

# An Evolutionary Typology of Mentalities

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## I. Introduction

The world of our cognition presents itself to our senses by means of the dynamic, subjective activity of our faculty of cognition. Through constructive comprehension and visualization, we strive to achieve objective understanding of the world around us. Progress in our understanding of the world is owing to the fact that our cognition and our model has is becoming more and more universally standardized as the result of more and more comprehensive mental operations and transformations. That, which had once seemed to be firm, unchanging and even everlasting within a certain frame of cognitive processes, when expanded in scope, loses its unchangeability, becoming contingent on a whole series of factors. But all at once, within an expanded frame of reference of mental processes, its "eternal values", which turn out to be but partial and conditional in the face of an expanding series of rational processes. The social milieu differs from the natural world only in that more powerful intellectual tools are required for grasping its basic parameters, including the method of reflecting within one's own inner being. Yet all the laws which apply to the natural world do continue to operate even in the social realm, though often the social scientists tend to ignore that work which has already been accomplished in this area, and prefer to hack their way through all over again from the very beginning alongside paths that have already been paved.

The work of Piaget challenged the separation of the science into the humanitarian and natural sciences, and introduced instead an

unbroken ring of mutually interrelated disciplines consisting of embryology, physiology, biology, psychology, philosophy, logic, mathematics, and all the rest. As Piaget wrote: "The only single idea of my own, which I can call my own, in my (good grief!) 22 volumes, was that mental process operate in the capacity of unitary structures. These structures determine the various forms of stable states toward which all evolutionary processes strive. Their roots, being at once organic, psychological and social, stem from the same biological morphogenesis." (See ref. no. 1, p. 21) Further, he states: "This law of evolution, which governs all cognitive processes, corresponds beyond doubt to certain laws governing the formation of the structures of the nervous system, which would be interesting to formulate in terms of qualitative mathematical structures (groups, matrices, etc.). I hope sometime to demonstrate the presence of connections between the mental structures and the stages of development of the nervous system and to create that general theory of structure, to which all my previous work stands as but an introduction." (Ibid, p. 23)

Based on the work of Piaget, we constructed models of a whole series of hierarchically ascending logical-mathematical groups, typifying the intellectual features particular to civilizations down through history. With the aid of these, it is possible to describe the entire range of diversity of mutual interactions among people, categorizing them according to the four basic types of mentality characterizing the entire diversity of cultures and the faculties of cognition, and to set up a beginning point for establishing order in international relationships. The hierarchically developed stages of mentality emerge through an evolutionary process, comparing and contrasting the interactions with the environment — part of which also includes the social realm.

## II. Order in Society

The sum total of symmetric relationships, or, simply speaking, symmetry itself, is in fact the chief factor of social order, and which can be identified in culture. For example, there is the age-old principle, "As you do unto me, so I also will do unto you." then there are all manners of behavior which help to support the stability of the individual, and the equal status and mutual respect among its members. These manifestations of symmetry in a practical sense need no explanation, but are accepted as self-evident, and constitute the better part of many moral, ethical, religious and legal systems.

There can be discovered coordinated relationships among the symmetries, which form a connected whole, which is distinguished according to levels of complexity and organization. For example, relationships among neighbors stand in obvious symmetry, in both positive and negative ways.

The fractal elaboration of these symmetries, that is, their never-ending series of repetition, leads to cycles which may on occasion degenerate into vicious circles, which conclude in an impasse in relationships. For example, an excess of any relationship between neighbors can exhaust their material and psychic resources, which can in turn lead to a chilling of the relationship, and then even lead to a state of antagonism. Hostile relations, which may even proceed to the point of military action, ultimately lead either to the rise of asymmetry in the relationship in the form of rule by force, or it necessitates an appeal to a court of arbitration, which itself again leads to a symmetry of an even higher order of complexity. These observations regarding the fractal expression of symmetries in real life situations begin to give rise to deeper -level conclusions, and, correspondingly, extend the cognitive frame of reference of the symmetries.

The relationships of asymmetry, as unequal relationships should maintain themselves in the same way that a shorter lever arm requires the application of more force in order to maintain balance. On the social level this force can take the form of political or physical superiority or in terms of greater knowledge, experience, authority, and so forth. In any case there absolutely must be some form of preeminence facilitating the stabilizing of the asymmetry for a certain period of time. As soon as this asymmetry disappears, to that degree the asymmetry is leveled out or the asymmetric relationship disappears altogether. At the same time the dual standards in the relationships of the powerful and the weak also disappear. Power represents something artificial and imperfect in the social order, since symmetry does not need to be learned and does not need to be imposed; it is just as natural as the still that returns to the surface of the sea as soon as the wind subsides. Then equilibrium appears (enters, emerges) as a potential and is realized through the mutual interactions with one another. For example, already in ancient times the Hindus considered that each unbalanced action, that is, action emanating from an identification with just one side of a polarity, generates an equal and opposite reaction, tending toward the restoration of equilibrium.

Since any action brings about a change in the circumstances, then,

by considering the effect of the protection from those changes produced by the action, we can say that the situation in which an individual (or any social entity) finds himself is created by either apparent or hidden consequences of its past actions, thoughts and emotions. Getting involved with situations, identifying with them, or accepting certain goals, he encounters the "reverse side" of his actions. Therefore, unpleasant situations are created by his own unconscious yet at the same time very potent actions. Once the one who does the acting achieves integration, i.e., synthesizes all the polarities within himself, then he transcends his unbalanced reactions, such as those that lead to confrontation and conflict. Then he is also freed from those causes and effects, since his actions will no longer evoke the reactions of protection from his counterpart. All his actions will be beyond the realm of opposition.

But on the other hand, if force goes beyond a certain threshold, then the symmetry starts to get thrown out of balance, and it is no longer possible to carry on give-and-take by any mutually acceptable means. As the Chinese proverb goes: "When order and disorder are in equal measure, it is impossible to bring about stable order." To put it in other words, if the force of the symmetry is equal to the force of the asymmetry, then no tolerable order can exist.

Furthermore, we shall describe four basic mentalities, particularly characterized by their historical tenacity. Already Plato in his time described similar patterns. For example, in the cyclical view of history, the progression of political regimes from aristocracy to democracy, Plato described all the possible phases of political transformation of the state around which political history revolves. (See ref. no. 2) For Plato, these cyclical states, which manifest consecutively, represented fixed characteristics of social systems, not subject to being guided or redirected. The model as presented by this author can stand as a beginning point for bringing guidance and direction to bear upon these processes.

### III. The Mentality Types ,The Egocentric Type

We call the first mentality type (and, accordingly, the type of social group) the egocentric type, according to the logic of egocentric thought patterns, which is predominant in it (as well as in the accompanying features of interactions). Egocentrism is the relative inability to stand in the position of the other person, to view things through his eyes, to translate into one's own point of view as one of the many possible

standpoints, or to coordinate one's own viewpoint with all the others. Egocentric thinking, as a rule, categorically, uncompromisingly, insist upon their own correctness, without regard for any of its consequence for social relationships whatsoever, draw one toward absolutism in one's opinions, and diametrically exclusive and inflexible positions. Denial of denial does not lead to development, but rather, only brings us back to the original standpoint. Polarized positions do not form a scale, but rather resemble hardened, frozen mountain peaks, between which there is no way to build any kind of path whatsoever. As they say, "Either one or the other. There is no other option."

The fundamental constant on the intellectual horizon of this mentality is physical and military might. Might is always right. Governmental authority likewise exhibits itself first and foremost in the form of strength. (Remember "timocracy", "rule by fear", which Plato described.). The narrow perspective and heightened aggressivity arising from this make such people good soldiers in any senseless war. The incapacity to see the multiplicity and the mutual interconnection of different points of view, to conduct an accurate evaluation of different standpoints - leads either to overly hasty social identification and identifying oneself with others, which sometimes exhibits itself in the form of slogans like "Do like I'm doing!", "If you're not with us, you're against us!"; or to a sheerly instrumental relationship toward another person as if he or she were merely a tool to be used, a "necessary" person - a means by which to achieve a certain goal he is striving after. In this regard, the level of these purposes usually does not exceed that of sensual satisfaction, the demands of the physical body, or objects of prestige. Objects themselves, as well as people, are regarded indifferently, detached from their connections.

A characteristic feature of such relationships is that they are not in congruity with their internal contents, they are characterized by sharp and unfounded vacillation from one pole to the other, they cannot be arranged according to their mutual complementarity, but rather it reminds one of mirror images of actions bounced back and forth between the one side and the other, and requiring an exact facsimile of one another. At the same time, the actions of two identical systems, though oriented in opposite directions toward one another, not admitting any sort of compromise nor reconciliation with one another, can only end in the state of one dominating the other, in which case, naturally, the criterion of success becomes some sort of indicator of authority or material power. As a result, in such a form of society (state), no other form of social order can be organized than the hierarchical control of one group of the members of the society over

the other, and this descending in rank all the way down to the bottom rungs of the society at the level of servants. Universality of order, then, is to be achieved by promoting the idea of "equality", which is to be promoted by political power (the state apparatus).

The failure to acknowledge another person as an independent subject with self-worth is directly connected with the particular intellectual level of such people. The political parties (expressing a pre-individual, group form of communication) depend on these as their main source of backing. There is no need for working out any rational justification for their pronouncements ("That's the way it is!"), nor to impart any logicality to one's thoughts and action, no need to probe for contradictions in one's own logic. For such people it is very necessary to make the process of their own thinking the object of their reflection, and at some point to unfold before their eyes the complex chain of reasoning, which they have just completed. Such features of their thinking as self-evaluation, connectedness, self-consistency - these can come about only as the fruit of intensive communication with other people in discussions, arguments, negotiation processes, over the points of view and perceptions with regard to the interests and opinions of other people (in the process called the "People's Assembly").

In light of the poor state of development of our faculty of visualization, of achieving desired ends by means of our mind's eye, in this case, when we speak of "attention", what we have in mind is rather, all too often, the exclusively outward appearance of things, with only limited recognition of their mutual interrelationship with one another. And it is from here that we move on to a rapid transition from one form of idea to completely another, in the context of a full synthesis of multifaceted phenomena, and directing our attention to something unitary, taking into account with the sweep of one's eyes the special features of the object of one's attention, and ignoring other superfluous aspects. Within a given collective, the word or the image in the cognition of the members, itself tends to be identified with the actual properties of the object itself. Under the impressionability of a given moment, speeches and slogans tend to impart the overwhelming impact in arriving at a decision in the matters at hand. Their emotions and their behavior are sometimes molded by completely unsubstantiated evidence and conceptions.

The legitimization of such a mentality yields certain products in the form of its own peculiar etiquette, "science", "philosophy", etc. Justice is understood as full, undifferentiated equality and uniformity. Good or evil is determined by the physical outcome of actions, without

regard for the thought of the person concerned nor for the social value of the particular action. Rules are pragmatic and utilitarian in the narrow sense: "You to me, me to you." Laws, on the whole, are compulsory, and the rule of thumb holds: "An eye for an eye, a tooth for a tooth." An atmosphere of intolerance and an authoritarian ideology are the rule. The philosophy is dogmatic and pedantic.

The esthetic sphere conveys uniformity by way of repetition and monotony. The logic is based on formal reasoning without reference to context. The religion has forms of paganism and idolatry. The epistemology is based on cognition of the "objective" (objects are considered as separate from one another). They identify the object with its name, and construct verbal images of things. The methodology is by classifying and systematizing things and phenomena, compiling lists of factors, which supposedly have universal import, i.e., a taxonomy of inflexible categories.

The science consists of models predominate with unequivocal and one-way cause-effect chains. The mathematics is basically quantitative. The geometry is Euclidean, assuming a group of intellectual prototypes geared toward the conceptualization of a hard body. The perception of things is black-and-white, with sharp dichotomies, in which contrasting opposites are polarized and exist in irreconcilable hostility to one another. Bourgeois and proletariat, landowners and peasants, police and criminals, doctor and patient, teacher and student, father and son — all these polarities are perceived in isolation and all in conflict with one another. The political realm is authoritarian. The rule of approval by collective decision is reduced to rule by sheer majority. Typical examples of this stage are the Soviet civilization and the various totalitarian regimes.

#### IV. The Legalistic Type

The second type of mentality, and, correspondingly, type of social community, in which it predominates, is called the legalistic type. Here the active thought principles and mechanisms are cognitive, associated with another social order, social reality, social institutes, types of knowledge, together with their corresponding transformations in the areas of science, philosophy, etc.

The fundamental constant is the law, the legalized norm. This cognitive feature relies upon the mental support of certain general laws ("norms", "rules"), the search for which constitutes the urgent task of this thought process. Its basic dichotomy runs along the

borderline between "norms" and "facts", the congruence between which becomes the entire intense occupation of social behavior. In accordance with this, the priority in regulating the behavior of individuals assumes the form of social norms, social rules, and social expectations. In this type of social organization, public opinion is manifest as such, and plays the role of outward authority in determining the propriety or impropriety of social behavior. (Public opinion is not simply the opinion of the society, which tends to change even in egocentric societies, but rather it is the opinion, which expresses the interests of the society as a self-sufficient and integral whole.) The orientation of individuals to the authority of a "significant other" or to the impersonal social authority is important above all.

Individuals are anxious about their conformity to the public opinion and about their own loyalty to the social expectation. Laws and norms dictate what they should do and how they should do it, and how to behave in all different kinds of situations. There is a system for taking account of the opinions and positions of other people, and there is a capacity for seeing things from the viewpoint of others. This gives social force to behavior that is in conformity with the respective social expectation. Overall a sense of striving toward equal rights dominates. Judicial and legal institutions have great power. Issues of legal justification, vindication, and rationalization of one's behavior and opinions occupy the minds of the members of this type of normative socium. "I think in such-and-such a way, because...." — this form of utterance or statement is very widespread.

The fundamental cognitive principle, directing the social interaction in this structure, can be formulated in the form of a series of rules of symmetry, ranging from "As you do for me, I do likewise for you." to the well-known maxim ("The Golden Rule"), "Do not do unto others what you would not wish to have done unto yourself."

In case disagreements should arise over the incongruity of expectations, then what takes place is an appeal to the common norm, law or statute, which should resolve the contradiction. (We must point out that, although laws function even in egocentric structures, the law itself in such societies is not legally legitimated, i.e., it does not correspond to the formal righteousness or the natural social laws, and is only an expression of opportunist politically legitimated rule by force. Conformity to norm, including legal, as established within such a social system, depends on this norm being internalized within common understanding, in the common sense of such a society.)

Here the state is the mediator between the players in society, setting the rules by which these players should play. Furthermore, the

state is also the mediator between the secular realm and the religious or sacred realm. The struggle within this mentality is first and foremost the struggle to establish the rule, and lobbying for this purpose. The party which succeeds in establishing the rule wins. A "good" player is he who observes the rules, and a "bad" one is the one who violates them. It is highly advisable to know the rules.

The social equality which is to be proclaimed, more than anything, makes one think of the position of a player who is located outside the society and, not knowing whether he is situated in a high or a low position, strives for an optimal strategy - to lose as seldom as he can. This is the "minimax" strategy, in which there is the minimum quantity of the maximum loss. Here, also, it is more important to minimize the contrasts between individuals, than to increase the benefit of all.

From here we derive the role of the state as the unifier. The state (government) distributes power (authority), which consists primarily in economic power. Equality is secured through redistribution centered on the mediator, the government, namely by enforced redistribution under the law. The stronger the drive toward equality, the stronger the state becomes. Here, any revolution under the banner of equality only serves to strengthen the power of the government. Therefore revolution is in fact a trap in which the state makes use of the rebellion to bring about its own transformation into a new form; the quest for freedom only leads to heightened oppression.

The social order stands as the result of individual negotiations, and does not have its roots in the collective as a whole. The society consists of atomized individuals. Their mores hold that the collective body of society is no more important than an individual; the law is above mercy; rules are of the nature of a contract and are upheld by law; the law is of an exclusively formalistic character. The philosophy is atomism, positivism, rule of the principle of "salvation of phenomena", rationalization of common sense and common knowledge. Its esthetic forms are the mosaic, and arbitrariness of style. The religious realm is a plurality, with competition among religious doctrines.

The field of logic is dominated by inductive reasoning. The main problem in science is to make the transition from particular observations to generalizations. Science is characterized by differentiation and specialization into many fields. Mathematics emphasizes statistics and stochastic processes. Politics is dominated by the principle of administration, arithmetic proportionality, and the so-called Western democracy. In public and social life people are isolated

and atomized. The typical example of such a mentality is the Western civilization and the form of government, which predominates in it.

## V. The Relativistic Type

The third type of mentality, characteristic of the corresponding society type, we call the relativistic. Cognitive relativism manifests in the striving to dwell outside of the scale of any category of polarization, coming from the desire "to be above the skirmish", to take the position of arbiter, of a sideline observer (in the pejorative sense, the prosecutor and instigator, the one who objectively wins out of the struggle between two parties). Here we find the tendency to be a manipulator in this type of thinking. Whereas, in the first two types of social principles, the principles regulating individuals' behavior were located outside of themselves — in the first type, in the plane of the physical consequences of behavior, in the form of reward or punishment; and, in the second case, in the plane of expectations and demands on the part of generalized significant others and the social institutions which bring influence to bear - now, in the third type of social order, the source of regulation is shifted to the internal realm. The chief mechanism for making decisions is the personally recognized motives, and assuming responsibility for all that transpires.

The dominant invariable is status and the ritualized meaning associated with it — the meaning of actions, words and texts. Meaning is something, which is created individually and incidentally. To discover the meaning means to describe the complex whole, its meaningful parts which are people, events and social structures. The actions of the players are regarded as texts, and they are regarded through a collectivist prism, and specific features of individual interactions are aggregated (gathered, assembled, constructed) together within the framework of ritualized interactions.

Equality is achieved through equality of status, as well as the spiritual and existential equality associated with it: A person who is able to decipher a certain meanings is considered as "equal" to another person. The state plays the role of the distributor of status, the source of meaning, and the authority in the realm of discerning the shades of meaning. The distribution of benefits is performed in accordance with the level of discernment of meaning (in the case of China), or in accordance with age (in Japan).

In place of outward authority there is internal authority - one's own spiritual, political, professional or cultural motives, interests and

principles, as directed above all toward self-development, the creation of one's own social community, party or group, and in securing a high status for oneself. The conventional nature of social laws, public norms and positions is acknowledged, though their objective sources are not concealed. The sources of pressure are not to be found without the individual, but in his own imperfection, which creates the need for external management, and the consequence of this enables people of the relativistic type to realize their goals and purposes by means of more complex social algorithms and strategies, which are difficult for people of the first two social types to figure out. For this reason, those of the third category are able to manipulate those of the first two social types. The dominant sense of life of this type is to strive for victory at all costs for the sake of attaining high status.

Here, each person strives to create his own game. There are no mediators between the players. Each strives to win other players over to his own team, drumming up those resources, which are necessary in order to coax other players to come over. In the absence of a judicial norm, personal connections play a great role. (When legal guarantees are absent, there is not even the tradition of reinforcing them.)

If in the societies of the relativistic type there occurs an incongruity in expectations, a violation of the complementarity of routine actions (or the consecutive chain of events), then each of the agents of interaction by him assumes the burden for the lack of smoothness in the flow of the give-and-take relationship. Then one seeks within oneself the causes for which the harmonious flow of exchange was interrupted. One takes upon oneself the responsibility for an improper choice of styles in an exchange, or for a poor assessment of the context of communication — the time, the place, the circumstances...; for a faulty evaluation of the character and special features of behavior of another party, his interests, goals, and so on. But all this only serves to facilitate the entrance of a third logical position, and the management (in the worst case scenario - manipulation) of the first two types of mentality. In the relativistic society and its structures, the release from mechanical behavior patterns attains a systematic nature.

Because relationships are always with distinction, and a completely unregulated interaction rarely occurs, the drive for self-perfection becomes the main motive of behavior. Observing the social life, studying the character of people, their motives and other aspects of behavior — this is an inherent aspect of the interests of those of the socium of the relativistic type. This is brought about by the fact that similar social communities and the social institutes which develop in this milieu are oriented toward securing freedom and self-realization

for each of their members. If a member ceases to perform his role, he is bidden to leave.

Naturally, the issue of truth is regarded in the perspective of context — depending on circumstances of time and place — and therefore attention is trained upon the other to the point of studying the minutest details of his personal life and his esthetic tastes. The agents of interaction strive to the maximal degree to read the individual uniqueness of their counterpart, and, by their response, to generate an aura of total mutual understanding free of any conflict whatsoever. Each places himself fully in the shoes of the other, abiding simultaneously in two hypostases: remaining oneself, thinking about oneself and one's mission, and at the same time totally becoming the other, pondering his potential reactions, his future response, and probing for a decent reply of his own to this. This enables him, while remaining at times unnoticed, to direct the behavior of the other person, including if necessary to translate these into vectors of pressure focused on the other. The interpersonal dynamic on such a level may even resemble a game between world class chess players, depending not only on the rules of the game and their experience, but also upon their personal knowledge of the psychological makeup of their partner.

The fundamental principle directing interaction of such a type may be formulated as the following challenge: "To each person with personal and concrete regard." or "In each situation, behave in the manner befitting a concrete person of character, communing in the context of exchange of a concrete ritual situation."

Self-determination and self-discipline assist the individual to escape from the social games contrived by others, for example, such games as "The game of getting rich", "The quest for equality", "Playing with ideas", "Striving for social justice", and so forth. Here, in general, the stronger the players, being almost on a par with the government itself, the stronger the collective whole will be. In such a way, they form a buttress for the society, facilitating the raising of the overall intellectual and moral standard of the society.

The norms here can be established anew at any time, and emerge as the result of the mutual agreement between two unique subjects in unique circumstances, free from routine conceptions, and capable of any form of interaction as convenient and necessary, on condition of its maximum concurrence with the concomitant goals and purposes of the partners. At the same time, in this type of social contract, the contradiction between the contents of actions and the social forms fettered to them is removed. The depth and variety, the flexibility and

continuously flowing quality of social forms make the social life like a flowing tide, in which those forms which do not attain precise definition swiftly disappear, in order to create a new, original configuration, like a kaleidoscope.

The individual finds himself in a game as it were; life is like an unending game of changing costumes, taking off former outmoded roles and masks... Quite naturally, in spite of all that is missing, there is the abiding presence of a deep-seated pillar (the sense of natural and social lawfulness), which enables one to connect one's own life with the lives of the many generations in one unbroken thread, exhibiting the harmony of our social origins and our cosmic roots. On the whole, this third mentality type can be found in many Eastern religious and political institutions affiliated with or neighboring upon the region of China and Japan.

## VI. The Synthetic Type

The fourth type of mentality we call the synthetic (creative) type. Creativity, both scientific and artistic, the quest for original paths in the political and social life, self-reflection as the source of new logical premises and forms and attitudes toward life - these are the basic features of the *socium* of this type. Here, unity is achieved not based on the ideology of a particular group, but by virtue of a common striving for the truth, under conditions of freedom of the quest. One does not submit to any individual but to the truth itself. The fundamental constant is knowledge in its highest incarnation, namely Wisdom. In this regard, we refer to that unchanging knowledge which, as the fruit of tradition, deserves to be renewed while at the same time retaining its identity.

The development of inner self-discipline neutralizes the activity of the lower feelings and passions, such as envy, greed, anger, and so on. The subjects in their own mutual relationships constantly transcend the world of appearances and social realities, which imposes itself upon the eyes of those of the first three types. In the realm of social realities of the fourth type, there is no longer a duality to objects, words and deeds; the contradictory nature of these categories has been overcome. Rather, the conditional and incidental nature of the very "I" itself is recognized. It is this very creative type of people themselves, which are the ones who bear the spiritual fruits (social scientific theories, religious teachings, new worldviews, etc.), and to whom people are indebted by their identification to group entities and

for the choice of their direction in life. The creative types rely upon the broadest categories — the soul, knowledge, creativity, humanity, and the cosmos... and they avoid irreconcilable polarized contradictions and schisms. Any theoretical conceptualization which has as its basis some partial and imperfect "I", a counterpoised object, i.e., "not-I" — all this is avoided. Even one's own requirements are regarded as merely the shadow of the "lower self". These are to be submitted to the spiritual and true Source and regulated in harmony by it.

The members of such a social collective usually involve themselves in elaborating a social ideology, laws, and social norms. At the same time they formulate their own individual lifestyle, embodying within themselves those responses to the eternal questions of life, and dedicating themselves in the quest to substantiate these in their own lives. They understand that their consciousness is subjective and that it is not they themselves who determine Truth, but that it is the Truth, which determines their consciousness. And moreover this Truth may even come to stand at odds with corporate interests and with social expectations.

Right and wrong is determined only in the context of all imaginable factors, and is of a symbiotic character — that is, the right or wrong of something is held up to account and stands in a mutual relationship not only in regard to certain interests, but also in front of the dignity of one's character, one's autonomy, and the value of one's personal uniqueness. Going through a course of distinction and separation, one finally attains to Unity; as a united ensemble composed of many dissimilar elements.

This requires the ability to see at once from a multitude of perspectives, including the perspectives of those people who do not regard the rules and the values of our own social order, or who are situated entirely outside of its bounds. Righteousness is always partial and specific, and cannot be described in the form of a certain ideal model. The punishment is always gentler than the offense committed; its purpose is not recompense for the offense, but the concern for correcting the offender. Protection and security of the individual are afforded through identifying the meaning invested by the respective players in their evaluation of social acts. The identity of meaning depends on the level of preparation, the proximity to tradition, the conditions of education, and the environment. Those individuals are especially esteemed who are able to impart the identity of meaning. Therefore, the conferring of meaning is most highly centralized.

The role of law is played by knowledge and the understanding of the laws of nature and the ability to embody them in one's personal

practice. What types of sanctions, other than the sanctions which nature imposes, can be imposed on a person? Although such types of sanctions may come to bear slowly and after a long delay, yet, in comparison with those social sanctions, these may be irreversible and may overtake a person even over a course of many generations to follow.

Therefore the game of coming to cognize the universe is indeed reinforcing the ties, which bind the whole world together, and is in confirmation of the cosmic religion. Here the state plays the role of the distributor of knowledge, and only after that, economic and other resources. Their allocation likewise proceeds in accordance with competence in knowledge.

The basic values of the creative (symbiotic) society are life as such, in all its forms. Then come individual autonomy, the creative potential, the working out of one's own convictions, and the quest for meaning in everything. Norms are formulated in correspondence with these values, norms by which the meaning of the existence of the collective is viewed in terms of its capacity to provide each individual with the conditions of freedom and development of his own character.

Those procedures and methods are considered as proper which lead to harmony, sufficiency, and growth. The judicial position and laws may be altered by use of a rational procedure — not simply by a pseudo-democratic method. Outside of the purely legal sphere, there are free negotiations and mutual agreements. An ideology of cooperation, nonviolence, and survival of the more symbiotic entity predominates. In the esthetic realm there is the principle of harmony of multifaceted beings. Their epistemology is a holographic, multiple viewpoint perspective, taking into accounts all different perspectives and points of view. The methodology is contextual analysis, flexibility and interconnectedness of categories, their heterogenous nature, a network organization of research, a non-repeating complexity. The logic is complementary: a synthesis of deductive and inductive, bringing discernment to the point of determining the essence of each single thing. In science there is mutual causality, a symbiotic paradigm, allowing for the self-generation and self-organization of the universe, the capacity to give rise to structures of higher order complexity on the basis of knowledge of the rules of interaction. The search for the contours in the map of cause-and-effect connections, enabling both the self-reinforcement or the self-destruction of beings. In mathematics, the quest for a combinatorial analysis which would support symbiotic relationships between alternative pathways toward achieving goals.

The perception of things is historical and from multiple points of view. The human being lives and acts in the context of relationships with other people, both the living and the deceased (ancestors). Behavior is characterized by firm mutual connection in both directions, which could be described as joint autonomy, enhancing the energetic strength of the social system. In politics we find the quest for a heterogeneous symbiotic system, providing for the optimum individuation of its elements as an alternative to rule by the majority.

We very rarely encounter this type of mentality, and its bearers are solitary, gifted individuals pioneering the path for the rest of humanity. The representatives of such a mentality are various Eastern religious sects centering on the Indian tradition.

## VII. The Dominant Logical Operations

We shall summarize the basic logical positions of the representatives of these mentality types.

1. First, the egocentric type operates on the basis of information connections which function with the most proximate generality, of the type:  $p, p \rightarrow q, q$ . The connection  $p \rightarrow q$  is not subject to doubt, and consequently, in order to receive  $q$ , it is required to unequivocally fulfill  $p$ . This type is the most readily manipulated by means of information and media. From an evolutionary standpoint, this is the initial type of consciousness, and is strongly impacted by the surrounding environment.

2. The second, normativistic type, as a rule, always holds up a scale between alternatives: the first is the scale between the alternatives  $(p \rightarrow q)$  and  $(p \rightarrow -q)$ , the second is that between  $(p \rightarrow q)$  and  $(-p \rightarrow q)$ . Here doubt arises regarding the truth content of messages and their conclusion, and other variations present themselves. For example, the increase of demand for a good ( $p$ ) leads to the increase of its price ( $q$ ), but may also lead to its lowering ( $-q$ ) under such-and-such circumstances; and the second variant: the increase of demand ( $p$ ) and also the decrease of demand ( $-p$ ) may both lead to a rise in the price ( $q$ ). Here the dependence on the environment (the strictness of the syllogism) is diminished owing to the airspace or room for play that is admitted here, and this enables one to construct his own assessment of the threats and the tolerable factors in the environment, and their effects. A system of intellectual operations or logical-mathematical groups affords a broader class of constants in thought patterns. There

takes place a transition from Euclidean geometry to projective geometry.

3. If the second type requires a precise definition of things as they stand, expressed in the search for firm and reliable norms, then the third, relativistic, type acts in the realm of a totally different conceptualization of social reality. Namely, if one understands the social reality as being made up of the entire aggregate of cyclical, non-equal processes, each of which is mirrored by a reflexive relation either in an opposing direction, coupled together, or neutral — then the most promising and hopeful strategy in the social plane is to accept the action of another in its original position, that is, not to interfere with any of those currents which emanate from the original action in the manner of forming a contextual norm in each situation. This third (relativistic) position, in its attitude toward the contestants locked in struggle, gains benefit from the acceleration or deceleration of the currents of activity, playing the role of a social catalyst, that is, by formulating these currents in a way of comprehending them and attributing value and meaning to them, understanding and evaluation, thoughtful and ideological, interpretative of the surrounding context and environment, in which, as with a filter screen, certain pieces of knowledge, evidence and information pass through freely without obstruction, while others are blocked off. Here the logic of thought is dialectical and procedural:  $p$  is  $p$  and simultaneously non- $p$ . Transitions, transformations, phases, interim states, etc. serve in the capacity of the invariables.

4. But the third position itself is in need of building materials — the resources of knowledge, examples or theoretical constructs, explanatory or narrative pronouncements, goal-oriented algorithms, and, most of all, the observational evidence of objective tendencies in each phase of an ongoing process, which also enables one to perform administration of the third position from an elevated position. So the fourth, creative, type supplies the third with the tools of cognitive-evaluative methods for pointedly and purposefully assimilating the social reality. For example, with the third position, one and the same social action, performed by representatives of the first two types of mentalities, might either be accelerated or decelerated, but beforehand these actions must be assigned some sort of cognitively recognizable status in the first place. In other words, the fourth position offers the creative opening up of new aspects of social reality and a change in the movement of unbalanced processes.

We can state several of the laws for elevating levels: a broader system of mental operations (the transformation of information), and

eliminating the invariability of the characteristics of the object of the prior level. That which on the previous level held the status of absolute or monolithic values, may come to stand rather as one of the transient values, dependent on context and circumstance.

In the process of accumulating experience in interactions, that which had at one point seemed constant seemed to be something upon which one could rely in all circumstances is now discovered to be incomplete and insufficient. It turns out to be interfered with in its dependence upon various other factors, which do not they submit to this given that had previously been fundamental and dominant at an earlier stage. There ensues a search for a wider platform, which should be reliable in a broader variety of situations. For example, the reliance on force turns out to be inadequate, as in the case of social movements. Then we seek a certain form of authority, in which there are broader and higher-level constants, for example, the authority of a leader. But, in the case of coercion to be creative, for example, authority and compulsion can be of no avail; a more gentle and graceful means must be employed instead. The whole process of elevating levels proceeds under the aegis of liberation from dependency. All living beings strive toward self-sufficiency and independence of the environment. Wherever such independence is discovered, then the quest gets under way for more firm and reliable constants, ultimately striving toward the position of primacy. In this way the social objects come to be formed — the constants of certain groups of mental transformations of the changeable behavior characterizing the systems to be investigated.

In such a manner, each act of cognition of one's own thought processes is performed via reflexive abstraction, uncovering more and more deeply seated (deeper than those earlier recognized), and this sense also more primitive, underlying thought schemata, but upon which depend the effectiveness and adaptability of behavior as a whole. The methodology by which this process is brought to completion — the psychological mechanism of reflective abstraction — it manifests on the cognitive level, and is a universal biological mechanism. The social structures unite with the biological world by virtue of the general subjection to the laws that govern the enhancement of stability of form, i.e., the laws of equilibrium. In condensed form we may picture the four mentality types as consecutive stages (iterations) of reflexive abstraction, leading from one group of constants and their coordination to a more complex coordination of thought. In this, even the disturbance of equilibrium is perceived differently by each of these mentalities.\*

This typology as elaborated here is an example of unified knowledge, where biology, logic, mathematics, ethics, psychology, sociology, political science, culturology and epistemology are synthetically brought together. It can be utilized as an aid in the process of developing thought, and to facilitate a more rapid recognition of the inclusive nature of the social subjects in their course of evolution in the past, and the identity of these with the prior situations and means of activity, which also influence the present circumstances. Each situation is an unending sequence of polarities. As soon as one side comes to be recognized, the other one of these inverse, mutually supportive complementary partners recedes into the background. Many religious practices, for example, meditation, which is popular in Indian tradition, are summoned to awaken that background, identifying with them, and bringing about balance and harmony. The synthesis of opposites and the transcending of polar identification, coming to see both partners as mutual and complementary, signify a step forward in the development of the cognitive scheme. Even if these would desire to separate, the strength of their bond only increases. If they desire to concentrate their energy upon just one pole alone, then the same energy appears on the opposite pole too. This kind of religious and humanitarian knowledge gains a foothold and a justification as bonafide natural science with the help of such a scheme as we have presented here.

### Remarks:

\* A violation of equilibrium leads to the necessity for readaptation to the environment, which is secured by the activity of the intellectual faculties, reflecting upon one's previous, unsuccessful instruments of cognitive orientation. Constructive balancing, which is at the basis of such behavior, has three independent dimension: (1) compensation for hindrances, i.e., symmetric response, overcoming the obstacle; whereby there are three phases of compensation: by means of behavior (a) bringing about compensation for the hindrance in an opposite direction or its elimination (the ethic of the Old Testament); behavior (b) providing for integrating the disturbing element into the system, in which the system itself adjusts to the object, or the obstacle is compensated for at the cost of forming new connections (the ethic of the New Testament); and behavior (c) in which the hindrance becomes included in a variation of the system (the symbiotic ethic). (2) The search for motivations, i.e., the creation of ideologies and rational justifications for one's interests; and (3) the construction of a new, non-standard approach to typical situations.

### References:

- Piaget, Jean. *The Principles of Genetic Epistemology*, London: 1972
- Plato. *Collected Works*, Vol. 3, Part 1, Moscow: 1977, pp. 351-382