

Natural Law and Evolution. Towards a Natural Classification of Order. II.

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This study seeks to understand "natural law", "evolution" and the forms of determination in a new way through looking into their context from various viewpoints. Order as the conceptual frame for all forms of determination is seen inseparable from consciousness and being. A perspective of natural law is unfolded that aims toward analytical scientific reality as well as the synthetical reality of the artist.

Natural laws are understood not only according to their building the static fundaments of the world, but also in their capability for development. The determination of nature operates on the different levels of being with differing dynamism: The "house of being" possesses of nine stories, each of which displays an altogether different relationship of order, being and consciousness.

To define closer the relationship between order, being and consciousness is the thought prevailing in the background of this investigation (serving at the same time as an introduction into the extensive study of this subject within the monograph "Ordnung, Sein und Bewusstsein", ref. (9)).

(Author)

3.0 Patterns of determination

In the following we will list some aspects which will transmute the idea of the logic form of determination into the pattern as it is appearing to the cognicent consciousness. The following patterns of determination may be called for as typical representations of the underlying form of determination (c.f. scheme 11). The laws which operate in the I.level of unity or consistency are of the kind, in which we have described law (1.1) so far; *logical structures*, instances of order, laws of possible determination.

On the II.level of polarity we find pure numbers as an expression of specific quantities. We know by physics that the world is numbered and that the natural *numbers* reappear constantly as its evolutionary law. The

world of polarity (as seen, for example, in electro-magnetism) is reflected in *equations*.

On the III.level of relations we find *proportions*, intervals, contexts and regular forms as we know them from music. All knowledge is born by comparison and comparison and alignment create the origin of all harmony (c.f. (6)). *Correspondence* is the method of linking the unequal but similar.

To illustrate the IV.level of system we may follow in analogy a development of simple graphical functions. In architecture we know these elements: (I) point, turning point, position; (II) line, which in turn is direction; (III) area with proportion; (IV) space, in which Gestalt and its metamorphosis comes into play; (V) on the next level we find space-time, change *within* space; still more complexity on the higher levels: (VI) we find time-lapses, cyclicity, changes which occur according to certain patterns; on the still higher levels we come to the idea of a closed (VII), open (VIII) and changing (IX) universe. If we continue to think within this image, we arrive at analogies of these functions in an evolution of simplest forms: we mentioned numbers (II), proportions (III), simple geometrical forms in areal space (IV) - square, triangle, pentagon etc. Likewise, the simplest geometrical forms in space - for instance platonic solids (V); archemidian solids (VI) on the next level; followed by simple crystal-variation- patterns (VII) to more complex patterns of movement as we know them from non-euclidian geometry and catastrophe topologies, where regularity appears within the irrational (VIII). All these types of form are systems, ways in *transforming* the *organic pattern of the world* into a network of functions, as a *metamorphosis* of basic patterns. Good examples of systemic thinking may be found in (19, 20). Beyond the metamorphosis of regular pattern we find on the V.level of individuation of form the free variation of new patterns which are unique and without precedent. How can we behold the meaning of forms which are uniquely irredundant and appear without a link to other forms? Obviously solely by a *precedent logic* which aims for the irredundant and unique and explains the general out of the individual. Here the scientific approach has to merge into artistic perspective and the human appears as the measure of things.

We see that the object of perception gradually changes from being quantitative to being qualitative. Form having come to itself in individuation, begins to act on the VI.level as a co-former, as a *metaform* of its form. The mode of cognition which emerges as a *creative logic* on this level, develops the qualitative-validated subjective sensing into a quantitative-systemic objective perspective by anticipating the preformation of quality within quantity. That is to say: the fact is considered that, for example, numbers, as well as geometric patterns appear to be potential bearers of particular content.

Scheme 11: Patterns of Determination

I	law	order in itself	determination	logical structures
II	objective	numbers	electro-magnetism	equations
III	knowledge	geometry/proportion	regular patterns	correspondences
IV	world	transformation of form	organic patterns	metamorphosis
V	human	form-creation	new designations	precedent logic
VI	value	metaform	co-formative form	creative logic
VII	purpose	"Gesamtkunstwerk"	objective thought	law of small numbers
VIII	might	borderline of experience	irrationality	aesthetic intuition
IX	will	that which is happening	consc.willed real.	surrender to being

In comprehending natural law therefore, for instance, by geometrical thought, it is quite essential to capture the qualitative aspects of simple form in order to lead these to further resonance within the human value-generating activity. *Resonance* of the VII.level bases on the *law of small numbers*, that is, the recurrence of regular, basic patterns in complex contexts. To embody natural law into human creativity, that is, to co-engage the objectifying thought of natural determination, a focus on simplicity and economy of form (oiko-nomos, law of the house!) for the purpose of inbedding the human being into the ecology of the purpose of life, into the household of nature, attains great significance.

A principal *borderline of cognition* of natural principles being effective in the cognitional activity itself by its focusing on simple structures and not being linked by essence to precedent-free contentual aspects and processes, it is essential on the VIII.level to incorporate the analytical cognitional form into synthetic-aesthetic sensation which is capable of capturing complex contextual patterns by artistic intuition.

In order to bring about within human activity the more minute aspects of the efficiency of natural law - the hidden might of nature - education of human imagination by aesthetic intuition into the intuitive-synthetic and final (from within the result) operating determination of nature is indeed valuable. A synthesis of scientific and artistic forms of cognition leads to this ability, linking ratio to the irrationality of being.

Beyond the operation of the rational and intuitive understanding of law there lies on the IX.level the vast field of formative causation (c.f. (4)) within the process itself. Whatever (the whole jointly) *wills* to happen, happens. To understand this dimension of natural law, the fusion of reflecting and sensing cognition into concrete action is needed. The practical situation offers its own way of revelation of form which may often be neither rationally nor aesthetically comprehensible and yet demonstrates all-pervading determination. Even that which seemingly stands beyond any cognizable or aesthetically sensible form, is part of the universal order by the empowerment of its happening.

Human aiming to work with natural law on this level - beyond rational theory and intuitive openness for "tuning in" to the total context -, has to be able to integrate any occurrence which enacts (seemingly by chance or disturbing) within a process of realization as an aspect in favor of the prosperity of the whole process. This calls for a will, which has further developed aesthetic sensation to a willingness of *surrendering to being* toward the realization of the seemingly impossible.

3.2 Methods as Expression of Law

As the levels of determination may not be separated from the fact of *interpretation* of consciousness, likewise the exposition of laws within cognizing consciousness cannot be separated from the *methods* which generate this interpretation. This thought has become quite obvious within the descriptions above. Similar to the levels of interpretation, a plentitude of methodical tools is available, which engages consciousness in the direction of particular types of being, respectively, which make use of certain "laws of nature" in order to achieve a clarification of their scope.

According to *Confucius* three fundamental methods of learning exist:

"The first is the easiest: By reproduction.

The second is the most difficult: By individual reasoning.

The third is the most bitter: By experience."

Clearly we may rediscover here the basic types of natural determination: The causal experiment, the final questioning for a new possibility, the reproduction of a given intention. In the realm of nature research the experiment is better suited to the existing types of law. The human being or new inventions rather ask for a final questing mind. In the field of ethic, moral and spiritual values the reproduction of tradition is advisable, for the accumulated knowledge of millenia cannot be distilled out of ready experiments and considerations of detail. Within the esoteric tradition of humankind we find numerous methods of practice for each level of determination, which educate the corresponding type of cognition. But the essential element of a good method is repeatability and intersubjectivity.

From the vast repertoire of methods we will give some examples in the following which follow the line of thought regarding the types of interpretation (c.f. scheme 12):

A method which leads to I.level of non-interpretation, is the practice of *Zen* which dissolves into *emptiness* of consciousness ("shunyata"). The observer practices in front of a white wall and learns to completely free his/her mind of any interpretative impulse. The objective of this method could be summarized into "back to the original", that is into the singularity of the observed. Herby the determination of simplicity and the *undifferentiated* is enhanced. There is always only *one* original - even in the age of high-precision reproduction techniques.

The naturalistic interpretation which operates on the II.level of polarity, calls for precise *discernability*. This may be educated by a method of searching for *antagonisms* (or *paradox* on a more advanced level). We are

Scheme 12: Levels of Methods of Educating Consciousness

I	emptiness	"back to the original"	the undifferentiated
II	discernability	"light out of the shadow"	antagonists
III	comparative ability	"knitting of mutual relation"	complements
IV	intuition	"unification of all factors"	simultaneity of circuit
V	creativity	"surprise of the new"	disenrollment of form
VI	ability to learn	"to live in the question"	thankful for the given
VII	perception	"to allow to be perceived"	sensing by will
VIII	breath	"to surrender to life"	intensive breathing
IX	sexuality	"to be revived by life"	alchemy of the body

usually very skilled in discovering the implicit negative within the positive. A greater benefit and surprise lies in the opposite method, that is by making a positive mode of appearance cognizable via the precise formulation of its lack. *A.J.N. Judge* has developed mastery in the latter method (very humorously, for example, in a paper (21) which enumerates 114 possibilities for wrecking of international bodies, conferences, study groups etc.), whereby, paradoxically, a positive counter-image of the factors of successful organization are underlined. The objective of this method could spell as "light out of the shadow".

Comparative ability leads into the realm of the III.level dialectics of synergetic contextual determination. The thinking in *analogies* (22), the generation of *correspondences*, especially conceptual *triads*, educates into this perspective. Allegory calls for interpretation by complement. Analogous to the pairs of opposites, this method would call for the finding of the "balancing third", the "golden mean", the *complementary* associate. The objective is "knitting of mutual relation". This dynamic position of thinking and cognition has especially been formulated by *Rudolf Steiner* for the paedagogical and social realm (23). The Occident, due to scholastic tradition, has become so used to the method of either/or that the practice of *as-well-as* should lead to a turning point on all levels.

The representation of the IV.level of wholeness asks for a method which addresses not only the thinking mind but also the human as a feeling and willing being - that is, his/her bodily-sensible-mental totality. The symbol requires for an alignment with its content in the very bodily sense, to be understood at depth. For human containing in symbolic interpretation all the aspects of the universe ("in His image and likeness..."), any form of observation should be capable of localizing its bodily-sensible correspondence. As a perspective of thought, observation of circuits may introduce into the form of determination of wholeness. The "unification of all factors" transcends likewise the rational-analytical mode of thought as well as the linear flow of language. The *simultaneous enhancement of all parts of a whole* is pictorial and intuitive. *Intuition* on the other hand presupposes the integration of thought and feeling. The method which initiates into the V.level precedent-logic of *creativity*, operates by *surprise*. The essence of a piece of art lies in achieving a fusion of its elements which is surprising and in turn stimulates the sense of newness and uniqueness. For the artistic-creative process being the discovery of the new *per se*, there is no method other than perhaps: to invent a method. Yet spontaneity does not follow an idea of indetermination but is created along a circuit which freshly chooses its center in particular by *disenrollment of form*.

Methods to intensify the VI.level experience of value are numerous. A very simple one is the practice of *thankfulness for the given*. Thanksgiving opens for the exchange of quality and lays down a foundation for the symbolic transformation of consciousness. To educate the meta-form of consciousness is to learn the *ability to learn*. The objective is "to live in the question". The "living in the quest" opens for the quality of the *other* and stimulates the readiness to accept the unaccustomed and to grow beyond the limits of the so far acquainted.

Beyond methods of growth, we come to VII.level methods of "breeding" consciousness by "multiplication". They employ the fact that human is linked to all other being by his/her organs of *perception*. By a particular method of viewing (for example - in observing not the detail, but peering into the whole and in turn

ensuing the detail by will), consciousness learns to "break free", that is, to dislocate its relation to solely a particular body and to entrust into all of being. The secret of perception is "to allow to be perceived" (24).

In a similar way the VIII.level existential encounter with life calls for a complete *surrender to life*. The most fundamental process of life with which this may be practiced is *breathing*. To breathe with life is to accept the law of birth and death; it is to understand existentially that life possesses *us* and not the other way around. The surrender to life to be born again energetically and psychically may be evoked easily by *intensive breathing* (25). The bodily encounter of the tides of the ocean may stimulate similar deep processes.

Sexuality provides the greatest challenge for the fusion of consciousness and being. Here human may encounter the IX.level ontical base(ment), the fundamental life energy which, when geared into *alchemical transformation of the body* may lead to spiritual-emotional-sensual unision with life itself (26, 27). Although one of the most unconscious processes of the body and devaluated by societal misuse and suppression, sexuality may supply the energy for juvenilation of the body, freeing of soul and wisdom of spirit. "Allowing to be revived by life" is the objective, which reflects the insight into the law of the eternally youthful being.

This catalogue of methods presents schematically the total range of determination of nature. Although these methods would have to be formulated in greater detail for practical purposes, it may become clear, in how far the common concept of natural law seems limited, compared to the rich field of bodily, emotionally and mentally experienceable reality.

3.3 Didactic Strategies

Though methods of educating consciousness may lead close to being in its depth and plentitude, still the question remains, in how far the experiential reality of cognizing consciousness in fact penetrates the field of "the real". To illustrate this further by a metaphor, let us look into the image of the "birth of the fool". One could speak also of the "death of the fool" or of the fool in general. What is the purpose of a fool?

Obviously he/she knows that he/she does not know. Or maybe he/she knows that all knowledge is limited facing reality, of which he/she is a witness. The knowledge of the fool is wisdom and humor (Germ. "Witz", c.f. Sanskr. "vid-"). Humor leads to the borderline of cognition... and transcends it into nothingness. The fool in this sense is empty and overfull at the same time. "Birth of the fool" is to say, that he/she appears like on a screen in a movie, in which he/she is an actor - until suddenly with part of the head, he/she begins to emerge out of the screen... looking into the audience. The fool begins to look into the audience out of the movie! There, a second fool from the audience looks back at him/her. They recognize each other. Who is the greater fool - the one, who was watching the movie and felt separate, yet captured by it; or the one, who was acting in it, without realizing that all was just a movie? They look up to the third fool behind the projector, who is supervising the creation of the illusion behind the lightbulb. He/she too, an employee of the movie-theatre-owner-fool? And what about the movie-director, the camara-man and the scriptgirl? Which fool has written the book for this piece? Where in between all this chimera lies reality?

We can probably rediscover easily the different levels of determination within this image in terms of different roles with differing horizons of freedom. Actors they are

altogether - prisoners of a dream, which they execute and create themselves, as well as observers and enjoyers of this dream - and, therefore, part of the frame of action, too, which encompasses and encircles this enjoyment totally. The old philosophical sophistic problem of immanence and transcendence, of *maya* and *brahman* returns in this image. Nowhere in this dream there seems to be a place for "genuine" reality - and yet all of this dream is real at once, in stepwise - by role, law, horizons of choice - regulated form.

A further possibility is viewing the spatial structuring as an expression of layering. From the microcosmic smallest to the macrocosmic biggest the line of observation is drawn. In some areas we will find an overlap with the evolutionary perspective. Here, also, a parameter is set as an absolute: space. We certainly could likewise argue positional, and understand layering as independent of spatial size and temporal age. This is described with the

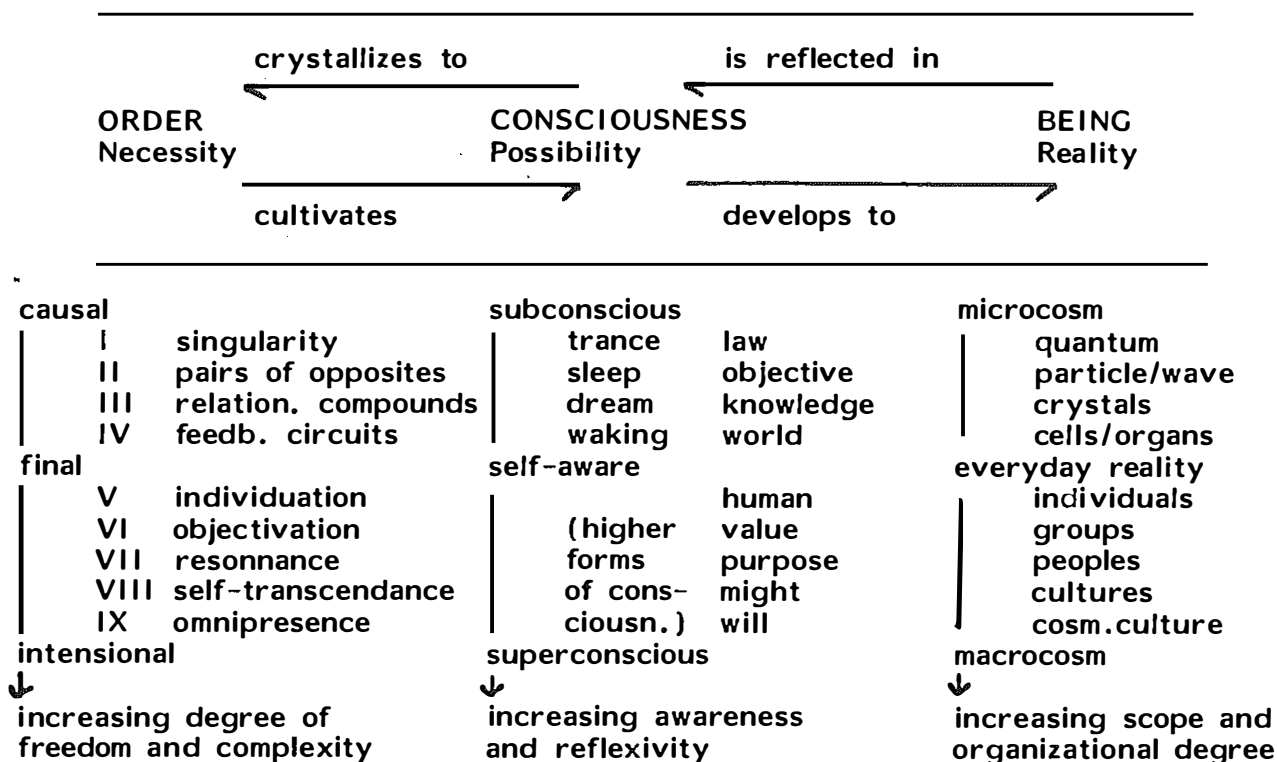
group, people toward a (hypothetical) cosmic culture. We recognize the growth of forms of law as positional evolution of "overruling" determination from causal to final, from dependent to free, self-sufficient forms of order (left column).

We find the reflection of this evolving of law in consciousness and the interpretational perspectives within the creation of purpose and evolution of consciousness which expresses itself in the realm of reality by engaging in progressively more complex processional contexts.

The temporal evolution of the "soul of the world" ("Weltseele") would in this reckoning be an ontological correspondence to the interpretational levels, respectively, degrees of consciousness.

Now it becomes apparent - even when limiting the reality of consciousness strictly to human and not drawing the lines of correspondence across - that the

Scheme 13: Layers of Reality



expression of an "overruling" of laws as presented, for example, by *Nicolai Hartmann* (7). The highest level of being "integrates" the determinational dynamics of all "lower" levels. Here, too, we find an absolute: position. Without any parameter of this kind we will not be able to proceed with the question concerning the layers of reality. It is essential to include the viewpoint which is evoked by the interpretational perspective likewise into a compound of layering, as well as the order-theoretical background which comes into play as the supplier of determination. If for the sake of experiment we put the ideas so far expressed into a survey, we arrive at the following scheme (scheme 13):

As we see in this scheme, the spatial layering of the right column develops from elemental quantum and particle via cells/plants to organ/animal, via human as individual,

interpretational aspects reappear also within the layering of the real itself; may it be only in the way of denoting playroles, in which human responds to reality. With the same argument which the evolution theoretist calls for the linking of patterns of order to processes of the real (c.f. Bresch in (30)), degrees of consciousness as levels of reflection of final texture may be adhered to processes of the real. With this argument, the causal character of law may be especially ascribed to the dimension of order, the final character of law to the dimension of consciousness and the intentional character of law to the dimension of being within the real. If this thought is inferred into the survey, we may see that "order", "consciousness" and "being" are basically concepts pointing to the same essence. The vertical and horizontal axis may be referred to each other.

From this thought it is clear that on the lower layers of the real, that is, up to the level of inorganic structure, the laws of *causal* determination are predominant. Likewise we recognize that the world on this level is structured predominantly by the *extension* of laws, that is, the *quantitative* situation. The size is effective for the kind of order we find.

On the medium levels of the real we come to understand that a form of law of *entelechal* and *final* direction is prevailing which determines with its stand- and view-point-relationship the character of the order explored (for plant, for individual, as for society, the *quality* of location, the particular embedding and direction within context is of greater meaning than extension). The *intensity* of quality displaces the extensivity of quantity. On the highest levels of reality *intensional* laws preside: here all is history, process, time-related happening. The Now is of superseding importance and with it *relation*, the conforming of processes with each other. The education of *will* which in individual existence and group-life is related to value (quality), is restructured in the cosmic happening into the *function* of the historical process of be-coming which possesses a logic that is based within the time-bound engagement (Vollzug) itself.

The transcendence within the image is released, enrolled and becomes experienceable, whenever there is a switching of roles, whenever the leap, the transformation from one level to another is accomplished - as the fool exemplified, who simply left his course to look into the eye of the paradox. Freedom to visit any level of interpretation and determination; the *complete* claviature signifies being, reality - the paradox, of not cognizing and yet experiencing, of knowing without knowing signifies consciousness, which touches beingness.

The movie-theater of reality shows a movie on each level, with its own direction, staff and observers. The didactic of the education in natural law seeks to evoke the fool on all levels, that is, to further the self-observation and independence in all playroles of determination and freedom. Conditioning exists as long as there are limited purposes. If the utilization of natural laws aims toward the unlimited, it all turns into a game, in which the rules are not felt having a purpose of their own, but of serving in favor of the game. Related to the "methods" of educating consciousness, this is to say, any method has to be given up once it is mastered. The forms of law as schematized are so-to-speak the classes in the "school of being" which have to be studied. If they are mastered, the unlimited horizon of freedom prevails, which utilizes determination for its own unlimited purposes. This is the "birth of the fool" - and likewise the "death of the fool".

4.0 Layers of Reality

Speaking about layers of reality, one implies a pattern of order reflecting this layering. This pattern may be a mental construct which refers to a particular perspective or it may be a pattern which emerges out of an interpretational expectation, with which the experiencing consciousness operates. The ontologist assumes in his/her layered model of reality, as has been expressed earlier, formative principles or natural laws of varying degree which are thought to be linked very realistically to the forces of the real. Usually one expects a natural law to express general importance, that is, the law of gravity, for example, should be localizable anywhere within the cosmos, if not for other determinative force limiting or modifying it. If we accept the approach that natural law itself is imbedded within the processes of the

real, this implies that a law as the law of gravity itself possess a phenomenon of the real in its base. Modern physics operates with this assumption. All of the forces are described as interactions which themselves are to be seen as exchange of energy-quanta. The law of gravity therefore has to be conceived as being as universally operational as the radiance of its (still to be defined) elemental quantum which sustains and transfers gravitation. The differentiation between laws which are seen as universal, respectively, absolute and those which claim their radius of operation within the process of the real is a very far-leading consideration.

The assumption of infinitely partitionable space and time, for example, is no longer expressed in some modern theories (B.Heim in (28)), with the consequence that space and time are no longer the separated, ideal categories which dictate by their structure the "conditions for the existence of objects" (I.Kant in (29)) and therefore may further cement the unrecognizability of the real ("the thing in itself"). For our consideration these questions are essential, for one has to search for a real criterion explaining the "layering of reality", if this scheme is not to be understood merely as a projection.

4.1 Evolution of Form

The title of this paper "Natural Law and Evolution" conveys an argument, with which the layer-theoreticist likes to operate: The timely segmented appearance of forms of the real in stepwise more complex forms which are signified by particularly more complex contexts of determination and correspondingly higher degrees of freedom. The beauty of this approach lies in linking the energetic-processional component of the formation of the real, so-to-speak, in cooperation with the development of formative structures: for a "higher" determination to become operational, certain particular energetic preconditions have to be present and vice versa. The blind spot in this theory is time which is called for as an explanatory fundament and proclaimed absolute. The practical consequence of this perspective, including the logic of viewpoint and evolution of the scheme of order into the layering of the real, is at least multidimensionality. In order to make this further transparent, each "layer" of the real (as for example, denoted with "cells/organs") needs to be further exemplified with respect to degree of integration (form of order) and interest of observation (character of awareness/interpretation). The succession of integration: *virus / monocellular / polycellular / plant / animal / human organic life* would possibly be such a dimension. Within this viewpoints such as: *Modes of observation / criteria of discernment / types of behaviour / systematics / particular individuals / general background / practical applications / connection to other areas of being / conclusions* may come into play (c.f. scheme 14).

This way of looking at things correlates "layer of being" with "level of order" and "degree of consciousness" - whereby the "layering" category takes on a differing status within each realm, depending whether we explore a "layer of being" of lesser or higher integration (of order), respectively, greater or minor spatial extension respectively younger or older stage of evolution with viewpoints and forms of description of corresponding categorial formation.

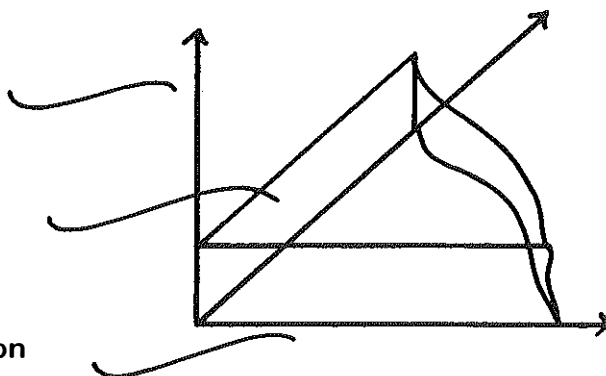
A pragmatic classificatory approach in this direction has been presented by *Ingetraut Dahlberg* (31, 32) which, though employing a rather different approach, arrives at seemingly similar results. Forms of Being are exemplified as "Object Realms" (Objektbereiche), integrative levels and viewpoints are presented and mixed with one other,

Scheme 14: Segment in the Layering of the Real

BEING
Evolutionary Layer
Form of Being

ORDER
Character of Order
Degree of Integration

CONSCIOUSNESS
Viewpoint
Interest of Observation



as "Aspect Realms" (Aspektbereiche). (Our own considerations have been expressed in (9), chapters VIIIA4, VIIIB4, VIIC4).

4.2 Being and Consciousness

The question, in how far reality itself is layered, respectively, possesses a character of order is not completely clarified yet. The consciousness-character of reality is expressed in the evolutionary thought, in that the *entelechal* moment, the goal-oriented character of evolution enhances a reflexivity similar to consciousness. Evolution on the other hand presupposes a hierarchy of natural laws, demands therefore a directed generation of layers of reality. The reality of consciousness points to the ordered character of being. On the other hand we have seen that consciousness itself operates along determinative formations and likewise knows of different operational layers. The question concerning the relation of being and consciousness now leads to very interesting perspectives.

In how far derives consciousness its intensionality from being? The intensionality of being, at least concerning the aspect of force, is without question, for all real happening implies an energetic character. The character of direction and purpose of intensionality however, is linked to the causal and final moment which is overruled by these and was identified with the orderly and consciousness-character of being. Human, standing on a medium level of being, cognizes being through natural law by ordering this (being) into the general structure and referring to that (order). In so far as this cognition aims at *controlling*, it is limited by the fact, that a form of being can only control what - from an order-theoretical point of view - is "below" it. In so far as this cognition is aiming to serve being, it opens itself for the influx of a greater power which will in turn use it to "overrule" and integrate it into its own life.

We have already mentioned that there may be degrees of being which are unrecognizable, but not inexperienceable for consciousness. If "cognizeability" has to do something with the possibility of *leading back* to determination, we can define in turn "experienceability" by the possibility of *leading toward* reality. Consciousness, by rendering and devoting itself to being in a serving attitude, is opening up its own reality. In other words: because being enhances its goals within the *entelechal* dimension of consciousness (the developing "soul of the world" - "Weltseele"), this "soul" is able to incorporate, that is, realize its own purposes as much as it is allowing to be "overruled" by the will of being by its own will of

serving. This seemingly strange and paradox formulation reflects quite precisely the relation of being and consciousness and explains intensionality of consciousness out of being. According to the character of the reflecting consciousness one will try to bring this intensionality of being either into a moral law ("Thou shalt..."); on a higher level, for example, clothed into a personified form, as an angel or God; to merge in a still more intensive fusion (that is, surrender unto being) into immediate sensing of value and into bodily experienced revelation and imperative. In a poetic formulation: The sun of being is first observed from far away, then watched from nearby, until finally to beam out from every cell.

The study of natural law on a low level follows the objective of "wanting to rule over nature" and precisely for this reason leads only to the encounter with a form of determination which is under the level of the constitution of human. A cognition of nature which is purely endeavored for the sake of understanding, may lead to the freedom of spontaneity of the individual responsibility of human. The introduction into the determination of nature out of a willingness to receive direction by life, will lead human into a stream connecting with all of being. The acceptance of responsibility leads to a freedom which surpasses the measure of human independence, into a self-creative livelihood. Human, consciousness: is a witness of him/herself - whereas in being, life: creates itself.

4.3 Value and Consciousness

The relation of being and consciousness may also be formulated in that being possesses in all forms of evolution the same intention: to generate itself. Consciousness on the other hand in this process is developing the direction of evolution which it chooses out of the search for the new possibility and its realization. This is achieved by consciousness adapting, modifying or creating natural laws which open up new possibilities out of the existing process. To express this as a metaphor, we could say: Being resembles a zoo, in which the evolutionary forms are prisoned by the cages of their horizon of action and cognition. Consciousness resembles a movement of metamorphosis through the species which brings about the multitude of life-forms in their quest for freedom. The human form of life, and human consciousness, too, lives in this zoo with a horizon of quest(ion)ing. Into which direction is it asking for freedom, which kind of question enables the metamorphosis of the zoo-inmate into a visitor?

One indication lies within the axis: "from competition

to cooperation". The thought of *being connected with all of being* is more likely to lead the way out into freedom than the thought of isolation. This connectivity with being on the other hand is furthered by the experience of value. The quality and intensity of value opens the way for consciousness to experience higher values of being. "Value" here therefore is synonymous with "signal, pointing in the direction of greater horizons of freedom within the limits of experience of the 'cosmic zoo'".

"Value" is by virtue of its nature the experienced horizon of freedom of being itself. "Value" is synonymous with a determination, capable of introducing and sustaining this horizon of freedom. The determination which leads consciousness by experience of value into beingness is sketched in the following by value concepts and corresponding attitudes (c.f. scheme 15).

5.0 Conclusions

We recognize - following the threefold approach of this paper - that insight into the operation of natural laws may be attained by analytic observation as well as by creative-innovative sensing and also by intuition and by readiness of action for that which *wants* to happen. Human aiming to do justice to this fact, needs a thorough education of his/her scientific, as well as artistic and spiritual-metaphysic talents. If we want to come back to a truly healthy ecological level of culture, we will have to open the borderline between science, art and religion and understand their area of operation as a continuum. The language of quantity (as the language especially of the natural scientist) has to be led into a deeper sense which is capable of recapturing the quality being pre-formed in quantity. The language of quality (as the language especially of the artist and the humanities)

Scheme 15: The Laws of Value

I	unity	trust	love
II	firmness	moderation	strength
III	flexibility	simplicity	truth
IV	fullness	humility	virtue
V	autonomy	responsibility	freedom
VI	openness	thankfulness	joy
VII	perfection	service	peace
VIII	depth	devotion	beauty
IX	completion	surrender	justice

I. The law of unity: Trusting creates love. Love makes trusting possible. Trusting love leads to unity.

II. The law of firmness: Moderation keeps strength. Strength furthers moderation. The strength of moderation generates firmness.

III. The law of flexibility: Simplicity attains truth. Truth is always simple. The simple truth bears a flexible mind.

IV. The law of fullness: Humility reigns by virtue. Self-control of virtue develops the courage for humility. The regency of humility sustains the fullness of all virtues.

V. The law of autonomy: Responsibility opens freedom. Freedom takes on responsibility. The responsibility of freedom is called autonomy.

VI. The law of openness: Thankfulness calls upon joy. Joy enlivens thankfulness. The joy of thanksgiving brings openness into place.

VII. The law of perfection: In service, peace is ripening. Peace strengthens the readiness for serving. The peace of serving contains perfection of attitude.

VIII. The law of depth: Devotion unveils beauty. The magic of beauty entices devotion. The beauty of devotion discovers depth.

IX. The law of completion. Surrender saves justice. Justice demands surrender. Surrender for the sake of justice brings completion.

The reflexivity of these formulations mirrors the relation of order, being and consciousness. Each value of being contains an attitude of consciousness which in turn is bringing it about under the rule of a corresponding form of order. The creative breakout from the imprisonment in the "cosmic zoo" is accomplished by the evolution of a new mode of being overcoming it. The practical realization of the laws of value is the step being beckons us to take.

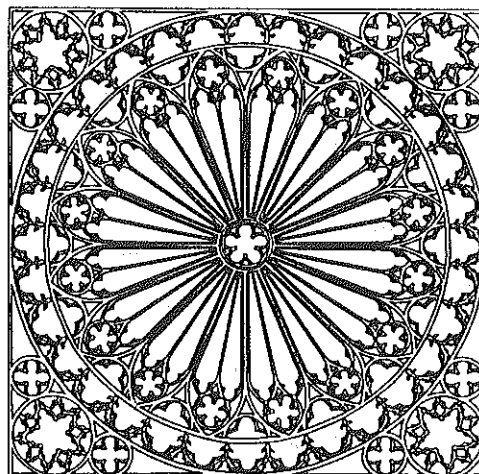
needs to be embedded into the relationality of correspondences which dissolves the space/timely particularization of individuals and individual occurrence into the overall context of that which is happening.

The basic thought within all these considerations is that in fact *all* happenings is completely embedded into the all-encompassing determination of nature; and that the activity of conscious utilization of this contextual fact becomes more important to the actor than to the context. The intelligent and creative observation of natural law in fact is merely propelling the mounting point of our involvement into the overall of nature along an axis of a determination of "must" via "should" and "can" to "may" and "will", from involuntary to voluntary surrender.

Therefore, the study of the thought of natural law proceeds beyond pure cognition of the basic principles operating in all processes to their transformation into lively forces of imagination in aesthetic observation of nature, in order to engage - out of the thereby created causal and final horizon of understanding - into activity and intensionality within the real flow of happening. The insight into the harmony of natural principles and the playful freedom of human creativity stepwise leads to the ability and responsibility of creating new laws of nature. The leading thought in this should be, to transform the world in a more natural (in the sense of an ordered whole) and more humane way (in the sense of culture as an instrument of refinement of consciousness).

This thought which seemingly is in contradiction to the traditional view of natural law as static and timeless; yet it is completely in accordance with the process of the real in its spontaneous, unforeseeable and nevertheless absolutely concordant course. *What follows time, is*

Scheme 16: Blossom and Cathedral



natural. Suffering develops by action being in contradiction with its own future.

Human freedom of will and cosmic real determination are not in contradiction; nature and culture form a continuum; the sacred and the mundane touch hands; our hairs are counted and yet we are free to tear them out or grow new ones. That which opens the future, has the preference of value: The openness of possibility as the idea of "becoming human" is the evolutionary direction into the value of which all life is evolving. Then, what is common to a blossom and a cathedral? It is the ability to re-enliven in a creative way the basic programming of the universe, by a *will* to embody it into an existing or newly created process of the real. The study of natural law was and is on all levels of expression a basic precondition for a meaningful and purpose-creating life. We come to see that not the coldness of a mechanically understood natural process, but the warmth of an all-pervading conscious *will* finally builds the quintessence of our exploration into natural law (c.f. scheme 16).

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