Deterioration of Water

For about a decade the groundwater has been sinking so fast in many areas that the number of years before people will be forced to abandon their upland villages and homes can be counted on ones fingers. This is either because their vital water supplies will have ceased to exist or will be obtainable, if at all, only at great cost.

With the sinking of the groundwater table, springs peter out, streams dry up and the soil, which ought to provide our daily bread, dies of thirst. In other places where water rises out of the Earth again, rivers break their banks and turn the countryside into swamps. In addition to this alarming quantitative shift in the distribution of water in, on and above the Earth, an even greater danger threatens: the qualitative deterioration of increasingly-scarce residual sources of water. This will render not just drinking water, but even domestic water, directly harmful to health.

Just how far the latter danger has already advanced is clearly evident in a Press article concerning an investigation of the water in Londons reservoirs and swimming pools. It appeared in the *Daily Mail* on 23rd August 1933. These investigations established clear proof of the presence of over a million bacteria per cm³ in the water of public swimming baths—places where thousands of people seek recreation, yet who thereby expose themselves to serious contagious diseases. If this danger already exists in constantly monitored facilities, how much greater it might be where such controls are absent. Apart from these revelations this investigation produced yet another surprise: it was established that where attempts had been made to remove this danger through chlorination, bathers experienced serious inflammation of the eyes and mucous membranes of the nose.

The Sterilisation of Water

One of the most difficult tasks in the treatment and preparation of drinking water involves the sterilisation of surface water and immature (juvenile) groundwater which endanger health and are unsuitable for drinking purposes. As a rule this water is taken from rivers, lakes and reservoirs or, where these sources are unavailable, is pumped up from deep wells and rendered (theoretically) drinkable with the use of chemical additives. All those forced to live in cities are well acquainted with the bad taste of mechanically filtered water, water which is contaminated by micro-organic matter, artificially polluted by chlorine, irradiation or other sterilising agents and disinfected by chemical compounds and other ingredients. What are not known, however, are the consequences ensuing from this.

While the dreadful consequences accruing from the continual consumption of sterilised drinking water may not be clear to water supply engineers, doctors cannot claim to be unaware of the causes of the sickness appearing everywhere. Their responsibility is all the greater since they are the ones who are supposed to keep the organic formation of the body and its various stages of development under constant observation and study. In view of the fact that contemporary doctors must also acquire certain preliminary technical knowledge and an understanding of various basic chemical and physical principles before beginning their medical studies (which to a large extent will actually rob them of their connection with reality), practising physicians should at least understand what effect the continuous consumption of sterilised water will have on the human body and whether the continued use of this method of sterilisation should still be permitted.

Those doctors who dedicate their whole lives to cancer research and are adequately supported financially in their endeavours should first of all ask themselves the question: how does such bacterial life evolve in the human body or in any other organically-constituted body? It is not sufficient merely to record the existing facts and to try to eliminate the unwelcome life-forms that already exist. The very fact that the development of bacteria is enhanced in water—water left standing for long periods, flowing slowly in the sunlight or in badly-enclosed, open wells—must point to certain correlations which urgently need to be researched, in order to put an end to the danger of disease associated with them. If this path has not yet been trodden, it is because our practising physicians themselves have already lost touch with Nature.

In the final analysis, all attempts to purify drinking water are directed towards creating conditions unfavourable to the bacterial life that evolves in it under certain conditions, in the hope of eradicating it. If the water has been rendered 'hygienically impeccable' in such manner, then, as a rule, one is entirely satisfied with it and believes that enough has been done. Quite apart from any other associated hazards—for example, residual micro-organic matter unpurged by present systems of sterilisation—it never enters anyone's head that certain material energies will also be denied to people who regularly consume sterilised water, sterilised milk or other sterilised foods. This deficiency will lead to a decrease in their mental, physical and sexual potency and will inevitably increase the health risks to their weakened bodies. After a lengthy time of constantly consuming water treated in this way, the blood will be systematically destroyed. This enfeeblement leaves the door wide open to the entry of disease.

The Chlorination of Water and its Consequences

In the increasingly difficult matter of supplying drinking and domestic water to cities and housing estates, scant consideration is given to the water's content of suspended solids. In addition, its internal physical processes and character are also completely neglected. As a rule, chlorination is deemed satisfactory to obtain clear, pure and germ-free water.

There is hardly a city where water is not disinfected or sterilised through the addition of chlorine, compounds of silver or irradiation with quartz lamps. In all these processes oxygen in *statu nascendi*, or an allotropic form of common oxygen, is produced which will kill off all living organisms. If water thus treated is drunk continually then the very same processes that we wish to achieve through water sterilisation must also take place in our bodies. Frightful consequences can ensue from the constant consumption of such water.

When sterilisation only is taken into account, there arise the various forms of the disease we collectively call cancer. In 1920, 2,400 people died of cancer in Vienna; in 1926, 3,700 fatal cases of cancer were recorded; in 1931, 4,900 fell victim to this terrible illness. From these figures the progressive spread of this disease is clearly evident.

This dreadful scourge which, despite all the efforts and skills of our medical research institutes, can neither be accurately recognised for what it is nor effectively controlled, and whose spread affects more and more victims, is primarily an after-effect of unhealthy or badly-conducted water. This not only contributes to the chemical make-up of our food and the constitution of our blood, but also determines the quality of the composition of the atmosphere directly surrounding the organisms inside the body. Relevant statistical data clearly reveal that cancer is most prevalent in those districts where no good, high-quality spring water is available. Even in those places where the spring water is still good and healthy, it will deteriorate as a result of being transported in pipelines sometimes hundreds of kilometres long. The emerging pattern of the spread of cancer can be measured against the length of the pipes in which domestic and drinking water flows to its point of use.

Naturally this assertion will be immediately countered by the statement that the water has undergone all conceivable tests and its day-to-day content of dissolved and absorbed matter is accurately monitored. If we continue to drink sterilised water only, we must also accept the ensuing consequences. If we do not wish to suffer a slow death in mind and body, we must search and strive for other ways to cast the Devil out of today's drinking water, but not with the Devil himself!

The Substance—Water

By taking the right paths we are led back to Nature and hence to the source of life, to healthy water. The higher up such water springs forth from Mother Earth the healthier it is. Borne up by inner energies it emerges only when ripe—when it has achieved its proper physical composition and when it must leave the Earth. The absorbed air content of such water consists of about 96% gaseous, physically dissolved carbonates. As a result the psyche or the character of water can be described as being of very high calibre.

There are some springs which exhibit such a high content of carbonic acid (this expression is in any case incorrect) that when small animals inhale the vapour from it in the surrounding atmosphere they die almost instantly—the Dog Spring in Naples being an example. This water is also dangerous for people who suck it into their mouths directly from the spring, and inhale its rising gases at the same time. Mountain folk call such springs ‘poisonous water’. Today springs can still be found which people avoid and which are fenced off to prevent access by grazing cattle.

According to folklore these springs are inhabited by ‘Waterworm’ which, if swallowed, irrevocably cause death within a few days. If a metal container is filled with such water and placed in the open air, the water heats up inordinately quickly, displaying a slight effervescence at the surface. Incidentally this phenomenon also sometimes happens when wells are bored. Whenever these events occur, the exposed water quickly subsides and the well is soon dry. When such water is exposed to the air, the emergence of an abundance of bacterial life is soon observed. The warmer the water becomes, the less

complex and the more primitive the bacteria. If warmed-up rainwater is poured into this water, a few drops of oil are added and the whole container sealed, the contents of the container very soon explode.

What has happened here? The negative atmosphere, the psyche contained in the high-grade spring water oxidises. It interacts with warm, heavily-oxygenated and consequently predominantly positively-charged air. When this interactive expansion encounters an obstacle and when a high-grade carbone is present—for example, in the form of oil—it shatters the container.

If such water is drunk quickly when the body is hot, the same phenomenon occurs in the body of the drinker. The affected person feels a stabbing pain in the lungs and dies within a few days. Alpine farmers describe this rapid sickening as the ‘vanishing lung disease’ (galloping consumption). If such cases are less frequent today than in earlier times, this is only because such high-grade water is now rarely found.

By means of the above interactions, energies will be either freed or bound. The defining factors connected with this encompass the diverse composition of the atmosphere and the varying effect of light, both of which are conditional on the season and the height of the Sun. The longer the water is exposed to the influence of light and the more it comes into contact with the air during flow or through mechanical motion (stirring action), the more it will relinquish its former geospheric characteristics, absorb those of the atmosphere and become warm, stale and insipid.

The more immature (juvenile) the water emerging from seepage springs or otherwise extracted from the ground, and the smaller the difference between contrasting magnitudes originally present, the weaker will be the interactions. The more inferior the quality of the products of this energy-exchange, the less complex are the micro-organisms which evolve. This necessarily results in the mental and physical degeneration of all those organisms that use this low-quality water in order to function. If the vitally important oxidising processes can no longer occur in an appropriate high-grade form, it is unreasonable to expect to find high-grade properties and processes continuing in water that is no longer able to maintain its inner ripeness or has lost its previously mature characteristics. It should therefore come as no surprise if, in such water, a variety of more primitive life-forms come into existence, which ultimately pose a threat even to human life.

Whereas an initial supply of oxygen was necessary for the emergence and development of these organisms, an excessive concentration of oxygen or an over-supply of a lower-grade oxygen would tend to be fatal to them. In this regard the same sort of thing happens to us. If we wish to visit the sphere of oxygen, the stratosphere, we must take with us oxygen of the same composition normally encountered in our own sphere. The same holds true for the supply of fresh water on ocean voyages. If excessive quantities of oxygen are injected into water then, in the long run, such water can support neither bacterium nor human being. Since the bacterium has no other way to breathe it must die immediately—whereas the human being, who at least still has a chance to gulp down some healthy air, perishes only in the course of time.

The body’s metabolic processes are dependent on a specific composition of basic elements—the carbone and oxygen groups contained in water. Similarly, the development of qualitatively high-grade vegetation is dependent upon there being a particular ratio between the quantities and qualities of these substances in the basic formative substance—water. These quantities and qualities generate a particular internal temperature appropriate to each organism in which they are taken up (whether by breathing, through the consumption of food or the direct supply of water) as a result of the interactions occurring during these reciprocal oxidising processes.

A particular inner temperature produces a certain physical form which in turn generates the special kind of immaterial energy we encounter as character. Hence the old saying *mens sana in corpore sano* (a healthy mind in a healthy body). If the composition of basic substances should in any way be altered,

not only must the metabolic basis for further growth of the body change but so must its spiritual and intellectual growth and further development.

Briefly summarised: healthy air, healthy food and healthy water produce not only a healthy body but also good character traits.

The Consequences of Contemporary Water-Purification Processes

The quality and quantity of water's oxygen content is substantially altered under present systems of aerobic water purification which take place under the influence of light. This immediately results in disturbances to the metabolism. As a further consequence, it results in aggregations of oxygen which the water in the body, already over-saturated with oxygen, cannot assimilate. As a result of the additional internal pressures thus created the first symptoms of disease manifest themselves as swellings and tumours. In the case of trees, these become clearly visible in shade-demanding timbers exposed to direct sunlight, in warm, strongly-oxygenated soils.

The presence of excess oxygen in the enlarged cells leads to production of high levels of acid and subsequently to inflammation. This inflammation in turn engenders even higher temperatures—fever—causing the oxygen to become increasingly aggressive and eventually to compensate for the lack of any other carbones by combining with the substances of the tissue itself. This results in the emergence of inferior and less complex microbes which, under suitable preconditions, begin their vital activity. In the absence of other food they make a regular feast of the macro-organism—the body. The disease-causing organism is therefore the indirect product of incorrect metabolic interactions. Science describes this as cancer.

The only means of defence presently available to science is the knife or radiation. Were our doctors to understand why cancerous tumours really begin to flourish once the body is opened up, or were they able to comprehend the underlying causes of combustion phenomena (inflammation), they would no longer use these methods.

It is a remarkable fact that distilled water greedily absorbs gaseous substances from the surrounding atmosphere, so that it soon takes on the smell of the substances surrounding it. Because such sterile water extracts gaseous carbones from its environs, medicine has also made use of it to purge human blood. The consumption of such water can only bring about a short-lived improvement in the general condition. In the most favourable cases it merely acts as a stimulant but, in the final analysis, such water can only act destructively on the organism, since it ultimately removes carbones from it. In this case these are not excess waste products but the most vitally important formative substances.

The beneficial effect of completely sterile water, therefore, can only be of brief duration, since the surrounding medium—the body—is divested of its most highly essential substances. This then serves to create the breeding ground for new micro-organisms. If attempts are made to sterilise water by chlorination alone, some of the oxygen will still be retained after the disinfecting activity of the aggressive oxygen has ceased. When this encounters the requisite particles of carbone it triggers the formation of microbial life in no uncertain measure. The carbones in water should be viewed as negative electrons and the oxygenes as positive electrons which, under the influence of temperature and in conformity with natural law, are mutually opposed in inverse proportion.

If we take in good food, good air and healthy, mature water, highly complex bacteria are formed which consume the low-grade lifeforms that may eventually develop. If on the other hand we ingest inferior raw materials, whether in low-quality food or carbone deficient water, no high-quality bacteria can evolve. The life-forms developing from these less highly-organised raw materials consume the body,

originally brought to life and uplifted by high-grade bacteria. The correct composition of the blood and its inherent energies, which are determined by these metabolic processes, are of crucial importance. The decision to breed predators or beneficial organisms in our bodies therefore lies completely in our own hands—or in the hands and brains of specialists in agriculture, forestry and water resources. A certain uniformity prevails throughout Nature. Hence these symptoms appear in a similar fashion everywhere, as is evinced by other forms of vegetation. The errors that have been made must therefore take effect universally and must therefore provoke a general decline.

The inner material content of water is also crucial to the height of the groundwater table. As revealed by spring water rising vertically to the top of mountains, the inner energies in mature water become so powerful that they are able to overcome the inherent weight of water-masses, if aquifers are properly formed and not too large in cross-sectional area. Experimental proof of this is easy to produce, as the photographs in figs. 3a, 3,b & 3c show. The sinking of the groundwater table is above all a result of metabolic disturbances in the groundwater. Consistent with this phenomenon is disturbance in the circulation of blood in our bodies and the movement of sap in plants.

Concerning Micro-Organisms

Let us look at some situations in which bacteria are produced. House floors were traditionally constructed of softwood such as pine or fir. These were frequently washed and lasted for decades, even when the gravel underneath was permanently wet. As new styles of interior decoration became fashionable, people wanted hardwood parquet flooring, which was laid directly over the softwood sub-floor. When these parquet floors were washed, micro-organisms sometimes developed and multiplied so that the superimposed flooring disintegrated in the space of a few years. In such cases our experts maintain that the timber employed was already infected. The true facts are substantially different. The structure of fine hardwood is of a higher quality than the more coarsely-grained softwood. Fine-grained wood contains qualitatively higher-grade proteins which metabolise only very slowly with a normal supply of oxygen.

If there is sufficient space between the old lower floor and the parquet floor, so that no air-tight intermediate layer can develop between the materially different types of wooden flooring, then these floors can last for decades, provided the wood is of suitable quality. If however the upper floor is washed and the intervening space is sealed off as the wood swells, then between both floors a warm, humid layer is created. Owing to defective water-proofing this now obtains its air and oxygen supply from the rising groundwater in the walls. This is water that has not been exposed to the Sun.

The concentrated oxygen rising with the uninsulated groundwater will expand in this moist, warm, intermediate zone and become aggressive. In this condition, this highly-organised oxygen first of all combines with the less-complex proteins of the sub-floor. The energies resulting from these metabolic processes provide the impulse for the development of certain micro-organisms, which begin their vital activity at appropriate ambient temperatures and eat away the parquet floor from the bottom upwards. Different types of food and micro-climate propagate different strains of these micro-organisms. They eventually infest the wider environment once their original breeding ground has been destroyed. It is therefore obvious that sickening trees in the forest will also be invaded by parasites. This especially affects shade-demanding species planted by modern foresters in the open: their sap becomes highly oxygenated and exhibits a much coarser structure. These phenomena are only the secondary and subsidiary after-effects of clear-felling operations practised over the last hundred years or so. The primary cause of the serious damage ensuing from clear-felling will be addressed later.

The question of how the microbe world comes into being and all its various preconditions cannot be usefully addressed as long as water continues to be viewed as a lifeless substance and its inner

metabolic processes are not taken into account. It is always the incessant metabolic activity of and within water that generates a particular life-form. Regardless of whether it is beneficial or harmful to humanity this life-form will ultimately serve the build-up of the whole.

Another instructive example concerns the living conditions of the grotto-olm, a blind, cave-dwelling salamander of the genus *proteus* (fig. 4). If we study the water in subterranean lakes, where the influence of light is totally excluded, then in such water we find an extremely peculiar atmosphere and no microbial activity. Apart from olms, present in these lakes in great number, there are no other living things. On what, then, do the olms live?

The heavy concentration of oxygen in such water requires only a slight warming and a consequent increase in aggressiveness in order to transform highly complex carbonates into an even higher quality, which the olm then ingests with the atmosphere contained in the water. The olm's respiratory processes and bodily heat trigger strong oxidising phenomena, leading to the development of increased heat. Together these are sufficient to transform highly complex carbonates in the olm's body into the kind of food it requires to sustain life.

On the other hand if the olm is removed from the cave and exposed to increased oxygen, the surface of its body begins to discolour and the olm dies. However if the olm is immediately placed in a container at the place where it was caught and if it is not exposed to the light of day, and if warm rainwater is poured into the container, then the identical phenomena occur. Again we encounter the same principle which for example also explains the mountain trout's peaceful stance amidst rushing water.

The above examples, however, are insufficient to clarify the true nature of autogenesis (spontaneous generation), which was acknowledged in the Middle Ages, but is rejected in modern times. Another simple example brings us even closer to the facts of the matter. Those places where very dark and glistening water streams out of the Earth's surface are the spawning-grounds of fish for good reason. If we examine such water at the very limit of light penetration (at the place where it first encounters incident light) a noticeable change can be detected in the matter found in such water and, the first beginnings of bacterial life. The closer we approach the zone shielded from light, the more highly evolved the bacterial life in the water becomes. Conversely bacteria are increasingly less complex the longer water flows in the light.

If we observe the fish living there the same picture emerges. The closer the fish to the spring, the tastier they are. Every fisherman knows that the powerful, stationary trout which live close to the spring, spurn every type of lure. Another remarkable fact is that these fish can live for months in caverns, to which they migrate when the water subsides during the hot summer months. The feeding habits of these creatures, which spend half their lives in daylight and half underground, are substantially different to those of fish living in the lower reaches of rivers and are similar to the lifestyle of the olm. A fact well known to alpine hunters is that the consumption of these almost-blind fish leads to higher sexual potency.

Another very interesting phenomenon is demonstrated by the emergence of mealworms. If a vessel containing meal is placed in a dry, warm spot, then only a few worms come alive, or none at all. In order to obtain a greater quantity and better quality of worms, an old woollen cloth or a bone is placed in the meal and the lid closed. The increase in the worm population is caused by the introduced third category of carbonates whose origin stems from a more complex group of vegetable matter than the meal.

While on the subject, a few interesting experiments can be described. If we pour a dilute solution of potassium chromate, or iron or copper sulphate, onto a moist gelatinous film, beautiful patterns of deliquescence appear which under the magnifying glass exhibit a delicate, strongly branched structure. If river water is used to make the gelatine and the whole experimental arrangement is placed at the interface between a positive and a negative temperature gradient, then after a certain time various

fungi, algae and mosses can be detected under the microscope. On the other hand if fresh seawater is used instead of fresh water, then different flora and fauna of this microbe kingdom will appear which are characterised by more worm-like, wriggling organisms. Under the right conditions this microbial world behaves in the same way as its brothers and sisters in the macro-world. It devours everything around it while engaging in the mutual struggle for existence, excreting all unusable matter and reproducing itself with incredible speed. The results of this experiment are particularly clear if the procedure is carried out in a well sealed glass vessel, insulated externally in order to maintain the correct temperature gradient (in this instance created artificially) and to prevent any transfer of energy to the outside. Apart from an atmosphere conducive to the formation of the desired micro-organisms or worms, the presence of a third, more highly organised substance is necessary in order to activate the energies and to create the conditions: For example, a drop of oil in water of the appropriate composition.

Whether the propagation of these micro-organisms is caused by their own physical energy or through the effect of an artificially created temperature gradient, is quite immaterial. The most important factor in both cases is the necessary alternation of the climate over short periods of time. This frees the life-generating energy at the point of intersection between the individual climatic zones (at the interface between two complementary temperature-gradients). Once again the prerequisite for the success of this experiment is the correct proportion of basic elements, the oxygen and carbone groups contained in the water. An appropriately-shaped vessel with a suitable air-tight seal is also required, in which the inner climate can be produced and maintained which is suited to the respective creature and therefore necessary for its life activity.

Another example can be mentioned to clarify a natural phenomenon which science has so far been unable to explain, but which can be clarified easily if we observe the circumstances that give rise to these remarkable events. These are the so-called 'worm rains' in Lapland which now and then happen in spring, during which it rains living white worms about 3cm (1¼") long. The usual, but incorrect assumption is that these worms, which fall from the heavens under the blood-red light of the midnight Sun, are somehow, somewhere caught up by wind, gathered together into a worm-cloud and at a particular location fall back to Earth in their thousands.

A similar curious phenomenon is the so-called 'rotting season' that starts in Lapland towards the end of July and lasts about four weeks. Trees should not be felled during this period because after a few days fungus appears in such profusion that all the work is in vain. Even heavily salted bacon is tinged with all manner of colours. The smallest wound festers and can only heal after the rotting season has passed. The same applies to animals, since any wounds they suffer during this period are also incurable. The young born in this period of purulence are often deformed. Mosquitoes and other pests die off *en masse* after the rotting season is over.

Further proof that a certain seasonally dependent climate or particular light influences enhance the propagation of a superabundance of micro-organisms is provided by epidemics that regularly occur under certain preconditions. These are caused by bacteria alone. They represent Nature's most effective self-defence when the human organism foolishly interferes with the driving forces of Life and Nature.

It is well-known that varying intensities and qualities of sunlight peculiar to each season play a major role in growth. For example, if light is directed into a room through window-panes of a particular colour then the flies begin to die off. However, if the colour of the glass is changed they can revive. The decrease in tuberculosis since radio waves first vibrated through the ether is also no accident. These emissions cause an unbalanced and excessive concentration of oxygen both in water and the atmosphere which goes a long way towards explaining why human beings have become faster-living, more hot-tempered, but regrettably less intelligent in the process.

Studies of earth rays and the appearance of symptoms of cancerous decay frequently associated with them, reveal that these can also be traced back to interactive processes in the interior of the Earth which have been impaired locally. These have been unfavourably affected by shifts in the distribution of groups of basic elements, for which groundwater acts as a conveyor, distributing them to all life via the soil's capillaries. All these phenomena, so mystifying to science, can be duplicated or prevented once the nature of the primal substance of all life, the nature of water, is understood.

Water Supply

If we study the water supply system of the ancient Romans, we can observe from archaeological remains that when their towns were originally founded great trouble was taken to deliver the necessary water to the place of use in wooden pipes and in conduits of natural stone. It was only later, due to the constant increase in the demand for water as the towns grew, that they hit upon the unfortunate idea of conducting bathing and drinking water in metal channels.

Where the use of wood was discontinued, the choice of suitable material for the pipes was determined by observation of the behaviour of coins of different metals, which were thrown into the springs for ritualistic purposes. The type that best resisted the various influences over the years was selected. According to the nature of the water many metals became thoroughly encrusted, whereas others were almost entirely dissolved. When water is supplied in long, iron water pipes serious material transformations can occur under certain circumstances which cannot be detected with present-day instruments, but which are of crucial importance for the character or the psyche of the water.

It is known that electrolytic processes—energetic processes—are instrumental in the formation of rust. These take place on the internal surface of pipe-walls through the action of carbon dioxide, which evolves as a result of changes in temperature and the presence of oxygen. The carbon dioxide released through the reciprocal effects of heat dissolves the iron in the pipes, in the process of forming ferric bicarbonates. If further quantities of oxygen are added as a result of excessive aeration of the water, then with the simultaneous onset of electrolytic processes the ferric bicarbonate will be converted into hydrated iron oxide (rust). This is precipitated from the water as iron ochre, causing a narrowing of the pipe diameter. In this regard it is to be remembered that the volume of wet iron rust is ten times greater than that of the parent material.

As a direct consequence of these processes a certain quantity of carbonic acid is removed. This was formerly contained in the water as an essential ingredient in the constitution of its psyche. Hence the psyche of the water deteriorates. The transformation processes that take place at certain temperatures and which lead to the formation of iron ochre as an end-product already have artificially pretreated iron as a base material. Whatever natural character the ore lying deep inside the Earth may have possessed is removed as a result of smelting and the admixture of various ingredients. If in the process of forming hydrated iron oxide, solid components accumulate on the inner wall surfaces, then transformation processes take place in conjunction with a negative temperature-gradient. These eventually result in retrogressive transformations and lead to the formation of a new inferior psyche which, in certain measure, appears to be associated with the iron ochre. The water, therefore, has not only lost its high-grade psyche by being conducted in iron pipes, but in addition has become endowed with a pernicious and second-rate psyche.

An especial danger arises through the frequent application of tar to the inner walls of iron water-supply pipes. This is done in order to inhibit the formation of rust. It is a well-known fact in medical science that the extremely volatile products of coal-tar distillation give rise to cancerous diseases in the body, which is why some water-supply authorities have prohibited the use of tarred pipes.

As often happens, water conducted in this manner is also impelled through turbines and physically smashed to pieces by the high rotational velocity of the blades. When it is discharged from the turbines and subsequently mixed with other water, serious damage is inevitably inflicted on the organisms and the surrounding soil to which such water is supplied. This treatment of the Earth's blood one can roughly equate with blood transfusions where any kind of blood is drawn off, stirred up with a whisk, blended indiscriminately with foreign blood and then injected into the body. A person treated in such fashion can become seriously ill and ultimately insane. The same thing must also happen when water treated in the above fashion is drunk over an extended period of time. The blood will be systematically destroyed. The physical and moral degeneration of those forced to drink such water constantly should indeed provide ample proof of the accuracy of what has been stated above. Even the spread of venereal diseases is above all to be attributed to far-advanced, enfeebled conditions of the blood.

If the abusive debasement of the psyche of water is to be avoided, then it is essential that the material selected for the supply pipe is not only a poor conductor of heat, but is also of a properly-formed organic nature. The capillary is the best model of an ideal waterconduit for the proper conduction and treatment of water in terms of its material composition, internal configuration and associated functions. The most suitable material is good, healthy wood. Artificial stone (such as concrete) on the other hand is almost as unsuitable as metal for the manufacture of conduits, because only materials of natural origin should be used for the conduction of the Earth's blood. To those who protest that wood is unsuitable for the reticulation system of a city because of its limited durability, it should be pointed out that good, properly-treated wood can actually last far longer than iron.

Circumstances permitting, and apart from any other special treatment, these pipes should be laid and surrounded by sandy, humus free bedding material in order to avoid external destructive influences to which pipes laid in the ground are frequently subjected. The poor thermal conductivity of wooden pipe-walls inhibits influences detrimental to the water's inner metabolic processes. This considerably weakens dissociations that take place under a negative temperature-gradient and at the same time retains the quality of the flowing water.

The hydraulic efficiency of pipes constructed with wooden staves is actually somewhat greater than that of iron or concrete pipes. The frequently-cited fact that wooden pipelines are cheaper to install should also not be underestimated. In any event, as must be emphasised here, the types of timber currently cultivated by modern forestry are well nigh useless for this purpose: almost without exception today's artificial plantation forests furnish timbers that possess neither the properties nor the durability of timber grown under natural conditions. It is rare today to find forests in which humanity, as forester, has not interfered destructively. Yet there are still sufficient remote stands of valuable timber untouched by contemporary forestry, to which the greatest attention must be paid if humanity is once more to be supplied with good, healthy water. Once a suitable timber has been selected pipes can then be manufactured which largely correspond to the necessary requirements.

Water can only conserve its pipe system, however, if its inner conformities with natural law are taken into account. These inner conformities prevail if the substances the water secretes, which serve to maintain and build it up, are able to fulfill their respective purposes. It need hardly be emphasised that the quality of the remaining sources of food will inevitably decline with the general deterioration of the water.

The capillaries in animal or vegetable bodies serve for the transport of blood or sap, and for the simultaneous and continuous buildup and maintenance of the capillaries themselves. Hence drinking water supply-pipes must be constructed accordingly, otherwise unwelcome processes will occur which lead to the destruction of the capillaries in the pipe-walls and to unwholesome metabolic processes in the water itself. These subsequently have the most detrimental effect imaginable on the human organism and on other bodies.

We find something akin to this in all waterways. Experience teaches that rivers seldom attack their banks if their inner conformity with natural law has not been disturbed. On the other hand there are no artificial bank-rectification measures that have proved effective long-term, which can withstand the destructive force of water whose natural flow has been impeded. The reasons for this lie in erroneous methods in use today which do not influence the water itself (which is what really matters) but which try to control it by its banks. Similarly it is of supreme importance that the composition of the walls of drinking water-pipes is suited to the natural, inner functions of the conducted substance, otherwise the supply pipes will be destroyed. This would lead to the destruction of the system of blood-vessels in the body and hence to dangerous metabolic disturbances largely responsible for the increase in cancerous diseases.

If the place where a spring is tapped is far removed from the point of use, it is only possible to maintain the character of the water (and then only partially) by taking very specific precautions. In no way can this be achieved with present systems of water reticulation, which are dictated purely by shallow and superficial reasons of profitability and expediency. The only case where slightly more care has been taken in the selection of the pipe material is in the transport of mineral water, wherein the emanations almost leap to the eye. Furthermore in order to satisfy the demand for water, spring water is often supplemented with immature groundwater which still lacks the requisite content of high-grade carbonates.

As things now stand, if water warms up on its long journey through pipes, which unfortunately are today made mainly of good thermal conductors, then both carbonates and oxygen in the water become more aggressive. The untoward effect of this development is revealed, *inter alia*, in the characteristic corrosion of turbine blades. The oxygen content enables embryonic bacteria, represented by organic matter in the water, to develop into bacteria proper. Processes identical to those taking place in the water itself must also occur, if such carbon-deficient and oxygen-rich water succeeds in entering the body. Under suitable temperatures it will likewise inaugurate transformation processes in the body's prescribed substances. These are not body-building processes, but manifestations of decay. Under these circumstances the consumption of such water will become one of the major causes of the scourge of the twentieth century—cancer.

The Consequences of Producing Drinking Water by Purely Mechanical Means

The production of drinking water by mechanical methods alone also leads to unpleasant surprises in many areas lying close to the sea. The conditions for equilibrium between layers of fresh groundwater and underground seawater were exhaustively studied by Badon Ghijbels and later by Herzberg. In this case we are concerned with the problem of the hydrostatic equilibrium between two mixable fluids of different specific weight.

In his 1911 paper entitled *Contribution to the Hydrology of Northern Holland*, Wintgens writes about this as follows:

The specific weight of fluids 1 and 2 are G_1 and G_2 respectively, and the difference in height between the surfaces of the two fluids after the establishment of a state of equilibrium is H metres; in this case the interface between both fluids will lie at a depth h_1 where:

$$h_1 = \frac{G_2}{G_1 - G_2} \cdot H \text{ m}$$

below the overall surface of the fluids. Deriving from this equation, the calculated maximum

depth of ground-water $h_1 = 42 \times H$ m, on the assumption that the specific weight of freshwater $G_2 = 1$ and saltwater $G_1 = 1.024$.

In Norderny's example, as quoted by Keilhack, the surface of the fresh-water lies between 1 and 1.5 metres above sea-level. By calculation this value of H of 1.5 metres would correspond to a ground-water depth of $42 \times 1.5 = 63$ metres. The actual depth of the ground-water was determined as lying between 50 and 60 metres.

If the freshwater-table is now lowered through the excessive extraction of water with large pumps, which also reduces the value of H , then the boundary-layer between fresh and salt water will be displaced upwards until it finally reaches the level of the suction-head of the pump, with the result that the salinity or the chlorine content of the drinking water increases until it becomes undrinkable.

These physico-mechanical processes are also augmented by the metabolic processes taking place between freshwater and seawater. Every new bore-hole driven into the Earth facilitates the penetration of oxygen into the boundary-layer between these two types of water. The condition of the temperature-gradient between the surface of the freshwater and the underlying boundary layer will also be altered. The combined effect of these two components is such that the water's inner buoyant energies, which would normally maintain it at a certain level, are likewise reduced.

In this connection attention should be drawn to the salination of many mountain lakes, which is ultimately attributable to the activities of hydraulic and hydro-electric engineers. First of all, through the wanton clearing of forest the rivers were robbed of protection from Sun and heat afforded by the leafy canopy of the trees. In addition water-courses were subsequently subjected to regulation by mechanical means alone. Both events produced higher concentrations of oxygen in the water, which then sought out the coarse and fine carbonates in the channel body, dislodging them from both bed and banks. Once this water reaches deeper and cooler lakes where the now-aggressive oxygen is concentrated and if the water is no longer able to retain the quantities of the now dispersing carbonates in suspension, the precipitation of salts then follows and freshwater is transformed into seawater. The reverse process happens at great depths in the sea, where strong concentrations of high-grade, complex carbonates can eventuate. There the water is not only fresh, but also develops a highly potent negative charge, which under certain circumstances can trigger off violent electrical disturbances in the depths of the ocean.

The Conduction of Earth's Blood

Before we move on to a description of the correct construction of a water-supply pipe, a further example should be given which should make the principle of correct water conduction obvious.

If the blood-vessels of a snail are examined, two differently-coloured systems of blood-vessels are evident. The blood flowing in the outer system of vessels is lighter and in the inner system, darker. The composition of the blood in the outer system is distinguished by a greater oxygen content and is substantially different from that of the inner system, which exhibits a higher content of carbonates. Investigations further demonstrate that suspended matter is concentrated in the middle of the capillary cross-section, whereas dissolved matter congregates more towards the periphery. In addition, if the blood-flow is deemed to be moving along a straight line then the velocity of forward motion is less at the periphery than at the centre. In this regard, however, note that this difference in speed is only illusory. The forward motion of the inner particles of fluid only appears to be faster than the outer blood particles. This is because the latter must describe a path roughly corresponding to a double-helical motion—a spiral motion within a spiral—whereas in the main the inner blood particles appear to perform a simple spiral motion.

The second component of the double-spiral movement described by the blood corpuscles of the inner system cannot be observed, because the line of the second spiral is an energy path imperceptible to the eye. This has a much higher meaning, for we are here concerned with processes of qualitative psychic enhancement, the raising of the psyche to a higher energetic and immaterial level. This not only influences the character of the blood, but in the course of further development also affects the character or psyche of the respective organism.

In contrast to customary methods of investigation the conviction is slowly gaining ground in various fields of research that the object under examination should be decomposed into its constituent parts to enable the study of its very smallest aspects.

The frequently-mentioned 'material transformations in water' are outwardly identifiable through the pulsation of water. Hydraulics is only aware that this decreases with increasing velocity and is intensified with increased roughness of channel wall-surfaces. Water is therefore invested with a certain inner vitality and a decisive role as it rises up in the capillaries in concert with the supply of necessary formative substances.

On many occasions I have stated that the rising of sap in trees cannot be explained by physical factors alone—such as the effect of external air pressure. Its explanation is to be found in ongoing metabolic processes in constant pulsation in every cell of the tree. It is therefore a result of the vital activity of the capillary tree-cell. Professor Kurt Bergel of Berlin came to similar conclusions in relation to the activity of the heart and the blood in animal life. He rejects the current view that the motor—the heart—is supposed to pump blood into all parts of the body. On the contrary this work is performed by the millions of highly active capillaries permeating the body. This fluid-raising capillary force is only effective up to a certain height. An external aid is therefore necessary. This Bergel demonstrated with a small experiment. He stood the base of a bundle of hair-thin tubes in water and lightly and regularly tapped it at the top, causing water to flow continuously out of the upper ends of the capillaries.

In his view health and disease are primarily dependent on the faultless or disturbed activity of the capillaries. Professor Bergel furnished definite proof of this in his investigations of a bird's egg. After being incubated for only a short period of time a small red spot appeared on an egg, which on closer inspection proved to be a drop of blood. If the egg is incubated further, then a network of arteries can already be distinguished on the skin of the yolk-sack. Rhythmical pulsations can still be detected just before it cools off.

The Double-Spiral-Flow Pipe

Both in cross-section and longitudinal section the double-spiral-flow pipe satisfies all the criteria necessary for a water-supply pipe, if it is to convey healthy water to the place of use. By means of a system of vanes made of precious metal arranged on the inner surface of the pipe walls (see figs. 5, 6, 7 & Patents Nos. 134543, 136214 & 138296 in Appendix), the water-masses are conducted along a double-spiral-flow pipe in such a way that the movement of the individual filaments of water at the periphery takes the form of a secondary helical motion along a primary helical path (see fig.) Through this arrangement both centrifugal and centripetal forces evolve simultaneously in the cross-section of the pipe, which convey bodies heavier than water down the centre. Bodies lighter than water are impelled towards the periphery.

Viktor Schauberger's portrayal of the double-spiral longitudinal vortex

Water-masses conducted in this fashion are slightly warmed through the interplay of mechanical forces of friction on the vane surfaces, leading to the separation of oxygen in the inner region of the pipe and its subsequent concentration at the periphery.

At the same time as the oxygen is ejected, all the bacteria migrate towards the periphery as well, since their living conditions in the more central part of the cross-section have now become unsuitable. In company with the bacteria, all the water-polluting particles are also dispatched towards the periphery of the pipe. Thus the water is easily and simultaneously purged of suspended matter.

Once bacteria have transferred to the peripheral zone in search of the required oxygen, and after a certain period of time in water completely cut off from outside influences, they are overwhelmed by a localised concentration of oxygen. In this way precisely those pathogenic bacteria susceptible to an excess of oxygen are advantageously eliminated, whereas non-pathogenic bacteria which are not harmful to human health, but in many cases are actually beneficial, are to a certain extent retained. At the same time as the content of absorbed oxygen is separated from the carbonates contained in all water, the inner core of the water surges ahead in a simple spiral movement (vortical movement along the longitudinal axis) because the surface tension of the water becomes physically reduced as a result of the above-mentioned separation of oxygen from the particles of carbonate.

The physical reduction in surface tension results in a mechanical acceleration, leading to the self-purification and energetic charging of the centrally-accelerating water-masses. On the other hand this charging of energy gives rise to further processes related to the overall equilibrium between the heavy, centrally-accelerating bodies and the energy-rich water. With the ensuing simultaneous cooling solid particles are separated and are again directed towards the periphery. There they combine with oxygen and are reunited with the centrally-accelerating water in the form of additional energies. Those particles of matter not drawn into the centre will be pressed onto the surface of the pipe walls by the prevailing mechanical pressure, there to combine with the raw materials from which the timber was originally formed. Thus they seal the pores of the wood, which in this way becomes more durable than iron. Once again we are here concerned with a natural process whose active principle is operative in the formation of all capillaries. The capillaries not only construct themselves but also protect themselves against harmful influences.

As a result of acceleration of the entire body of water peculiar to the double-spiral-flow pipe, greater quantities of water can be conveyed than in an ordinary smooth-walled pipe and, due to the efficacy of the oxygen, extensive self-purification and self-sterilisation of the water occurs which constantly increases in quality through the uninterrupted build-up of energy as it moves along its path. The reason for this is as follows: as they accelerate, centrally-conducted water-masses are simultaneously cooled, with the result that gases evolving from the carbonates become concentrated in the flow-axis, where the lowest temperatures reside. This concentration decreases towards the periphery. The oxygen on the other hand is concentrated around the periphery of the pipe, reaching its most aggressive state at the interface with the warmer pipe-wall, giving rise to mutual interactions between the two basic substances from the periphery inwards. This subsequently leads to the aforementioned interactions which qualitatively enhance both water and wood.

In the course of time the relative spacial distribution of the more central flow of water and the interactions at the surface of the pipe walls arrive at a certain state of equilibrium. These processes then cease—the water is now mature and both wood and water have become almost immune to harmful outside influences. Whereas oxygen is located in the peripheral zones of the pipe, the free particles of carbonic acid congregate in the boundary zone of the inner core of water as a result of the water temperatures prevailing there. The carbonates contained in the water, in bound form, necessarily accumulate in the central axis, which is predominantly saturated with carbonates. By arranging the in-built, specially-shaped vanes in a particular way, aggressive particles of oxygen on the boundary layer of the outer edge of the inner core of water, are brought into continuous and direct contact with the most aggressive carbon dioxide, resulting in a continuous generation of energies. These are drawn further towards the centrally-accelerating water masses, due to the decrease in temperature towards the

central axis of the pipe.

Accordingly two types of circulation are created in the cross-section of the pipe: the mechanical circulation of the water and the counter-circulation of those energies that evolve when aggressive particles of oxygen encounter free carbon dioxide. This circulation of energy manifests itself in the form of a continuous electro-dynamic process. In this instance it does not take place at the walls of the pipe, but at the boundary zone of the water's inner core, resulting in the qualitative uplifting of its physical, material, energetic and immaterial attributes—but not in the destruction of the pipe walls.

These double-spiral-flow pipes also convey matter heavier than water down the middle of the pipe and at the same time ennoble and refine it, so that oils of inferior quality, for example, will be improved during flow. After smelting, iron ores transported in this fashion yield a higher-grade iron, because in the process of being transported, the oxygen in the ore is consumed in the formation of new carbone compounds (reduction processes), which then contribute towards the materially higher composition of the carbone—iron.

The Pulsation of Water

Life takes place in three spheres:

1. in the Carbonesphere
2. in the Atmosphere
3. in the Stratosphere

These various spheres are inter-connected through the agency of water. On the other hand water's various states of aggregation form the bridges for the formation and transformation of the basic elements it transports, which are thereby transferred from the stratosphere into the interior of the Earth and vice versa.

Apart from the purely mechanical cycle of physical water, there is another form of circulation which operates in the opposite direction—the 'energy cycle'. Here two contrasting movements are involved: the upward movement of carbones with the carrier water and the downward movement of oxygen. At the point where the paths of these mutually opposed currents intersect, energy is freed. Owing to the constant variation in the length of night and day, these energetic interactions cannot arrive at a state of equilibrium. So shifts in individual micro-climatic conditions must constantly occur, resulting in continual modification of the qualities and quantities of basic elements.

The outcome of this continuous reciprocal interaction is the metamorphosis of the different forms of water in each individual zone and the constant transformation of the various species of vegetation in which water, ceaselessly moved by this interplay of forces, wends its onward way. This inner equalisation of forces is to a certain extent inhibited by the effect of the self-weight of the water. Through fluctuations in the magnitude of the component forces, water particles are constantly made to rise and fall. In other words the pulsation of the water inevitably occurs.

Every new entity and all growth evolves from the smallest beginnings. Further development in the early stages can only be accomplished if the cycle in the interior of the Earth proceeds correctly. In the natural order of things, every higher form of vegetation is built up from the lower forms preceding it. The carrier of the necessary elements and the moderator of life-processes in the vegetation root-zone is groundwater, whose movement is triggered by a drop in temperature, which on its part is caused by inner metabolic processes taking place in the here-decisive groups of basic elements. The impulse for the movement of water is hence a product of interactions between the opposing elements it contains, the necessary resistance for which is supplied by the water itself. This resistance to the interaction

between the carbonates and the oxygen further results in continual fluctuations in temperature, which impart an additional impulse to the movement—the pulsation of the water.

As it moves along its path water dissolves salts at one moment, transports them at another, deposits them at a third and creates and transforms energies. The essence and purpose of these eternal metamorphic processes is to build up and maintain various forms of vegetation and physical bodies, which on their part represent bridges by which energies are created and maintained. The potential differences that are always present between the inner temperature and the outer ambient temperature are none other than different patterns of force which both terminate and reactivate the circulation of water.

The two forms of evolution are therefore of material (physical) nature and of immaterial (spiritual) nature. All that exists, be it a stone, a plant, an animal, a human being, a planet or the Sun, represents an organism possessing both body and soul. Every ray of light and heat requires a physical form in which it can manifest itself and evolve. Every body requires an inner energy which creates and transforms it. When a body decays, then the energies that initially created it are again freed. They are never lost—should they lose their habitat with the decay of the body, then they willingly coalesce with the water that eternally circulates in, on and over the Earth and transmute it into to a new life-form. Therefore wherever we look there is life, eternal creation and transformation. Should we look into apparent emptiness then a sea of spiritual life, of past and future generations stares us in the face.

Every material form of vegetation always has its immaterial counterpart in light, heat and radiation. Every change in sphere changes the overall internal and external conditions, alters the weight and inner intensity of the radiation of the physical substance—water—and thus the direction in which the carrier of life moves. Disturbances to the inner and outer conformities with natural law lead to the disturbance of the very foundation of all life's creative processes. The disappearance of water or its material transformation is a very serious warning sign, for if its inner structure and composition is changed then its character and hence the character of all forms of life, including humanity, will also be changed.

Regression in the quality of the various forms of vegetation, qualitative deterioration of the highest plant organism—forest—and the increasing physical and moral decadence of humanity are simply the logically-consistent symptoms of disturbance of the physical constitution of water and disruption of the geosphere brought about by humanity's subversive activity in the organism 'Earth'.

The religion of the Chinese forbade any kind of intrusive interference with the Earth. Even the construction of railways in China encountered stiff opposition in religious circles. In the light of all that has been stated so far it can be seen that the culture of the Chinese, which has endured longer than that of any other people, is no accident. It owes its existence to the fact that the carbonosphere remained untouched for a long period of time. China's decline was inevitable the moment the Chinese began to adopt the manners, customs and technological achievements of the western world. Another horrendous example concerns developments in Russia, which took only 15 years to catch up with what other nations had taken 100 years to achieve—famine.

What we are experiencing today is no crisis. It is the dying of the Whole—the qualitative, physical deterioration of all organisms initiated by the disruption of Nature's water-balance. In step with this proceeds the moral, intellectual and spiritual collapse of humanity. This collapse is already so far advanced that despite all the warning signs, people are still unaware of the gravity of the situation. Behaving far more cruelly than animals, people see their ultimate salvation in decimating the mass of humanity with weapons which—together with the banners under which our children are supposed to bleed to death—our priests actually bless.

The decision—whether we take the latter road of collapse or save ourselves at the eleventh hour from our own self-mutilation—lies only with ourselves or with politicians and men of science who take upon

themselves a truly appalling responsibility. They do not consider the seriousness of the situation and are unable to provide any really effective assistance in salvation—and out of selfish interest they continue to adhere firmly to their present point of view.

Healing Water for Human, Beast and Soil

As long as humanity refrained from interfering with Nature's interdependent organic functions, and as long as Mother Earth could still supply her blood—water—to the vegetable kingdom in a healthy condition, there was no necessity to contemplate how wholesome water could be produced artificially in the same way that it is naturally constituted inside the Earth.

Today, where almost all healthy springs have either dried up, or the water has already been intercepted at its source and delivered to urban areas in wrongly-constructed water-mains, the soil and the entire animal kingdom have to rely on worn out, stale and consequently diseased water. Even quite immature water (full of inferior, less complex substances, and torn from the womb of the Earth), or health-endangering surface water (sterilised with chemical additives) must be supplied for human use. It is therefore high time that we discover ways and means of protecting human, beast and soil from the decay that must legitimately follow if the Earth dies of thirst—as a result of the internal decomposition of water arising from current economic measures and industrial practices.

Nature alone can and should be our Great Teacher. If we wish to regain our spiritual and physical health, we should not simply rely on secondary mechanical or hydraulic phenomena. As a first priority we must see to it that sublime conformities with natural law are thoroughly investigated—conformities which govern the ways in which Mother Earth prepares her life-giving fluid and the means she uses to conduct it to the point-of-use. Once we have unveiled this secret, if we faithfully copy what has been tried and tested over millions of years, then we are on the right track. Only then can we intervene analogously in Nature's vital functions and harvest an over-abundance of the best and most noble fruits that Mother Earth has created and maintained in countless varieties with the aid of healthy blood. In order to penetrate the great mystery surrounding the origin of all life, we must take an interest not only in our living space, but in the 'above and below', in which water pursues its eternal cycle in obedience to a great and immutable law.

It may be impossible for us to observe the wonderful processes in crystal-clear water with our eyes, and likewise impossible for us to accompany water on its mysterious path above and below the Earth. Nevertheless an indirect, inductive way still lies open to us to research those things we cannot see but which we absolutely must know about, if we wish to remain healthy and hence to serve the purpose of life: continuous creation.

Up to now all that humanity has ever done has been to commit crimes against Mother Earth. In so doing not only do we inflict grievous injury on ourselves but also on the natural environment. With endless patience she has passively suffered humanity's interference and intrusions, motivated by greed, avarice and ignorance. However as a result of continuous ransacking and thorough ventilation of the Earth, inner decomposition of her blood is taking place and with it the dying of the soil that feeds us. Not only have pumps been attached to the inner circulation of water, wrenching it prematurely from the Earth's womb, but also the water flowing over the Earth's surface has been ruined through senseless regulation of water-courses. As if this were not enough, we also cut down Mother Earth's forest or destroy it organically, and now our own head is finally on the chopping block. This had to happen in order to bring humanity to its senses and to the understanding that nothing in this world goes unpunished. Ultimately every foolish interference with Life's wondrous workings—Nature—must exact its vengeance on humanity itself.

The fable of a former paradise is no figment of the imagination. Although our ancestors may indeed have been engaged in a constant struggle for survival, their lives were still relatively carefree by comparison with the present era. But what will it look like after a further generation, if it continues to go downhill at its present rate? What future will our children have to face if no way can be found to stem this dreadful, festering tide? Today we are already confronted by events that must shake every thinking person to the very core of their being. What purpose is served by continuous self-deception or by deluding ourselves in the foolish hope that somehow things will improve by themselves? If we wish to make life enjoyable and beautiful again, then we must apply the lever where life begins. The origin of life—the ur-substance—is water, which is the guardian of the secret of all becoming and evolution. This secret will only be unveiled once we have come to understand the innermost nature of water.

In exactly the same way that a ripe apple falls to Earth from the tree, water rises out of the Earth of its own accord when it is mature. It matures when it has so transformed itself internally that it can and must take leave of Mother Earth by overcoming its own physical weight.

While correct methods of spring-capture cannot be addressed in great detail here, reference should nevertheless be made to the skills of the ancients. These skills were either lost or had to yield to worse practices. Where possible, the Romans tapped their springs in such a way that at a certain height above the mouth of the spring they placed a cover in the form of a thick stone slab, carefully leveled and smoothed, on the sloping face of natural rock. Having been completely sealed all around the perimeter with driven wedges, a hole was then cut in the stone slab into which the outlet pipe was inserted and secured, so that no entry of air was possible. In spite of and because of their simplicity, all methods of spring-capture in those days were more mindful of the nature of water than contemporary systems. Apart from other serious errors, contemporary systems have also frequently destroyed the conditions of water circulation and metabolism between the spring and its surroundings, principally by over-extensive building works and by disturbances in the vicinity of the spring caused by the use of lime, cement and metal pipe-fittings.

With regard to the actual choice of material for water pipes, where wood was not used, the metals of coins ritually cast into springs were observed for a number of years, and those most resistant were selected for the conduction of the water. Depending on the nature of the water, many of the offertory metals became thoroughly encrusted and thus unacceptable to the respective deity, whereas others were almost entirely eaten away—a sign not only that water can easily decompose metals, but also that every cult has its more profound meaning.

The following statements should not be taken as a recipe for the production of healthy water. It should only be stated here that even in this area a thinking person can make good the sins of his or her ancestors, and is capable of producing good, healthy water in the same way that the Earth does.

It is quite obvious to us that a mighty tree can ultimately develop from a healthy seed planted in the earth. It is thus equally understandable that only ripe and healthy water can produce healthy fruits. In the same manner that a seed in the moist earth requires heat and cold, light and shade, and the energies associated with them, exactly the same applies to water. Water has an equal need of these opposites in order to build itself up and reconstitute itself internally. The very reason water wends its long way through the universe is to maintain and gather these opposites. In every drop of water dwells a world of possibilities. Even the Divine has Its abode in every drop of water. If we destroy water, if we remove it from its cradle of the forest, then we stupidly rob ourselves of our most prized possession—our health. With it we lose our place of birth—our habitat—as well. As restless as water which has been wrested of its soul, we too must once more take to the road. Wherever we alight, decomposition, unrest, ruin, poverty and privation soon begins.

However, if our work is to become a blessing instead of a curse, then we must content ourselves with

living off the interest and the superabundant, ripened products of the Earth's capital. We must never live off the substance of the Earth directly. Water supplies this interest in such a valuable form that we could do without all the rest and live off her surplus alone, taking only what is ripe, once we understand how the Earth manages her household. We still have time and we still have water. If at long last we finally take proper care of this giver of life, then all will right itself again automatically!

Good high-grade spring water differs from atmospheric water (rainwater) in its inner material contents. Apart from dissolved salts, high-grade spring water possesses a relatively high quota of gases in free and bound form (such as carbon dioxide and carbonic acid). Up to 96% of the gases absorbed by good high spring water consist of compounds of carbone. Under the term carbone is here to be understood all the carbons of the chemist, all elements and their compounds, all metals and minerals—in a word, all substances except oxygen and hydrogen.

Atmospheric water (rainwater, *aqua destillata*, condensate) or surface water exposed to strong aeration and intense light influences exhibit a comparatively high oxygen content, almost no salt (or only less-complex forms), little or no free carbon dioxide and bound carbonic acid, and an absorbed atmospheric gas content predominantly of oxygen in physically dissolved form. The expression 'physically dissolved form' here means a more highly-evolved solution (compound), comprising groups of substances not occurring in purely chemical forms of solution, and in which energetic processes are already actively involved.

Following from this, we therefore differentiate between water possessing a high percentage of carbone energies and water exhibiting a high percentage of oxygen energies. The former we will describe as cathode-water and the latter as anode-water⁺. Cathode-water possesses a negative form of energy and anode-water a positive form. These energy-forms are characteristic of what we describe as the sphere, psyche or character of water. Accordingly, high-grade spring water bubbling out of the Earth possesses a preponderance of carbone-spherics—negative energy-forms or negative character—whereas rainwater coming from the atmosphere chiefly exhibits oxygen-spherics—positive energy-forms or positive character.

Apart from the necessary isolation from light and air and a capacity to absorb certain transformative substances (metabolic catalysts), atmospheric water infiltrating into the ground also requires certain lengths of path and periods of time in order to carry out the restructuring process correctly—to become inwardly ripe. Only mature and therefore healthy water can produce good fruits. In the same way that the seed requires heat, cold, light and shade and the energies associated with them for its development, so too does water in order to be able to build itself up and transform itself internally. Water is ripe when its absorbed air contains at least 96% carbon-spherics, together with a quota of solid carbones associated with such a sphere. It is precisely upon this inner ripeness that water's excellence and up-rising or levitative force depends. The longer the path traveled, the more highly-organised and qualitatively higher-grade its inner energy becomes, provided that the appropriate transformative substances are present. The closer to the centre of the Earth, the more complex and aggressive the oxygen-groups infiltrating with the water become.

When atmospheric water infiltrates into the ground its oxygen content becomes concentrated as it approaches the geothermal low point of +4°C (+39.2°F). All the carbones present above this boundary layer, which combine with the particles of oxygen as they approach it, are thereby restructured. Some of these rise upwards as nitrogen while others remain behind as salt crystals.

Such oxygen-charged water can therefore take with it none of the carbones previously brought up from the Earth's interior through the reverse process, below the boundary layer of +4°C. It must leave them behind in the vegetation zone. This vegetation layer is akin to a sub-depot which is continuously supplied with oxygen or carbones from above or below through these reformative processes. It is

limited in depth by the geothermal neutral layer of $+4^{\circ}\text{C}$. The water that sinks further beyond this boundary layer can only take with it those surplus or less-complex portions of oxygen which cannot interact or enter into a restructuring process (oxidation), for lack of the presence of suitably-organised carbones in the vegetation zone.

Due to rising temperatures with increasing depth in the interior of the Earth, which themselves are actually engendered by these interactive processes, the oxygen descending with the water becomes increasingly aggressive. This enables both the interaction and recombination of various grades of oxygen with carbones. These carbones have also become progressively less complex with increasing depth. Ultimately even coals (carbones in a solid state of aggregation) are decomposed and restructured when aggressive oxygen comes into direct contact with them under high pressure (which arises simultaneously because of this). Incidentally, we also find something similar in the transformation of foodstuffs in our bodies: this transformation takes place with the intake of water and air, and activates metabolic processes that condition life.

The higher these reconstituted and ennobled carbones rise towards the Earth's surface, the lower the surrounding temperatures become with the approach towards the boundary layer of $+4^{\circ}\text{C}$. During this process oxygen components of groundwater also become less aggressive. The higher-grade the carbones, the less complex the oxygen groups need be in order to complete the interaction, and vice versa. The relative position of the boundary layer of $+4^{\circ}\text{C}$ also varies, due to fluctuations in ground temperatures caused by the rising and setting of the Sun and the alternation of the seasons. Generally speaking, this layer lies higher by day and deeper by night. When assessing the causes of fluctuations in the groundwater table, the introduction of the already well-known concept of the saturation deficit is necessary, with which the relation between temperature and water-vapour content of the atmosphere is determined.

The climatic conditions of Central Europe are of moderate continental character and are distinguished by maximum rainfall in the summer months.

However, this is associated with a corresponding increase in evaporation due to higher temperature—thus the saturation deficit will be greater. The annual rainfall distribution in Central Europe amounts to 9%-13% in the summer months and 4%-6% in the winter months. According to Mayer's findings (*Meteorologische Zeitung*, 1887), these values for rainfall distribution are to be compared with summer and winter saturation deficits of 3mm-7mm and 0.3mm-1.0mm respectively.

With equal levels of relative humidity, and with rises in temperature from -10°C to $+30^{\circ}\text{C}$, the water content of the atmosphere can rise more than fifteen-fold. Only when data concerning the amounts of rainfall and the saturation deficit have been studied will it be possible to arrive at laws governing the fluctuations in the height of the groundwater table. Generally speaking, however, since at present these two meteorological components can neither be added together directly, nor cancel each other out, fluctuations in the groundwater table must therefore be dependent primarily on their reciprocal interaction. The possibilities for practically applying the here-decisive conformities with natural law encompass the effortless and almost costless raising of the deep-lying groundwater table in deserts.

Apart from the mechanical interplay of forces co-active in the raising and sinking of the groundwater table, another factor to be taken into account is the physical interaction—the absorption of portions of carbone elements and the binding of gaseous carbones, which are diffused (dispersed) through the water at a suitable temperature if isolated from light and external air. The highest dispersion of carbone groups is always present in the immediate proximity of a concentration of oxygen that occurs under these circumstances—which means that the water can complete its reconstitution and become internally mature.

The water lying above the boundary layer now further charges itself with carbones present in the

vegetation zone of the Earth, using up more and more of its oxygen in the process. When a certain degree of saturation is reached following an increase in ground temperatures towards the ground surface in summer, it then has to release carbonic acid, which rises in the form of bubbles and mechanically assists in raising the water in the soil's capillaries. This interplay of forces is boosted by yet another physical energy form—the oxygen-starvation of water over-saturated with carbonates, which creates a negative pressure (vacuum), resulting in the raising of the water.

Good, high mountain springs do not gush out of the ground due to excess mechanical pressure (as has hitherto been assumed), but because of the effects of negative pressure (suction). In the final analysis these are due to processes of material transformation—combination of mechanical and physical effects related to the non-compressibility of water at +4°C. This explains the phenomenon of high-altitude springs that rise on mountain peaks or at great heights, which are caused to rise to the surface through the action of physical opposites.

When carbonates, whose quality constantly improves the higher they rise, draw closer to the concentration of oxygen present in the upper regions of the atmosphere, the last remnants of the accompanying water crystallise under the low temperatures prevailing at this altitude. They descend with the oxygen again as microscopic particles of ice. Now moving without a carrier and continuing to rise, the remainder of the extremely diffused carbonate particles ultimately reach the highest oxygen concentration of all—the Sun—and contribute to the organic, formative processes of the solar system. The reverse process takes place in the depths of the Earth, where carbonate groups—coals—already compacted and concentrated, are decomposed under the influence of the most highly-aggressive oxygen.

The energies in the upper regions of the atmosphere, which evolve from the interaction between highly-complex carbonate groups and less-complex quantities of oxygen, return to Earth again by way of radiation. Conversely, radiant energies that have been released in the depths of the Earth are drawn upwards. Gaseous hydrogen, which becomes denser as it approaches the Earth's surface, offers a resistance to the interactions through which these energies are transformed into light or thermal radiation. In this form they finally reach the Earth and contribute towards the organic build-up of various forms of vegetation. The nature of the processes taking place deep inside the Earth is such that their effects are projected in the opposite direction. Radiation, light and heat are therefore the counterparts of certain forms of energy evolving at the Earth's surface.

Vegetation (material bodies) is equally the result of the restructuring processes continuously taking place. Water is everywhere involved, and with its assistance the necessary interactions occur. Every change in form of vegetation hence inevitably leads to the modification of this inner transformation and development, to an alteration of climatic conditions—and thus to a change in the inner character of the world's blood, water. The properties or character of the Earth's blood is conditioned by the sum total of circumstances that have only just begun to be considered by our experts. The beneficial or detrimental influences of certain substances contained in water, such as chlorine, ammonia, manganese, iron, sulphuric acid and so on, will not be discussed here, since these are dealt with quite sufficiently in the relevant technical literature. From our point of view, we are primarily interested in the oxygen content and the carbon dioxide content in its various bound forms, including its salts.

In various publications it is gradually becoming evident that increasing attention is being paid to compounds contained in water, which manifest themselves in a certain labile state. Major changes in temperature and the influence of light and air can destroy these delicate formations within a short space of time. These formations, however, are what really matters. With regard to ordinary drinking water, this is particularly applicable to semi-bound carbonic acid and how it is incorporated in bicarbonates of salts. However, 'uncombined' carbonic acid is also of great importance, since it is the essential contributing factor to the refreshing taste of good, high-grade springwater, and, as 'associated'

uncombined carbonic acid, it necessarily contributes towards maintaining the labile bicarbonates of salts in solution. Above a certain concentration the content of uncombined carbonic acid endows the water with aggressive properties and has a detrimental effect on metal surfaces, particularly with the presence of oxygen. The importance attached to the supply or exclusion of air is due to the fact that in groundwater, for example, pyrite does not decompose if air is excluded. The moment oxygen is introduced, as a result of human activity, sulphuric acid is formed from pyrite.

Attempts to transport certain medicinal waters while still retaining their properties have so far been unsuccessful. In those waters, whose efficacy is in part attributable to their content of certain unstable iron compounds, evidence of decay due to the entry of air and light can already be detected—although on first inspection everything appears to have been retained in the water qualitatively and quantitatively. A certain length of time after discharging from the mouth of the spring, all radioactive waters lose a great deal of their medicinal effect. Their emanational activity is greatest in very early stages, and when conducted in pipelines this can only be maintained with the implementation of very specific precautionary measures. Naturally, this is also valid for other types of water.

In Professor Dittler's opinion, radioactive gas is added to medicinal water mechanically and already loses half of its activity within four days. According to L. Winkler, the oxygen content of water lies between 6cm^3 and 8cm^3 per litre of water, depending upon the water temperature. This quantity is very slight compared to the amount of soluble carbon-dioxide in one litre of water, which decreases from 1500cm^3 to 1000cm^3 as the temperature rises from $+4^\circ\text{C}$ to $+15^\circ\text{C}$. In general great care should be taken to ensure that the hydrogen ion concentration (pH) does not fall below $0.7 \times 10 = \text{pH}7$, since the aggressiveness of the oxygen will eventually damage the supply pipe. In addition the water's dissolved carbonates will also be precipitated as a result of the oxygen's activity.

Experiments carried out in order to determine the relation between water temperature and external effects of a purely mechanical nature have yielded no satisfactory result. Kerner tried to establish formulae demonstrating that the temperature t of a spring is a function of altitude and the petrographical composition of the mountain range. Thus, in the case of the springs at the foot of surface moraines in the Dolomites, for example, he presents the equation

$$t = 8.00 - 0.13h$$

according to which water temperature should decrease by about 1°C (1.8°F) with an increase in altitude in the order of 200-300m (600-900ft). However, J. Stiny states that the functional relationship between altitude and water temperature should not be adhered to too rigidly, since many other factors are also involved, including the 'motility of the air'.

Keilhack refers to heat influences active in the water itself, resulting from processes of oxidation and hydrate formation. Because of this function, these quantities of heat attain considerable importance. Where carbone appears in the concentrated form of hard pitcoal or brown coal, an additional heating effect occurs which is conditioned by the oxidation or combustion of coal seams in the interior of the Earth.

A phenomenon occurring in many places relates to the fact that springs deliver cooler water and rise higher in summer than in winter.

In summer a positive temperature-gradient exists from the stratosphere to the lithosphere. During this period cold, once strongly oxygenated snow melt water emerges into the light of day. In winter, on the other hand, there is a negative temperature-gradient from the atmosphere to the lithosphere, and frozen ground prevents the infiltration of surface water so that the relatively oxygen-deficient water that infiltrated during the summer rises from the depths. In both cases the water has had an opportunity to charge itself with carbonates over an extended period, and to restructure and ennoble itself appropriately

under the influence of a suitable temperature gradient, with the result that such springs deliver excellent water. Both the length of time available for the water's processes of ennoblement inside the Earth, and the oxygen content of the initial parent water are decisive. This is because if water richer in oxygen can reach deep levels, reconstituting processes take place in more lively fashion. Since snow melt water sinking deeply into the cool layers of the ground has a greater content of oxygen than ordinary rainwater, it hence follows that cooler water appearing in summer must also be of a higher quality.

Many a hydraulic finding (today viewed from a purely mechanical standpoint, with scant consideration given to its physical aspect), will lead to an entirely different line of reasoning once physical factors referred to so far are taken into account. The result of this fundamentally different way of looking at things—from a physical instead of a merely mechanical point of view—is that my discoveries will never be incorporated into the contemporary complex of hydraulic opinion. My ideas will not be understood as long as adherence to the current one-sided approach persists. This applies to contemporary river-regulation as well, and especially to the internal destruction of water's character through its use as a raw material for machines. The disastrous consequences caused by modern forestry are to be discussed in a separate chapter. In recent years even chemistry has come to realise that it is totally inadequate to characterise a water or a medicinal water quantitatively or qualitatively by its given compounds of salt alone.

The restructuring processes constantly taking place in Nature can readily be emulated artificially in order to produce healthy, ripe water, once appropriate physical forms in which necessary restructuring processes can proceed can be manufactured.

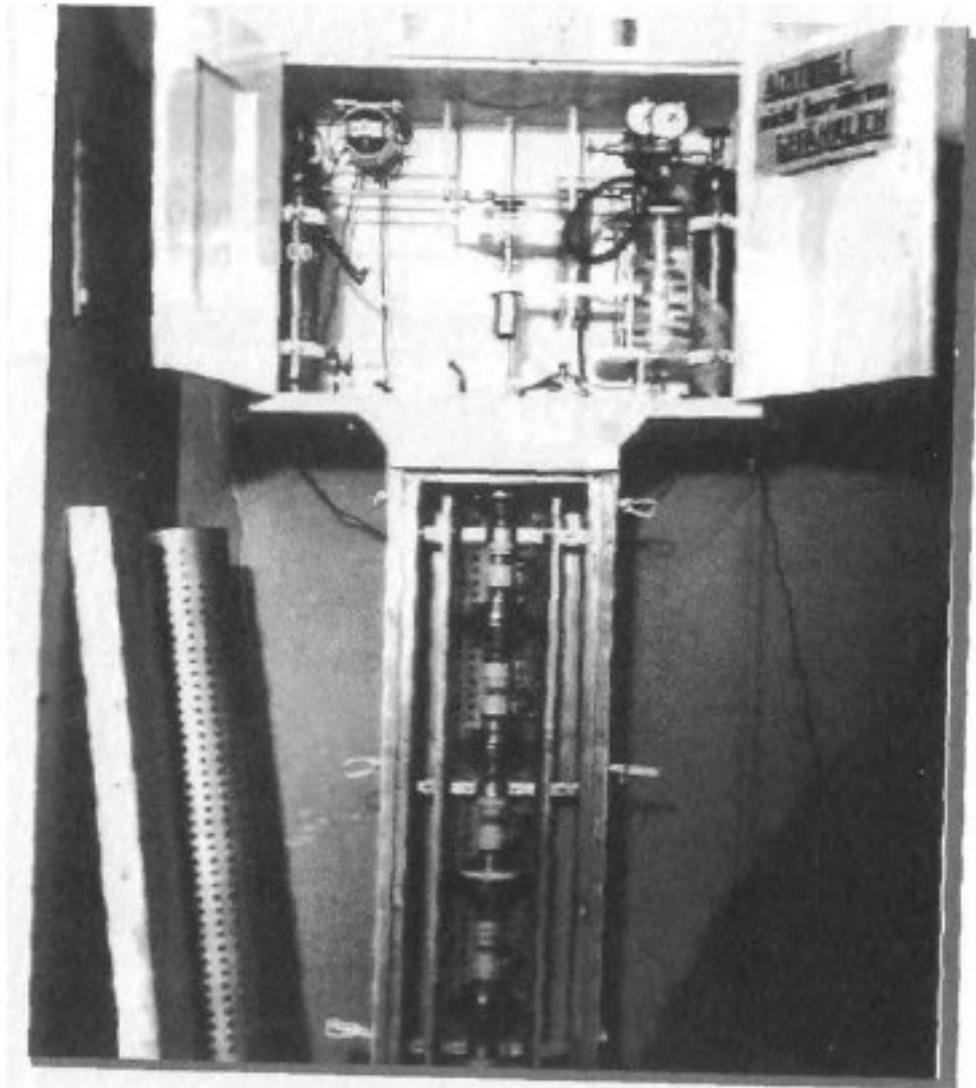
The change in freezing and boiling points, evident in certain types of water, led to the finding that the freezing point of aqueous solutions is dependent on the number of molecules contained in one litre of water. Electro-chemistry was the first to take an approximately-correct path, in that it began to provide evidence of what really matters here. Whereas a solution of many organic substances (organic in the sense of modern chemistry) conducts very little electric current or none at all, precisely those substances (carbones) contained in various types of water are classified as electrolytes.

If the dissolving of carbone groups characteristic of water and medicinal water is properly carried out, ionisation can also occur without application of a low-voltage current. The fact that the conduction of electric current through aqueous solutions has been successfully achieved (in which ionisation of saline solutions occurs naturally without a detectable loss of electrical energy), provides proof of the above axiom. This phenomenon becomes all the more understandable and also gains in practical value when the explanation of the true nature of electricity is taken into account.

While the method of describing water by specifying the salts in their dissociated form is certainly a small step forward, other energetic processes taking place in water are still far from being exhausted. The elucidation of these processes will radically change contemporary thinking and will enable practical applications of electricity, providing humanity with undreamt of possibilities for development.

The apparatus for the preparation and production of healthy drinking water (see fig. 9) cannot at the moment be described in more detail for patent reasons. Apart from this the means of producing other forms of energy directly from water, in a physico-mechanical way, should anyway be evident.

Had our scientists taken Nature as their teacher instead of consistently and stubbornly pursuing their own goals, we would doubtlessly have been spared our present misfortune. It is high time the many mistakes and errors made thus far (some of which occurred only recently while others have accrued from earlier epochs) should be rectified as quickly as possible in the interests of an increasingly destitute humanity. Any untoward delay in this necessary change in approach cannot be countenanced. To wait until the ponderous scientific apparatus has laboriously adapted itself to new guidelines is out of the question.



Detail einer Wasser-Veredelungs-Apparatur Viktor Schaubergers
Abbildung im Original von „Unsere sinnlose Arbeit“ nicht enthalten

Apparatur zur Herstellung von quellwasserähnlichem Trinkwasser
*Praktische Umsetzung des österreichischen Patents Nr. 142032 von und i-
durch Viktor Schauburger*

Water In Ritual, In Life And In Medicine

The following section is about the deeper implications of water in the life and ritual of our ancestors,

and takes the form of an investigation of historical symbolism, borrowed in part from the works of Martin Ninck, Norden, Weinhold and others.

Having little or no time for inner composure, or the contemplation of human developmental history, modern people naturally see water as a purely chemical substance, adequate for our physical needs as bathing water and possessing a purely practical value as the driving force for our power stations. Our ancestors viewed water from a completely different standpoint, seeing it as the source of all life. Many legends and transmissions from the mythology of various earlier peoples conceal a much more profound meaning than is usually ascribed to them by their more rational but less deep-thinking descendants.

The point of view expressed in my explanations, that water is to be considered the blood of the Earth, finds its parallel at many points in our ancestor-worship. Various sayings and depictions make reference to mother's blood, mother's milk and the maternal tears of our ancient Mother Earth. Even modern linguistics owe much to the symbolism of earlier epochs. It is therefore no accident that the word 'spring' has a feminine connotation. The figures of the water-goddesses, the nymphs, are always coupled with stories of love.

Nymphs are ready at all times to give birth, as Goethe also said of the spring in Faust:

“For a spring abrim with songs of love is constantly reborn.”

Wuttke-Meyer also cites the following old German custom in connection with the fertility of springs. When going to a spring for the first time, every pregnant woman had to 'silver' it by throwing in a coin, otherwise it would dry up. Apart from the springs, rivers and lakes were also highly venerated in the rituals of the ancients. Even today we find that the distinguishing characteristics of the principal rivers are allegorically portrayed by their tutelary deities. According to whether the water is in motion or at rest, it will be ascribed either a male or female fertility potency. In 'The History of Religion' by Chant de la Sauss, we discover that the ancient Egyptians believed the ur-water Nun to be possessed of a dual potency.

In his lyrical ode, God, Nature and Cosmos, Goethe writes:

There, where water splits in twain,
Life is e'er set free, unfolding its domain,
And in emerging from its source,
Waters blessed with vital, living force.
There flock beasts, a-thirst for flowers,
Midst thrusting boughs and leafy bowers.
And in Faust, the same German prince of poetry declared:
You sources of all life,
upon whom hang Heaven and Earth,
you spring forth, you overflow!

In order to explain the importance of water in medicine, it would be best to permit a doctor still connected with Nature to speak for himself. Dr Schew writes:

“In the nature of things, water is the great bestower of energy. It is the most invigorating, and at the same time, the most powerful of all tonics. In this regard, there is nothing else like it in the whole world.”

In his book on natural methods of healing, F. E. Bilz lets the great poet himself express this point:

“This vast expanse of water—the ocean—is the condensed breath of God, without which all would be but a cold and barren mass of rock. It is a breath that has endowed the Earth with

fertility, beauty and life.”

The role played by water in the constitution of the human body resides in the fact that the body consists of up to 90% water. It is much easier for human beings and animals to go without food for a long period than to go without water. The average person can survive for about three weeks without food and water. However, if water containing a certain quantity of nutrients in material and energetic form is drunk, then such a person can last for considerably longer. A Dr McNaughton tells of a madman who was able to survive for 53 days on water alone.

Today, modern civilised people drink predominantly bad water. As a result they have to a large extent given up drinking any water at all, thereby inflicting serious damage on the body. Dr Munde writes:

“Recent investigations by Genth, Bequerel and others reveal that an increased discharge of moults follows from an increased intake of water in the body, whereas a reduced intake of water results in a greater condensation of the same, and a greater quantity of uric acid in the urine—a fact of which those stricken with gout should take heed. As can be determined by comparing various medical experiments, there is a certain optimum quantity of water for every individual, which very significantly raises the quota of solid matter in the urine.”

In conclusion, attention should be drawn to the fact that people who consistently drink good, healthy water also have a good appetite and consequently probably stay healthier.

Conclusion

While the previous explanations may have been couched in rather harsh terms, this is done in the public interest. The danger will increase daily should contemporary methods continue to be applied. If determined action is not taken quickly then chaotic conditions will inevitably arise within a very short space of time. There is absolutely no time to be lost.

It is understandable that our hydraulic experts take no delight in the ruthless revelation of this deplorable state of affairs. However, this does not alter the facts of the matter. Numerous attempts in recent times to withhold my many informative dissertations from the public by removing relevant articles from books, newspapers and periodicals are childish. By so doing, they will ensure that I make even greater efforts to place these expositions before the public. Such attempts only demonstrate a certain weakness, and in any case are merely proof of the irrefutability of what I have stated. Frequent protestations that ‘contemporary methods are being practised world-wide and hence cannot be wrong’ mean absolutely nothing. At best, they serve only to explain why the whole world is in such an appalling state. In this situation the best strategy can only be a ruthless attack, in which all parties are at all times entitled to the right of defence and rebuttal. All those who wish to perpetuate the status quo for fear of losing their jobs should bear in mind that an existence built on false foundations cannot in the long run be maintained. That is, even when it appears guaranteed by security of tenure, because an impoverished people pays no taxes and therefore cannot afford an expensive bureaucracy.

When they become ill, let those who continue to believe that water is a lifeless substance to be controlled by mathematical formulae alone, then summon a mathematical genius to their sickbed instead of a doctor. Their fellow men will then be rid of such narrow-minded thinkers as fast as possible.

Unfortunately the catchword ‘systematisation’, which all too frequently governs our methods of working nowadays, has found greater favour than is good. Today, the expression ‘logical thinking’ or ‘mathematically-trained thought’ conceals sheer intellectual incapacity or mental inertia. By far the largest number of discoveries and inventions have not been made on the paths trodden by scientists,

often to their astonishment, if not to their great dismay. The overall progress of the world is caused by a certain measure of discontent, the characteristic phases of which are revolutions or wars. Similarly great advances in the realm of the intellect are brought about by revolutionary thinkers.

A certain myopia has gained ground even in the empirical methods practised in contemporary hydraulic research institutes. People still cling desperately to the external appearance of a given phenomenon, thereby failing to study the far more important nature of its inner processes. Indeed, amongst those in this field who are responsible there are some who have already recognised the limited value of such purely superficial observations. Yet, for reasons of job security, they regrettably continue to abide by tradition.

There are many greedy individuals who believe that water, oil, coal and other precious substances can be torn from the Earth with impunity. Concerned only for their own well-being, they are quite prepared to create a black market not only in foods but even in the water destined for rich and poor alike. Such persons should be warned that the despair of the great mass of the people will bring about a much earlier end to their selfish endeavours than they could ever foresee. Everyone else, especially our young people, should co-operate as a first priority in the rebuilding of our former indigenous forest, and with this the restoration of healthy water to the Earth. Then we shall all be able to survive and humanity will continue to exist.

This year [1933] is to be remembered as the hundredth anniversary of Alfred Nobel (1833-1896), the Swedish chemist and engineer, who became a millionaire through the invention of dynamite in 1866. Becoming aware of the tragic consequences of his invention a few years before his death, he established the Nobel Foundation, no doubt in the desire to make amends for the frightful harm he had caused. Millions of human lives have since fallen victim to this fearful device of destruction and war. Further millions, perhaps even whole races, will yet be robbed of their lives, of their very existence, if humanity continues to avail itself of such inventions. It is not unique for humanity to have to traverse tortuous and often dangerous routes before arriving at a better understanding of a matter.

If we study Gilbhart's article, which appeared in the business section of the *Deutsche Zeitung* (number 242, 1933), we see that the German government is now in the process of rectifying a serious mistake committed about a hundred years ago. It caused perhaps even greater harm than the use of explosives in modern warfare. This article was titled 'New Forestry'. Scientists have long been aware that many practices in modern forestry are unsound and that our forests have declined in quality since the introduction of scientific forestry methods in about the middle of the last century. Yet they have so far failed to show the necessary courage to own up manfully to their mistakes. With the prohibition of clear-felling much has been achieved, but not all that is necessary. This was done merely to gain time in order to safeguard their employment, or at least to make provision for their old age at the expense of the general public. It will not succeed, however, because it will be studied in such detail that every schoolchild will understand what terrible evil has been foisted on the entire human race by forestry's supposed science, as a result of its ignorance of the true facts. The same applies equally to modern agriculture and other contemporary achievements.

With regard to armaments and preparations for war, it is possible to render harmless all bombers, dirigible gas balloons and even gas and explosive filled grenades by the simplest of means. All other weapons of war will become like children's toys once humanity fully understands the energies that slumber in water. In this regard, equal care will also be taken to ensure that everyone learns how to use these forces. For if humanity is truly intent on self-destruction through the use of force, then it should have the requisite means placed at its disposal, so that it can fulfill this desire as quickly as possible.

This should leave the reader with mixed feelings. It should be quite apparent that, in view of many undoubtedly correct observations and well-founded clues, it should not be necessary to attack science

and technology as fiercely as they have been attacked here. Unfortunately, however, attack is absolutely necessary, because it would be utterly futile to seek any other worthwhile contact in this direction.

The following explanations, which will be further elaborated in later publications, should furnish sufficient proof of the impossibility of a compromise or of the incorporation into the existing scientific edifice of discoveries only touched upon here. The errors of contemporary science and the damage wrought by today's technology are too great. With the present consumption of coal and oil at a level of two thousand million tonnes per annum, the moment when this important source of energy will be exhausted is coming disturbingly closer. Within a few centuries, as science has calculated, the last reserves of oil will have been extracted from the Earth. If we continue to busy ourselves in the same old way, we will have to search for other sources of energy since the loss of these energies would signal the end of our civilisation.

Science earnestly endeavours to discover new forms of energy and also believes these can be obtained through research into cosmic energies. However this pursuit demonstrates not only an almost boundless bias in thinking, but also furnishes irrefutable proof of the untenability of scientific endeavours and objectives. To put it mildly, they can only be described as Utopian. A science possessed of such goals cannot possibly be taken seriously, and cannot claim the right to a leading role in the fate of humanity.

The direction indicated earlier is far from being the only correct one. Nevertheless it is closer to the truth and is thus able to throw a revealing light on these misconceptions, since the ascertainment of the purest truth is an unattainable goal for humanity and will probably ever remain so. The very idea of using alternative (cosmic) energies once all the reserves of coal, oil and timber have been exhausted is so absurd that this alone condemns the whole of science.

Temperatures prevailing in the interior of the Earth are the product of interactions that take place between carbones contained in the Earth and oxygen entrained by infiltrating water. Were the last reserves of highly-organised carbones eventually to be totally stripped from the Earth, these interactive processes could no longer take place and the Earth would cool off. Since it is practically impossible to remove all carbones from the Earth however, these cooling phenomena can only occur to an extent commensurate with the severity of disturbance to these inner interactions. These disturbances are caused by the removal of carbones, or by ventilating the Earth. Conforming to natural law, the effects of today's technological and industrial intrusions into the Earth must therefore lead to the following results:

If various external influences such as bore-holes, deep wells, shafts and open-cut mines, excessive extraction of coal, metals and minerals, all act to inhibit these interactions, they will provoke a cooling of the Earth's crust. The atmosphere will also cool off as a further consequence. These causes, which ensure an excessive accumulation of oxygen in the atmosphere, must also result in its concentration due to the influence of cold. In the course of time air strata normally subjected to low atmospheric pressure will become heavier in the absence of upward-streaming groups of carbones. These strata will sink downwards, over-saturating both the vaporous and the fluid hydrosphere with oxygen. If, having now become over-saturated with oxygen and heavy, this water succeeds in infiltrating into deeper strata of the geosphere, into the carbonosphere for example, then under the prevailing high temperatures the accompanying oxygen will trigger off lively oxidative events.

The cumulative effect of these will result initially in localised explosions, eruptions or earthquakes, and subsequently in ruptures of the Earth's surface. This will provoke the sudden release and elevation of gaseous carbone groups. These relatively elementary substances will first interact with atmospheric oxygen only at great altitudes, and in various hot zones will trigger off a regional redistribution, causing sudden cold spells and the movement of stronger or weaker air currents.

In equatorial zones the ascent of these carbones will be enhanced by the stronger reflection of heat.

Under certain circumstances the reciprocal effects thus provoked can become so large and so aggressive that the zone of interaction in the lower levels of the atmosphere extends downwards in the form of funnel-shaped clouds. This leads to the general formation of tornadoes and the violent cyclonic storms which have long been known in equatorial regions. Through these powerful interactions, water-vapour will be forced into localised concentrations, resulting in the formation of heavy thunderstorms and the occurrence of cloudbursts. Apart from large quantities of carbonates, substantial amounts of water-vapour are also expelled into the atmosphere during strong eruptions, offering increased resistance to the Sun's radiant energy, and hence to an increase in heat (through the heat-absorbing function of atmospheric water-vapour).

The sequel to this phenomenon is a short-lived, luxuriant profusion of vegetation (a phoney agricultural success) in which consumption of gaseous carbonates (carbon dioxide) is intensified. These substances, however, can no longer be produced from the Earth's interior in the necessary and regular proportions. This leads to a qualitative decline in various forms of vegetation, and to a decomposition of the dynagens reflected back by the Sun, namely to a systematic cooling-off, and therefore to the inauguration of a new ice age. These developments will soon be brought about by the devastating activities of those involved in forestry, agriculture, water and energy-resources management because, as a result of their predominantly one-sided way of looking at things, the regularity of the water cycle will be inhibited, and with it the energy cycle and the upward flow of carbonates. As already mentioned, it is inevitable that humanity's present absurd practices will bring about a drop in the quality of dynagens reflected back by the Sun. Ultimately, by arresting the oxidative processes in the atmosphere, the generation of heat will also be reduced.

It can thus rightly be asserted that the next ice age will be virtually dragged in by contemporary science and technology. For this reason the manifestations of economic decline, familiar the whole world over, must logically keep pace with the advance of technology. This state of affairs will worsen at the same tempo as the sources of energy required to maintain technological progress are removed from the Earth. The greater the progress we achieve in technology, the deeper we will and must sink culturally and economically. However, this is not the end of the matter!! With the curtailment of the absolutely essential oxidative processes in the Earth, enormous aggregations of water must make their appearance, initially in the atmosphere and subsequently in the Earth, because in neither case can it be assimilated or reconstituted. Now heavily over-saturated with oxygen and poor in carbonates, this water, which either infiltrates into the Earth or quickly re-evaporates and streams upwards into the atmosphere, will displace its freezing point due to the absence of its partner, the carbonates. This results in an unavoidable and fundamental change in general climatic conditions.

Furthermore, when the potential of the groundwater, now possessing a unipolar charge, has been reduced through lack of carbonates, it is forced to sink down to depths where carbonates may eventually still be present. There it shifts its boiling point, oxidises prematurely and gives rise to violent eruptions. With the final subsidence of the water, all vegetation will gradually disappear in the same way that it once appeared. After the occurrence of immense catastrophes, which will manifest themselves in the form of earthquakes, cloudbursts, whirlwinds and so on, the vegetation zone, in conformity with natural law, will slowly but surely be covered with ice. Deluges and catastrophic inundations are already on the increase everywhere today, to which approximately 20 million human lives will fall victim. Presently these are only harmless events compared to the disasters which can be expected in the future. These must inevitably occur if humanity continues to allow itself to be guided and controlled by contemporary science.

As a case in point, the present explanation for the formation of rain is so incomplete that it is hard to believe how such a hypothesis could have been upheld for so many centuries. Science explains the origin of rain as the condensation of atmospheric water-vapour due to the presence of cold. This

explanation is approximately true in its widest sense, but in the final analysis it actually describes only a very unimportant secondary effect. Even the formation of rain, as elementary experiments prove, must be attributed primarily to the above interactions. These can only arise when ascending carbonates intersect with descending oxygen groups attached to microscopic particles of ice.

Were the scientific view correct, then in the higher strata of the atmosphere it ought to rain in winter and snow in summer, since it is well known that air and ground temperatures swap places with each other with the alternation of the seasons.

In consideration of the events described only in broad outline here, there is only one practical option left. That is to make humanity either suspicious or rebellious. Only thus, at the eleventh hour, will it still be possible, perhaps, to trigger off the necessary impulse towards recognition of the unimaginable danger that exists. This is a danger which today threatens a hoodwinked humanity regardless of race or nation. There are people, endowed with an almost God-given cluelessness, who have brought us to this terrible impasse and would lead us on into chaos also. Those apart, there ought to be people with enough humanitarian sensitivity to prevent our children from being led unawares into such frightful cataclysms. The possibility still remains to rip the blindfold from the eyes of sensible individuals and with their help, to undertake a rescue attempt. Our young people would doubtless energetically support this because it is their future that is at stake. There is no herbal remedy for stupidity, and therefore the unconsciously insane can hardly be called to account. However, if the causes of decline appearing everywhere are recognised for what they really are, then any continuation of these perverse practices, which are consciously leading all humanity towards disaster, would unquestionably be deemed a criminal act.

Conforming to natural law, the systematic disturbance of the water balance will reliably happen as a consequence of current industrial, technological and economic practices, leading to the increasingly extensive suppression of interactions that condition all life in Nature. The logical outcome of the cessation of oxidative processes occurring between basic formative substances is an increasingly widespread cooling and desolation of the all-nourishing vegetation zone. If the present *modi operandi* continue to be applied, then apart from the emergence of disease and degeneration, world-wide famine must inevitably follow.

The insights gained from the preceding explanations must force us to the following decision. We renounce the grievously damaging achievements of contemporary science and technology and we strip our reigning intellectual masters of their power. Alternatively we allow them, little by little, to strip us of ours, and by every trick in the book to put us on ice (in the true meaning of the term). In this scientifically contrived, conserved form, we will be preserved for as long as conceivably possible. At the very least we will eventually provide a future humanity with the cautionary end-product of a bygone 'culture'.