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UNDESIRABLE VERSUS DESIRABLE SOCIETIES

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This publication is being circulated in a pre-publication form to elicit comments from readers and generate dialogue on the subject at this stage of the research.

FOREWORD

This paper is a voluntary contribution to the GPID Project. It summarizes the results of a research project on modeling desirable societies, carried out by the two authors independently from the GPID Bucharest team headed by Professor Solomon Marcus.

A preliminary exposé of the subject at hand can be found in two short notes by Botez and Celac on Social Desirability (Notes on Social Desirability and What a Desirable Society Looks Like, both GPID Working Papers, 1979); in a communication introduced by Botez at the GPID Bucharest meeting, June 1979, in which some issues related to Visions of Desirable Worlds were dealt with; and in an extended paper entitled Global Modelling without Models (discussed at the GPID Montreal Meeting, July 1980, and printed in GPID Paper Series in 1981). The main conclusion that stems from this phase of research is that, under certain explicit conditions, no unique image of a desirable future society could possibly be devised. The two authors have tried to prove that the participative process of building images of future desirable societies is more important than its result — i.e., the picture of a desired society itself — and that it cannot be reduced to a standard idealized planning process towards predesigned goals.

The approach developed in this paper centres on the idea of undesirable societies as a critical complement to desirable societies. This negative reasoning has already been used by other GPID contributors: Mallman and Marcus derived the definition of basic human needs from converse premises (1978). Thus, we will strive to discover what is undesirable and what is to be done in order to avoid undesirable social settings, as a basis for a critical approach to planning and a new outlook on what a strategy could possibly mean.

ABSTRACT

The idea behind this paper is simple: While devising an image of a future society — one which actually would be universally accepted as desirable — appears to be a troublesome endeavour, to substantiate what should be avoided better corresponds to our experience in the real world. Consequently, to frame the images of undesirable societies becomes a necessary ingredient of any strategy for action. Proper suggestions can indeed be derived from such images as to why, what, where, when, and how things should be done and who should act — as Galtung puts it — in order to prevent the advance of social dynamics toward undesirable states.

This essay has 8 chapters. In chapter 1, the general problematique of desirable versus undesirable societies is sketched out. Chapter 2 deals with a critical analysis of some current considered-to-be-desirable societal projects. In chapter 3, the shifting foundations of individual versus group images of future societies are briefly introduced. The main conclusion stemming from this part accents the need for considering two different issues when societal desirability is explored: the structure of the desired society and the desired rules of negotiation of what is desirable or of what is not in both the present and future. Chapter 4 focuses on some specific group images of what should be — namely on class, national and global (or world) level. In chapter 5, some conjectures concerning the general relationship between societal structures and rules for dialogue able to define such structures are presented. Chapter 6 deals with a special type of resonance — called here desirability resonance — as a framework for understanding societal dynamics. In chapter 7, the problem of assessing the roads leading to the desirable societies is explored, with emphasis on the difficulties of a (positive) idealized long-term planning. A new type of long-term planning (called here critical long-term planning) focusing especially on what is to be avoided as undesirable is introduced in chapter 8, suggesting a frame for a possible theory of negative strategic awareness in social choice.

I. WHAT IS AND WHAT SHOULD BE: A STORY

In his opening speech addressed to the world Future Studies Conference held in Bucharest in 1972, Bertrand de Jouvenel described the relationship between what is and what should be as follows:

> There is much wisdom in the proverbs made up by various peoples. This is an Irish story. A traveler came into a village and he asked the peasants: "How can I get to the so - and - so place?" - which actually was his destination. And a peasant answered: "I, for one, if I were you, in order to get there, I wouldn't start from here." In other words, we find the world as it is, and it is from this world that we must starting building the desired future (de Jouvenel, 1976).

But, in fact, are we sure — as the traveller was — that we know our destination, i.e., the desirable future we are aiming at?

Before answering this question, we shall imagine another story, in prolongation of de Jouvenel's. Let us imagine a tired and hesitant traveller, who arrives in our village and asks us how to get from here to a definite place. This time, the answer will not come as quickly as in the Irish story: In our turn, we want to question the traveller. Why does he want to get there, we will ask him. Has he perhaps already been there before and wants to return? If this is his first trip, what does he know about what he will find at the destination? Is that what he is actually looking for?

We would like to know even more. Does the one who recommended the road and the destination really understand the purpose of the trip? And can this counsellor be trusted? Now that the traveller decided to undertake the trip, did he evaluate not only the hypothetical benefits, but also the costs (for instance, in fatigue of time lost) of his choice? And, if

the road is long and difficult, will there be any chance for him to change his mind?

Finally, as if it were not enough, we arrive at the key question: What will happen if the traveller cannot reach the destination in his lifetime? Are his children willing to travel along the same road their father chose for himself? Is that a proper thing to do — to make a decision that will bind one's children? If there are doubts about such a paternalistic right, how can he avoid pushing his heirs down a one-way road?

At this point, we must make a confession. Asking all these questions does not mean that we know all the details about the roads leading to nor that we once visited the destination — as the Irish story suggests. But, in our view, such a psychoanalytic exploration could possibly help the traveller not only to discover his genuine desire, but also to prompt him to consider some alternative targets to his initial choice. As concerned and attentive guides, we had in mind mainly to warn our traveller about eventual hindrances awaiting him on the road and especially about one-way tracks, leading straight forward, which forbid the return and drive the traveller inexorably toward a unique destination.

1.2. Let us now imagine one more story. A group of travellers come to a village and ask a peasant how to get to a place having some definite characteristics. Most probably, the different members of the group will react differently to the answers given to them. However, they probably will accept a few variants as meeting their requirements. Even more probably, the members of the group will form a consensus about avoiding one-way roads and unpleasant places and settle (almost unanimously) on a decision to avoid them.

But what will happen if a group of different travellers encounters a group of peasants — each of them holding distinct information about and individual assessments of the possible road leading to the possible destinations envisaged by the travellers? Presumably, the consensus can actually be established around even fewer issues than before; the group

will decide to pass over the places displaying the most obvious dangers and to avoid threatening and wearisome roads.

These ad hoc fables add to Jouvenel's marvelous metaphor a few other morals. Manifestly, we should perceive the world as it is when we undertake the task of devising desirable futures. Even more, not any desired world could possibly develop from the present: logically and realistically, it can engender only some future societal organizations.

The conclusion of the Irish story is that the destination point must be regarded as a function of the place of departure. In addition, we would say that it is equally important to know if the travellers' choice of destination has been based on an honest estimate of the length and difficulty of the roads. For, there always exists a chance that because of a path that is too long and too exhausting, the advised travellers will reconsider their initial plan. A good guide should probably take care of all that.

II. DESIRABILITY: PAST, PRESENT, AND FUTURE

2.1. Forecasters and planners play a role similar to the peasant guides in de Jouvenel's story. But unlike the peasants — who can stay at home if they want to — the forecasters always escort the travellers on their way toward the desired target. Their concern with the desirability of the destination is thus entirely justifiable — especially if one keeps in mind that the considered target is an abstract image of a desirable society, which generates (even idealized) values for long-term goals and policies (Emshoff, Mitroff, and Kilmann 1978).

In the GPID framework, the desired societies are beta type, i.e., horizontally integrated and participatory organizational structures. Beta-type societies are mental constructions that contrast all the real societal forms currently in existence: the latter are diagnosed as alpha type, large, vertically-integrated and unappeasedly growth-oriented (Galtung 1978b). Therefore, establishing the beta relationship — it is suggested — could become a wide project, nourishing goals and strategies and promoting actions for implementation.

2.2. What are the sources of the confidence placed in the beta-society project?

First, let us remark that beta society is an abstract product of social thought. Ultimately, one can associate the beta relationship with the hunter-gatherer societies, but to a contemporary man such a parallel can easily appear hazardous. Thus one can infer that the beta relationship has never been experienced in the history of mankind, and its desirability is sustained mainly by theoretical reasoning.

New arguments in favor of beta societies are given by (social) thermodynamics. Georgescu-Roegen's ideas about the relevance of the Entropy Law for all social and economic processes have as a natural corollary the unavoidable drive toward high-entropy society (Georgescu-Roegen 1971). A similar social organization has been described by Rifkin and Howard (1980) under the label entropic society. In a more sophisticated approach, Prigogine and Stengers advocate that, within the framework of the thermodynamics of equilibrium — and only in this case — an inevitable trend toward greater disorder is at work. Thus, the most symmetric (social) configuration becomes an attractor for every other state of the system (Prigogine and Stengers 1979). In their words, within isolated systems, equilibrium is a strong "attractor" for the non-equilibrium states. If equilibrium is reached, the system forgets its initial states. Only the "attraction basin" counts: Every system in which at least one of the states belongs to this basin points towards the same final state, characterized by the same behaviour and the same set of properties. Once this state is established, the system will continue to fluctuate around the attraction state.[1] Let us incidentally remark that the Marxian concept of an objective law of history governing the necessary transition toward communism can be set down in thermodynamic terms. In this particular outlook — at least rationally — a beta-type society is not only a desirable variant of a future arrangement but also the unavoidable single one. We shall elaborate on a critical analysis of the speculations on the social implications of thermodynamics of equilibrium in chapter 8.

Second, the desirability of beta relationships derives also from the critical analysis of existing societies — and the consequent alternative images of the future — provided by great religions, ideologies, and social utopias (Laszlo et al. 1978). Plato conceived of a model as not merely a representation of something, but as an idealization to be followed. In Plato's spirit, a world model is an exemplary world — i.e., an ideal and desired world. Since his time, philosophy and utopian thinking have continously attempted to design — and dreamed to put into reality — a desirable society.

The beta society therefore is a concept building on a long tradition of

past societal projects. It inherited the values of (European) Renaissance, and of the (European and American) Enlightenment; it absorbed (European) Marxian ideology and the subsequent project of comprehensive social change, derived from the criticism of the canonical nineteenth century (European and American) capitalist society, eventually updated and enlarged;[2] now it also incorporates other Western radical views — the product of a critical approach to contemporary western societies (and the western images of non-western societies).

Despite the obvious western background of the beta paradigm, the feeling prevails within the GPID Project that the "traveller" — i.e., a (western or non-western) citizen of the planet, concerned with his own future — believes that the guides who recommend to him the beta society as a destination for his trip understand his innate aspirations. It is also assumed that the traveller trusts his guides enough to follow them: he may be sure that his guides are not only correct in their assessment, but also honest in their devotion to the common goal — as common destination — which attracts both travellers and guides.

Third, it is often considered that beta society can be reached — maybe during our lifetime.[3] For one-third of the people of this planet, the communist society — theoretically, a beta-type one — is no longer a utopian abstract construct but a goal to be attained: the journey into the future is already in motion on a one-way road.[4] For those who are engaged in this "battle" (as it is frequently called), it is evident that their children will share their ideal and will proceed toward the goal projected by their parents (or even grandparents) animated with the same enthusiasm.[5] Apparently, in this long perspective the problems of efforts (or costs) to be paid by the community lose their meaning: if the only alternative is to continue the motion, then it would be stupid to consider unnegotiable issues.

2.3. Confronted with these aspects, the planners-guides are compelled to ask themselves several questions. First, are there firm grounds to embrace beta societies (as a common destination) because they reflect the

inner goals of the common citizen of this planet? Have we, the forecasters-planners, devoted to the so-called normative approach, the moral authority to persuade people to choose a definite image which will monitor their long-term prospects? How can we picture not only the benefits of ideal societies but also warn people about the length and the difficulties of the road — even if we sincerely believe we are correct? Does our speaking too much about desirability and describing merely the benefits of ideal worlds become just another manipulation of people's desires? And, focusing on what will occur in a distant (and insecure) future, are we not in fact encouraging the neglect of our present? If people's interest is polarized by issues beyond their disposition for concrete action, can their lack of interest in daily problems possibly favour the stability of current societies? For, utopian dreams described as reachable are excellent therapies against alienation: the aliené is cured by a false feeling of commitment and the actual order will be less troubled by deviant individuals.

The answers to these questions will be drawn from analysis of the process in which the images of the desirable futures are built up. Anticipating our conclusions, we shall state that desirability should be associated with the rules for negotiating the guidelines (and not with concrete goals) and that its role is to substantiate long-term strategies.

The term strategy is given here a rather unusual content. As normally understood, a strategy is connected with positive action: one devises a strategy to reach something. But if what is to be reached is a society that is supposed to function in a way only ideally foreseen,[6] to transform a desirable fuzzy and distant image into a guideline is not free from dangers. In fact, existing global trends run against a beta-type goal (Galtung 1978a) as an image of what a desirable society looks like. Apparently, the implementation of such a project goes beyond the horizon of action of our generation: to invest several generations in a project which will take a long time before being realized appears morally questionable. More than that, today's actions favouring some issues can produce, in the very long run, counter-intuitive implications, playing against the same issues. As we are discussing a societal evolution,

involving more than a generation, this becomes particularly significant — especially if one thinks that intuition also evolves and that the dynamics of expectations and needs changes quickly.

To conclude, we will associate the concept of strategy no longer with positive action, implementing what is desirable, but with negative action, i.e., with action that blocks the way to what should be avoided. This gave the title to our essay.

What has been said above is suggested by analysis of how the images of social desirability are produced. The next chapter is devoted to this problem.

III. INDIVIDUAL AND GROUP IMAGES OF DESIRABLE SOCIETIES: SHIFTING FOUNDATIONS

3.1. It has often been said that the images of a desirable society are circumscribed by the image-maker's cultural background, just as every other image is. Therefore, one can postulate that the images of desirable societies[7] for people living in different parts of the world, despite the advances of science and technology and the spreading modernization — considered as factors that unify human experience (Boorstin 1978, p. 15) — are different.

We shall develop as an example the analysis of alpha versus beta social structure. This issue is often considered basic for the design of a desirable future.

Several a priori prerequisites sustain this conjecture. First, that people are comparing themselves with a group of reference; second, that it is possible to select from among the issues defining the position of humans in the society one essential issue as a criterion for comparison, horizontal or vertical being thus estimated on a scalar basis; and third, that the conclusions drawn from this type of comparative analysis suggest and substantiate one prevalent ethical value with which to make a critical assessment of future projections about the state of individuals and about the quality of the social environment. Let us incidentally note that if more-than-one dimensions are considered as a base for assessment and comparison, "horizontality" and "verticality" lose all meaning: indeed, if an individual is characterized by a set of qualities, then two different individuals are no longer comparable (unless something additional is introduced, e.g., a point of view).

Are these prerequisites always fulfilled? It is difficult to give an

honest answer to this question; it requires serious inquiries into people's aspirations as they appear in different cultures. As for us, we do not believe that, in all possible cultures, people live by comparison,[8] perpetually keeping an eye on others; that the comparisons are merely based on materialistic matters; and that unavoidable differences are at the roots of social (un)happiness.[9] Further, even if disparities are perceived, it is doubtful that all individuals view them as abnormal and consequently decide to transform the society into a more balanced one.[10] Obviously, the feelings inspired by such comparisons depend in large part on the chosen reference group and on available information. What one finds out about one own's status will differ essentially, depending on whether the neighbourhood, the region, the country, the west, the south, or the whole world is taken as the term for comparison. Let us incidentally mention the role played by informational media — which actually add to the unmediated personal experience facts and assessments beyond one's direct reach — thus intervening in the process as a possible manipulator of people's wishes and aspirations.

The whole issue becomes even more debatable if the value of equity — the very backbone of the beta-structure concept — is confronted with other values (such as individual autonomy, responsibility, freedom and so on). The propagandists of large-scale societal experiments undertaken in this century often suggest that beta structures are by nature anti-individualistic and that therefore there is a choice to be made between equality and individual freedom. For people living in socialist countries (i.e., in what we call the Second World[11] — envisioned as a world corresponding to an egalitarian beta-type structure), this is more than a suggestion: people's personal experience in society tells them that they have traded individual freedom for (a certain kind of) equality. In other parts of the world too, possibly due to the available information on the real socialist experiment and on its results, people perceive the relationships between the two issues as mutually exclusive.

That departs essentially from the genuine Marxian dream of a desirable society in which both individual freedom and equity are achieved. The canonical Soviet-like socialist organization has been stripped of its

myths — especially after Stalin's era. For a time people saw a possible return to the original rapport between the two issues — as it was envisioned by the founding fathers of socialism — and put hopes into the Chinese Maoist experiment. But the excesses of the Cultural Revolution and its actual assessment (possibly unfair, but widespread) once again measure the distance separating reality from the original project.[12] Apparently, the existing socialist societies do not embody a beta-type organization. Beta society is still a project whose feasibility remains to be proved if one believes — as the authors of this essay do — that it is more than a temporary myth.

In conclusion we will say that, in our outlook, at the individual level, the desirability of beta organization of society is hardly more than a hypothesis. In all probability, there are people who are neither stupid nor patent reactionaries who do not share this (western) rationalistic ideal.

Discussions on these matters often overlook the fact that individual images on societal desirability are not given once and for all, but are engaged in a yet little known dialectics. An individual has his own beliefs and information about the situation and the beliefs of other people. A feedback structure relates one's image of what is desirable for the society to external issues.

Speculations about a typology of individuals — defined by the balance between internal and external signals in the design of desirable futures — could be developed on this basis.

So, one can describe a first category, comprised of individuals strongly motivated by their own beliefs, always disposed to interpret the external signals rather than to change their opinions. Usually these people select, from available information, only the "good news," providing them a positive feedback, reinforcing the images they already have of what is to be desired. What has been called cross-deformation effect 13 is a particular instance of the same phenomenon: It involves (a sometimes involuntary) distortion of available information (e.g., on other indi-

vidual dreams and aspirations) to motivate (and to justify) one's inner drives. This is the class of true believers (Hoffer 1954).

A second category could be described as depending merely on external signals, actually neglecting internal motivations. Such people change their images of the desirable society in contact with emerging realities.[14]

Finally, a distinct class groups the individuals who try to balance the internal and external motivations when they substantiate the image of a desirable society and consequently act in different manners if confronted with different situations. Such people readily accept compromises on issues they consider less important, but remain inflexible on those issues perceived as essential. This attitude is very prevalent among communist intellectuals.

3.2. At the group level, the image of a desirable society is a construct of a different sort. Balancing inner impulses with external signals an individual reaches his own conclusions about what a desirable society looks like. But groups — in which individuals usually live, work, and relate to each other — are heterogeneous configurations, in which most likely one has partners whose beliefs he does not share.

Obviously one can imagine social groups cemented by a common — or almost common — image of a desirable society. Some political organizations — as, for instance, communist-Leninist parties — are based on unanimity on this issue and are incompatible with diversity. Sometimes it is suggested that an appealing societal issue could also explain the shaping of a nation. For instance, the immigrants have been attracted to settle in the United States not because they shared a common past but because they embraced a common project for a future societal organization, and it is this project that finally sealed the internal coherence of the newborn nation (Brzezinski 1976).

Let us remark that this romantic perception of unanimity is no longer satisfactory when trying to trace the image-of-desirable-future formation.

The unity around an ideal can be observed merely in small-scale volunteer communities, experiencing new, noncanonical styles of life, as happens in Freetown of Christiania (Lemberg et al. 1978), or in social-scientific organizations grouping people who share the same (or almost the same) views on a desirable future (WFSF for instance).

In reality, we are all living in some manageable unit within existing societies. Enterprises, schools, villages, universities, towns, churches, and nations are such manageable units, always heterogeneous, mostly hierarchically integrated — and therefore of the alpha type. In fact, management means hierarchy — be it originated by structural issues (as in capitalist class-societies) or by functional issues (as in self-labeled classless[15] socialist societies). In fact, the capitalist-generated hierarchy is structural, i.e., is a necessary consequence of the peculiar anatomy of the capitalist class society: The socialist-generated hierarchy is merely functional — i.e., it is a necessary consequence of the peculiar physiology (or operation) of so-called classless society. In our view, there is no organizational similarity between the two patterns, as it is sometimes claimed. Nevertheless, both are hierarchies.

How is the image of a desirable society shaped within the (existing) social environment? Obviously, the theoretical beliefs of individuals belonging to a manageable social unit are (up to a point) related to their status within the given hierarchy: Different positions in the hierarchy offer different social benefits. Consequently one's drive toward a more desirable organization is accompanied by a (perhaps unconscious) estimation of the change in one's personal status. Most probably, despite the theoretical commitment to a more desirable society, the drive towards action aimed at changing the society in the "right way" is more intense if one hopes to improve his status than if he has something to lose.

The differences in the intensity of drive towards change may become important enough to modity the entire issue. In fact, what does an individual belief in, say, a beta structure as desirable mean if, for

some personal reasons, a particular individual is satisfied with the society as it is, or is even frightened by possible changes? Moreover, what does it mean to desire a better society if one is in fact strengthening — by his social or professional activity — the existing society? Social change implies redistribution of authority within the manageable group. But how many people are willing — for messianic reasons — to renounce their privileged positions?[16]

In the previous section (3.1), the sources of diversity in images of desirable societies, on the level of the individual, have been explored. Now, in addition to the issues mentioned in this section, other sources for diversity have been found in the inescapable belonging of almost everybody to a certain manageable unit attached to the existing society and in the variety of status-related attitudes developed within these units.

3.3. Thus, individuals in groups have even more reasons to develop different images of what is desirable for the society than the perfect loners do. Now, how can such images be aggregated in order to produce a construct that could possibly qualify for the "image of the entire group of what is desirable"?

Obviously, any individual image of what is desirable for society introduces a particular ordering of the public issues that confront the given community. In a previous paper (Botez and Celac 1978) these problems have been tackled. It has been stated there, in conclusion, that following Arrow's impossibility theorem, a rule for combining the individual rankings given to issues and consistent with (seemingly innocuous) assumptions concerning the completeness of the domain, positive association of social and individual orderings, independence of relevant alternatives and individual sovereignty and nondictatorship[17] ultimately cannot be established.

What are the consequences of the impossibility theorem for the study of group images about desirable societies?

First, except for the associations founded by mutual consensus around an a priori stated image, no single image selected from among individuals' images that will be unanimously accepted as representing a desirable society by all sovereign members of the social group and guiding their actions can be found. Indeed, groups are usually "manageable units" — in which "workers" and "capitalists" and "bureaucrats" are present. These categories have meaning only within the group: if one side disappears, the activity of the group ceases. Now, something desirable for the group must be desirable for all the sides. This is what the impossibility theorem is about: Theoretically, no unique comprehensive image can embrace what is desirable for capitalists and workers and bureaucrats.

Otherwise, in order to preserve the unity, the group should either expel the dissident faction (but then the group's activity ceases) or tolerate a frustrated (even if minoritarian) subgroup — but then the image is no longer desirable for every member of the group. In practical terms, each time we discuss a group's image of a desirable future, we should ask at least two questions: Desirable for whom? and Who doesn't agree with the (necessarily) particular version of what is desirable?

Second, Arrow's theorem suggests that, when a definite image is unanimously accepted by a heterogeneous group, the "nondictatorship" assumption is not fulfilled. Legitimately, one can infer that — despite apparent unanimity — genuine diversities and even opposite views remain hidden or rejected or ignored for some reasons by the group as a whole. In practical terms, when unanimity appears, a few questions must be asked too, namely: Why aren't alternative views openly stated? and: How many members of the group are concealing their views?

Finally, we have seen that a particular image (for instance, an image drawn up by a definite person) cannot be advanced as the group's image (even if it has been accepted sincerely by everybody in the group). One more question arises here: Does it mean that the concept of desirable society loses its claim to legitimacy in real life if a group is considered instead of an individual?

In quest for an answer, we shall turn once again to the impossibility theorem. In Arrow's spirit, the dilemmas brought about by the individual's image become less disturbing if one thinks in terms of a dialogue between alternative (or even conflicting) images rather of an unique image of desirable society. The outcome of dialogue will no longer be a comprehensive image but a general framework for debate. On such "less-than-an-image" base group agreement will be easier to achieve; less frustration will occur; and a real possibility for internalized social change seems to emerge. The image-makers themselves change in the course of the critical dialogue. Following rules in accord with the structure of the group, they will (perhaps) produce new images of themselves and of their partners, of what is and of what should be. The new images will be reassembled, leading to other rules, opening new paths for thinking about the future and acting. The social group and its members (individuals as well as coherent subgroups) evolve together. However, the group as a whole does not necessarily process a comprehensive image and does not act as a monolithic whole following that image.

The design and implementation of coherent images of desirable societies becomes a continuous process. It is compatible with drastic changes brought about by scientific discoveries, new ideologies, new religions, etc. Theoretically, the situation in which a generation makes choices on behalf of all its successors is avoided. The desired society is no longer an immobile paradise, but a flexible framework, allowing its members to think about the future in their own — and yet unknown — manner.

3.4. We shall now summarize the discussion developed above on the differences between and the shifting foundations of individual — and group — process of image-making. Let us recall that "individual" means here "social actor" — i.e., a human — carrier of an image of a desirable future or a number of humans united by a common image.

Individuals develop particular images, which are strongly biased by tradition, culture, and available information. But the images developed by an individual are not "transferable" to a (heterogeneous) group — un-

less the group is under personal dictatorship.[18] If they belong to a group, the individuals negotiate around the image of what should be desired. This process is necessarily regulated by the power structure installed within the group; the rules of the social dialogue are shaped by this structure. As a result of the dialogue, a less-than-an-image appears. Thus, the individual authors must remember that only a (small) part of the image they build about what should be has a certain chance to become a guide for group polity. It is their right to try to increase this part through persuasion, through criticism directed against other images, etc. But it is also their duty to understand that even more important than the images they propose for the desirable future are the rules that govern the dialogue between them and their partners. Obviously, that implies that the actors producing images are really concerned with discovering what is desirable — as percieved by the group as a whole.

Let us also add that, paradoxically enough, one can eventually imagine a group which as a result of non-alpha (or possibly beta) rules of the dialogue, the less-than-an-image of the desirable society can remain of the alpha type. When, for instance, the workers refuse to take the responsibilities of management, apparently they are ready to accept an alpha structure as desirable, looking for compensation in better opportunities for leisure and fewer duties to be performed. Logically that is a desirable arrangement for the group — even if it differs from some individuals' views.

Conversely, it may happen that, as a result of alpha rules of the societal dialogue, the desirable society will be beta type. Again, this arrangement can hardly be labelled desirable — even if it fits some individuals' views: For, in this case, what is desirable has not been defined at the level of the group.

IV. CLASS, NATIONAL, AND GLOBAL IMAGES OF DESIRABLE SOCIETIES: SOME MARGINAL REMARKS

4.1. The term "social group" has been used previously mainly as opposed to the concept of individual (or social and political) actor. Summarizing, a group cannot be reduced to an individual. By definition, a group is more than an individual: Genuinely different individuals belong to it. But how different could the individuals forming a manageable unit possibly be?

Obviously, certain social groups play a crucial role within modern society. We shall consider social classes — basic groups in the classical Marxian approach — nations, and, finally, all of mankind. We shall try to describe the kind of image of desirable society each of them plots, focusing on the image as a result of the dialogue and of the rules of the dialogue. The intricate dialectics linking the images to the rules of negotiating group images will be explored within the concrete frame of class, nation, and world as a whole.

Before going further, let us stress that, in order to shun the temptation of utopia, we consider that "what should be" has already been expressed as aspiration rooted in "that is."

4.2. In the classical Marxian outlook, a social class is composed of individuals having in common a certain position vis à vis social productive forces (which lead to the dichotomy: haves versus have-nots) and, as a consequence, bearing a specific weight in the distribution of social production and of wealth (thus underlying the social status and role). Belonging to a definite social class puts a decisive mark on the image about what is and what should be. For the have-nots (or the poor) the desirable order might mean first one that corrects the existing unfair

social order, thus bridging the gap between haves and have-nots and promoting a redistribution of ownership. For the haves (or the rich) a desirable order may mean first to resist the pleas of the poor, thus conserving their privileges in a society divided into haves and have-nots.

Now, all that has been said above conserves its meaning only if the society is pictured in classical Marxian terms, i.e., in terms of economic wealth which is not mandatorily reducible to economic determinism (Brucan 1979/a, p. 10).

In nineteenth century capitalist organization, it was practically impossible to separate the haves from the have-nots into manageable units: Both categories were defined exclusively one in opposition to the other. The Marxian analysis of the bourgeois society of the past identified two alternative images of desirable societies: one for the have-nots — a classless society, whose modern descendant appears close to a beta-relationship — and one for the haves — a society conserving the status quo of alpha-type structure. The group image about what is desirable emerged as a result of negotiated dialogue between incompatible alternatives; the rules of the dialogue have been established in accordance with the structure of the group — namely with the distribution of power within it.

How have the alternative class-oriented images and rules of group negotiation evolved since?

The changes are obvious. A world-wide movement has been organized on behalf of the have-nots, aimed at transforming their image of a desirable society into a project and putting it into reality. This movement has succeeded in implementing the basic tenets of this image on one-third of the planet. So far, this has been achieved by force: some committed minorities, disappointed by the rules of negotiations moulded by the burgeois society, organized in resolute bodies called parties and, thoroughly convinced that they were acting pursuant to the mandate of the entire social class, took over power and installed class dictatorship, destroying their opponents, usually also physically,[19] together with the corresponding alternative images on how a desirable society should be.

As a result a new type of society emerged: the socialist society, called sometimes real socialist or developed socialist or multisided developed socialist.[20] We used here the term "new" not as a substitute for "better." In fact the socialist and liberal societies as they appear today are not comparable. It may happen that, for some definite people and some definite issues the comparison could make sense — with one society looking better than the other one. However, if considered as wholes, both societies display so many compensatory aspects that the comparison simply has no purpose.

Let us also recall that the socialist societies have never been considered by their founding fathers as large-scale social experiments, but as legitimate (thus unique) results of the action of long-term objective laws of social development discovered more than a century ago by Marx and Engels. That means that there is no other way but to go ahead.

The new society displays some characteristics; private ownership of the productive forces no longer exists; the right of property has been transferred from individuals and groups to the nation-state (with the exception of Yugoslavia); there is no more-than-one-center of power; the entire authority is concentrated in the hands of a unique leading political force, the communist party; the alternative views of what is desirable are banned — and so is any action guided by heretical images.

These characteristics put indelible marks on the structure of the society and shape new styles of life, new aspirations[21] and a new image of the society to be desired. Such unparalleled concentration of economic, social, political, and cultural power within a single group[22] paved the way for the planned concentration of means and resources directed toward explicit goals. Among the goals to be reached, industrialization is considered a key element of progress and modernization (Brucan 1979/b) in not-yet-industrialized countries. The corresponding power structure could therefore be labelled industrialized (or industrializing) class dictatorship. This appears as a rather unusual combination: In western literature, the term industrialized is currently associated with bourgeois democracies, as to describe industrialized democracy.

In the process of building up new societies, the images of desirable futures were changing too. For the militants who took over power (alone in the USSR or China or with foreign aid in Eastern Europe, where the Soviet influence after World War II played a crucial role) completing the installation of communism appeared as a one-generation project. It is now obvious that it requires much more time.[23]

Therefore, the revolution turned into a stable society, headed by a new establishment, called by Galtung the PMP(party-militaries-police) complex, organized as an alpha structure, that promotes ambitious economic goals. The improvement in the material standard of living is measured by comparison with the past and, more recently, with the levels reached by the consumption-oriented bourgeois society: that became both a basic goal and the criterion for assessing the successes achieved in the construction of the new society. More and more, the communist society prove to be a classless and affluent society — affluent in the western sense of the word.[24]

Apparently, affluence is more difficult to achieve in class dictatorships than in classical bourgeois democracies. Indeed, ideological scruples along with the absence of stimuli promising material rewards to the bravest (promoted in virtue of the self-labelled egalitarian beta orientation of the society), restrict economic growth. The class-oriented selection of managers appears also to retard the formation of a class of technocrats — obviously better prepared to cope with the complexities of modern production processes than committed but inexperienced leaders.

Countries under class dictatorship are acting, on the world market, as national (or even multinational) corporations. Consequently, their internal structure (of the domestic market for instance) differs basically from the economic environment. One can therefore presume that, on the capitalist market, purely capitalist actors (firms, corporations, etc.) are more successful than those units that are compelled to accomodate their internal long-term strategies with the random short-term fluctuations of the environment. In technical terms, in industrialized class dictatorship countries, economic growth is subject to ideological,

political and social restrictions. In industrialized burgeois democracies, there are no such restrictions imposed upon growth: Growth itself is the ultimate goal and all other things serve as tools (including the social structure, the political management, etc.).

The classical Marxian theory expected that labor productivity, in societies based on collective property, would be greater than in societies based on private property, and consequently, that capitalism would be surpassed — economically — by communism and replaced by it. So far, however, the communist societies apparently remain less successful than bourgeois societies in achieving global economic performance.[25] But, as we shall show below, this is intentional and finally serves the interests of the advancement guided by the existing elites toward the desired beta-type society.

Now, what are the images of desirable societies devised by individuals born and raised in industrialized class dictatorships? And how are individual images aggregated into a group image of what is desirable? We are speaking here about the successors of the pioneer-militants who took over power, and we shall examine how the long-run operation of the industrialized class dictatorship put its marks on individuals.

First, people born, educated, and trained in a class dictatorship spend their whole life in a constant state of emergency — due to the war fought against internal and external enemies of communism or due to campaigns carried on to build up a new society and to speed economic development, especially industrialization. People spend their whole lives as soldiers at war and are persuaded to submit permanently to the (unchallengeable) class (or party) discipline.

This environment sharply modifies the spectrum of individual aspirations. Even more, new aspirations and motivations are shaped sometimes under confusing (for external observers) words. Many western scholars who study communist society are perplexed by the current conceptualization, in which "revolutionary" means in fact "being in agreement with the authorities," "participating" means "to follow orders," "take part in

the political game" means "never challenge the power," etc.

The complete monopoly of information and the unlimited possibilities of political manipulation add new facets to this picture. The politically oriented selection of internal and external news and their deliberate use as rhetoric for propaganda purposes also help to legitimize the existing power structure, to confirm the correctness of the chosen one-way road leading to the new society, and to draw attention to the failure of bourgeois democracies[26] seen as rival and alternative societies.

As a result, an overwhelming feeling submerges the individual: He belongs to an army that combats a hostile, unjust environment and that will finally win. Consequently, what the individual believes to be desirable for the society is derived ab initio from a pre-existent group-image (shaped by the class-conscious proletariat a century ago) of an unquestionably desirable and beneficial — in a long-run perspective — future society.

Second, as the main features of the road towards the desirable society have been settled, what an individual is allowed to decide upon is the choice of his own images of desirable statuses and positions within the stable frame of society's structure. Social achievement no longer means "improving one's own status" in a (possibly manipulated) competition, in which some lose and others win — as it happens in bourgeois society. Rather it means "to realize as much as possible" within a societal drift advancing irrevocably toward general well being. "As much as possible" obviously remains dependent on personal values, motivations and "cost-benefit" assessments that influence one's options.

Some people are thus driven by material, social, and political success. They look after and readily accept the costs to be paid for entering the category of privileged (nomenklatura) — this bizzare group, whose very existance is rejected by the ideology it adheres to. Other people strive for achievement in a professional field, tacitly accepting the rules of the game: obedience in exchange for security and support.[27] Finally, the majority of the individuals — called sometimes the silent majority — tries to enjoy the benefits of the new style of life.

Job security and extensive welfare programs offer social protection to the individual. A feeling unknown in other societies spreads: that somebody else (namely the society) takes full responsibility for one's griefs and problems.[28] Consumption is maintained at a very low level, which generates a continuous awareness of these issues. That is the main reason why we do not consider the lack of economic performance in the socialist world as really challenging the existing stabilized structures. In fact, the generalized scarcity offers new tools for manipulating people's desires. New sources of social gratification and personal happiness — unknown in other contexts — are emerging. The perspective of acquiring material goods slowly but steadily becomes a factor of stability, coherence, and individual commitment to social polities. In addition, the obvious limitation of material wealth leaves room for new values and aspirations — possibly non-materialistic. That partly explains the emergence of a strong (and unexpected) interest in traditional and religious values in all communist countries, which in the long run can eventually lead to the reconstruction of the whole space of social values. The extraordinary succession of events that began in Poland in August 1980 can be taken as an example.

The reshaping of the social values system in Poland is a rather singular case. Usually, people who feel attracted or experience new or uncanonical values tend to become isolated from the mainstream of social life. In the planned uniformity of individuals' aspirations, a real diversity actually exists, but the different deviant values are not openly transferred into the social stage: people feel that it is more realistic and less costly to foster in privacy the values they consider desirable rather than to participate in a dubious game, the outcome of which remains uncertain.

Third, all these processes bring about a paradoxical result: the consolidation of the alpha-type organization within communist (beta-oriented) societies. Indeed, the existing communist power guarantees the fulfillment of individual aspirations and authoritatively guides the whole society on its way toward the desired beta organization. Obedience to this power and implicitly to the alpha structure it represents means commitment to the beta goal.

Summarizing, contemporary communist societies are self-reproducing alpha structures, whose duration and strengthening are justified and accepted on behalf of the future beta society. The difference separating what is from what should be is not regarded as substantial: What is is accepted as an inevitable stage leading to what should be. Moreover, the image of the desired society is, in this case, much more important than the rules of societal dialogue which is supposed to generate the image that will be perceived as desirable.

So far we have described the image of the desirable future and the processes through which it is implemented — as seen by the working class in the spirit of Marxian classical thinking. The alternative images — shaped by the burgeoisie — are all variations on the theme of liberal industrialized democracy, be it called technological or post-industrial or technetronic or active or affluent society.[29] All these images, together with western radical utopias about decentralization, are usually included in the same class, labelled by communists as "burgeois dreams on the future of capitalism" (Bestuzhev-Lada 1976). The images of the so-called convergence of communist and non-communist views of the future are also considered by communists as irremediably bourgeois. In opposition to the communist tradition, for non-Marxian thinkers, the rules of the societal negotiations, through which an image of a desirable society emerges from individual images, remain more important than the proper result of the dialogue.

Therefore, on the level of the societal image or of the rules of negotiating it, the conscious belonging to a specific social class is a unifying factor in the individuals' images of desirable futures.

4.3. Belonging to a definite nation can also be regarded as a factor cementing the relationship between what is and what should be. Within a nation-state, the political will can be mobilized for attaining collective goals, derived from abstract societal images of the future. That is what happened in the communist world, where nation-states have been formed in order to create a desirable society in the eyes of the

working class; the revolutionary bureaucracies, institutions, an entire structural network developed[30] so as to achieve this goal. Thus, the class-oriented image of what is desirable becomes operational within national contexts and is directly associated with political will.[31] A kind of nationally diversified communism emerged as a result of the recently shaped alliance between nationalism — built around the concept of the nation seen as a compact whole — and communism, which always sees the nation divided in classes.

Within this new frame, what should be is transformed into what should be for the nation. A typical example in this respect is Romania. This communist country follows the classical Leninist road toward the desired classless society, while claiming its political independence and acting in the world arena in favor of a status quo, guaranteeing the existing power structure and the fulfillment of its national goals.

Let us incidentally note that the nationally diversified communism allows the diffusion of the Leninist model of the future society much more efficiently than the centralized Soviet-co-ordinated communism. In fact, this fresh version of the Leninist societal dream distinguishes itself from the controversial past (which saw Stalin's camps or Mao's Cultural Revolution excesses) and appears definitely more appealing for the new nations — or new leaders — than the old image of an international organization whose headquarters are in Moscow — or in Beijing.

The alliance between communist and nationalism brings about some surprising results: The communist structures are reinforced; their popular base is no longer a part of the nation but becomes the whole nation, because for a communist nation the only alternative is to remain communist, the individual commitment to the nation is converted into commitment to the communist nation and consequently to the communist structures, goals, and values, as expressed in connection with the given nation. For small- and medium-size countries (like Romania), the nationally coloured communism is mostly defensive, i.e., aimed at preserving the national identity along with the advance toward the communist goals. For more powerful ones (like the USSR), it can promote extra-national interests and goals, whose

pursuit is perceived from the exterior as proof of an offensive impetus (labelled hegemonism, social-imperialism, etc.).

Thus, the specific ideology of nationally diversified communism focuses rigorously on the final image of the society which is to be desired by the whole nation and neglects in large measure the rules of negotiating this image throughout nation-wide dialogue.

In the non-communist world, the nation-states perform as main actors in the international arena. On this expanded playground, shaped by war and trade, power and economic wealth are distributed among states.[32] Although industrialized bourgeois democracies acquired many trans-national characteristics, undoubtedly the ethnicity and the national identity are now much more important issues than they were in the 1950s.[33] Somehow paralleling the image-making process as it occurs at the level of non-communist class ideologies, the western democracies, on the international level, also remain more concerned with the rules of the dialogue (which lead to a polity) than with the image of what is desirable for the given nation.[34]

In the Third World, at the level of nation-states, the key goals are development and modernization. The image of what is desirable is seen in terms of development and modernization. Once accepted, this precise image puts its mark on the national dialogue. Gershenkron suggests that the more advanced the world economy, the greater the costs of entry into the industrial age. Paying the costs of development thus calls for actual collective mobilization, which in turn requires greater central co-ordination (Gershenkron 1963).

Burgeois democracy and fascism or communism appear rather as successive phases in modernization than as alternative options open to any given country at a particular moment of its history (Moore 1966, O'Donnel 1973). Even if such a conclusion seems overstated, one should note that the adoption from outside creates sufficient requisites for the installation of a non-beta set of rules that will govern the national dialogue on a desirable future of the society. The same result emerges if the goal

pursued had been not modernization but resistance to modernization. Obviously, modernization is given here the standard content meaning process leading toward a western-like society (i.e., towards a society with similar industrial structure of production, consumption, etc.). Our remark remains valid if we replace mimicked modernization by whatever else — but equally exogenous to the context.

4.4. On the more-than-national level — and particularly on the global level — to discern how the relationship between what is and what should be operates becomes more difficult.

If the world is viewed in genuine Marxian terms, then what should be is a world-wide communist society (i.e., a beta-type society), the advent of which is unavoidable. How such uniform classless society, transcending different civilizations and cultures will operate in reality remains an open question. For there is no doubt that in such a society, extended over the whole planet, whose members enjoy full equality, a drastic redistribution of wealth and power will occur: this will also affect the working class in the industrialized bourgeois democracies and even people in the communist world. It is not clear at all that, when confronted with the alternative of renouncing their privileges, the poor in the center will not abandon their radicalism in order to benefit from what is. If so, the abstract drive toward what should be — in this case, a world-wide classless society — could lose the support of the center's working class.[35] The same may happen in the communist world. In the Third World too, the political elites, while favouring egalitarian issues, remain generally more concerned with pursuing local nationalistic goals than with helping more deprived people.

The dream of world-wide equality might not enjoy concrete mass support: Actually the relationship between what is and the dream about what should be is practically nonexistent.

We must therefore concede that the implementation of beta-type images of a desirable society at the global level remains utopian. The same is

apparently true of the attempts to implement beta-type rules to the dialogue on what is desirable — between individuals but spread all over the world (as proposed by S. Mendlowith and his colleagues within World-Order Projects network). Both the images of and the debate around what is desirable still remain a seductive dream, but alienated from real trends.

Further, if the world is viewed as formed by small groups of concerned individuals aspiring to become (in a distant future) small self-reliant communities, the same problem arises: to identify the social forces acting in this direction. Without such forces, the gap between what is — namely large, highly centralized groups — and what should be — namely a beta-type network of decentralized nuclei — cannot be bridged: At least so far, the rationalist plea to install a new social structure remains unfulfilled.[36]

One can simulate also what happens if the world is regarded as a stage on which adverse groups of nation-states confront each other — as the theory of core-periphery and imperialism does.[37]

In this case, the critical assessment of what is (namely of how the alpha structure functions at this level) can suggest, as a possible variant of what should be, a beta-like structure of (actually conflicting) groups of nation-states. Such clichés as the New Economic Order, frequently invoked as a solution to world problems by the canonical UN approach, are probably rooted in this perspective on desirability.[38] The same is true if the world is regarded as a collection of independent states-national or even multinational. In this case the beta structure is promoted mostly as the level of rules governing the negotiation between nation-states concerning global desirability and not at the level of resulting images (Botez 1976).

V. SOCIAL DESIRABILITY BETWEEN IMAGES AND RULES: SOME CONJECTURES

5.1. In the following we shall depart from the idea that society's desires are embodied into horizontality — or beta-structure, as it is called within the GPID network.

In our view, the definition of societal desirability involves images devised by individuals (or social actors) of the desired state and rules of negotiating a common concept. As beta must relate to images and rules equally, we will call the horizontality of images of desirable societies beta 1 and the horizontality of rules of the dialogue beta 2. As we have seen before, beta 1 and beta 2 are not necessarily connected. While beta 1 can stem from beta 2, beta 2 — as historical circumstances have proved — does not lead to beta 1 (at least so far). However, if installed in a real context, the two types of beta will probably develop a stronger dependence; multiple feedbacks will regulate their mutual relationships, involving also other elements — such as historical traditions, fulfillment of basic material needs, the (maybe hostile) reaction of the milieu, etc. But those questions go beyond the purposes of this essay, which focus on desirable societies as projects of not-yet-existing abstract organizations (and not as results of a learning process rooted in past and present real-life experience). At this conceptual level, the distinction between beta 1 and beta 2 appears rather natural.

Let us introduce measures on abstract scales for the horizontality of the images (β_1) and for the rules of negotiation (β_2). On this scale, $\beta_1=0$ means perfect verticality (i.e., a pyramidal army-like hierarchy) and $\beta_1=100$ is perfect horizontality (i.e., an absolutely egalitarian social setting); $\beta_2=0$ signifies total dictatorship (i.e., an intolerant despotic prevalence of an unique view in societal negotiations) and $\beta_2=100$

is total democracy (i.e., a continuous process of negotiation among equally weighted alternatives produced by all social actors). The limit scores of β_1, β_2 (β_1=0, β_2=0, β_1=100, β_2=100) are abstractions: More or less real situations will be denoted by (β_1, β_2) as the measure of horizontality (or the beta measure) evaluating one's desire about what should be in a future societal organization; β_1 and β_2 can thus be seen as the respective desired weights assigned to the horizontality of the societal structure and to the horizontality of the rules of the societal dialogue. The combination of β_1, β_2 results in a pattern that is less foreseeable than a pre-existent image of a desirable society.

The measure of horizontality as introduced above suggests some interesting developments concerning the inner content and the changes over time of the measure of horizontality.

First, from the theoretical point of view, the more horizontal the dialogue, the less foreseeable the emergence of a definite social structure becomes. Borrowing a metaphor from quantum physics, we can say that beta 1 and beta 2 generate complementary visions of desirability, with complementary languages and formal grammars. It was Niels Bohr who advocated that scientific inquiry asks for a choice of a language, i.e., of a specific set of macroscopic concepts, in terms of which a physical system must answer the inquirer. Any language has, on the one hand, a limited power to represent such a system, and, on the other hand, the alternative languages are irreducible. Consequently, no point of view overlooking the alternative languages "from Mars" (called in French "point de vue de survol") can possibly be found.[39]

The irreducibility of languages works in our case too: In order to describe desirability, a choice is to be made between beta 1 and beta 2. Thus, a rule similar to Heisenberg's principle of uncertainty apparently governs this field: If (β_1, β_2) is the measure of horizontality within a given (existing) society and (β_1', β_2') is the measure of a desired one, then if we note

$$\Delta\beta_1=\beta_1'-\beta_1,\ \Delta\beta_2=\beta_2'-\beta_2$$

something like

$$\Delta\beta_1 \sim \frac{1}{\Delta\beta_2}$$

or

$$\Delta\beta_1 \cdot \Delta\beta_2 \geqslant k \qquad k \text{ is a constant}$$

ought to stand true.

Second, if the individual's desire to change the society becomes a guide for his actions, it might be expected that the relationship between β_1 and β_2 depends upon the size of the societal group we are dealing with.

It can therefore be inferred that there exists, within the hierarchy of social groups, a certain region where the horizontality of the images is more important than the horizontality of rules, e.g., in small groups, in which the individual's activism may endorse a realistic efficiency.[40] Further, another region can be found where individuals are no longer real actors and where the horizontality of rules is more important than the horizontality of images, e.g., at the extra-national level. Thus the distinctions could be drawn between what should be for me, for us and for the others, avoiding uncritical prescriptions and inadequate transfer of desires from one civilization to another.

Third, the time factor also adds new aspects to the discussions. Obviously, for an individual, one's images about what is desirable should necessarily be limited to the horizon of one's life. Consequently, the horizontality of the images plays a greater role in the short- and medium-term; the horizontality of the rules is not limited to a definite time interval: being atemporal, it assists in the emergence of not-yet-imagined societal desires. This eventually suggests a new definition of open-ended societal planning (Gabor 1967).

These are but a few issues derived from the proposed formal framework. Actually the aim of this essay is not to develop a mathematical model for understanding and predicting societal desires. We shall only note that the measure of horizontality can depict how societies (existing or not yet existing) do absorb the alternative fluctuations of their horizontality. In fact, if one considers a definite societal issue x — e.g.,

economic performance, crisis-state, proliferation of violence — as depending on β_1, β_2 (seen as control parameters), then its dynamics can be described by a cusp-type surface, represented by the equation

$$f_1(x, \beta_1, \beta_2)=x^4-\beta_1 x^2-\beta_2 x$$

if the images are more important than the rules or by the equation

$$f_2(x, \beta_1, \beta_2)=x^4-\beta_2 x^2-\beta_2 x$$

if the rules are more important than the images. The control surface gives the key to how the sudden — or catastrophic — variation of the issue x might be brought about by a slow (and relatively small) change in the respective horizontalities of both images and rules.

In particular, it can be proved:

a. That even exclusive variations of the horizontality of rules (and not of images as some radicals tend to believe) can have revolutionary implications.

b. That there exist certain variations of images horizontality that do not lead to revolutionary implications.

c. That one can find simultaneous variations of horizontalities of both images and rules with practically no noticeable impact on the variation of the output.

d. Finally, that even small variations of horizontality of images (and not obligatory drastic revolutions) may cause revolutionary implications.

In many respects, the conclusions stated above appear to us to be counter-intuitive and relevant for a critical assessment of the traditional revolutionary mythology.

VI. DESIRABILITY RESONANCE: A FRAMEWORK FOR UNDERSTANDING SOCIETAL DYNAMICS

Although images of the desired societal structure and rules vary from individual to individual and, more generally, in societal and political life, from actor to actor (as political parties, nation-states, transnational formation, etc.), some may overlap in the case of a certain number of individuals and actors. Extending a concept introduced by Maruyama,[41] we shall introduce the desirability (or D) resonance, as describing the state of convergence of the images issued by different individuals or actors of what is desirable for the society. The opposite of the resonance will be called dissonance.

In our view, societal desirability involves images of the desired structure and rules for the negotiation of what is desirable. Consequently, we shall distinguish between resonance focusing mainly on a desired structure (and somehow neglecting the rules) called in the following discussion D- (from desirability) structural resonance and resonance focusing mainly on the desired rules of negotiation (and somehow neglecting the output itself), which will be called D-functional resonance and finally resonance focusing equally on structure and rules — called D-holistic resonance. A large spectre of situations can be identified as a result of the cross-meddling of differently weighted limit cases introduced above.

6.2. D-resonance is a useful tool for understanding the map of societal desires; for drawing the topological disposition of social groups (the distance that separates them being measured on the desirability scale); for describing how individuals or political actors relate to each other (with sympathy or adversity or neutrality); for singling out the key

factors of societal (and more generally of world) dynamics.

In fact, individuals and political actors who find themselves in political D-resonance can derive mutual gratification from their interaction; this relationship may also reinforce their desires by amplifying feedbacks. Conversely, when D-dissonance intervenes between individuals or groups engaged in hierarchical relations, a source of structural conflict can arise, whose development may shape the dynamics of the groups-relations in a dialectic manner. Moreover, the partners may cease positive interaction and fight each other. Furthermore, if the D-dissonance afflicts the individuals or groups in non-hierarchical relations, it can be mistakenly perceived as rooted in a lack of logical or moral sense: Former partners will blame each other for being illogical or even immoral.

D-resonance should also be regarded in association with other types of societal resonance, in particular with what we shall call structural resonance, i.e., resonance generated by what is (or by a personal position within what is) a difference from D-resonance (which works at the level of what should be). We shall not elaborate further on the details of this issue. Let us only mention that D-resonance may become a force unifying, re-grouping, or separating individuals' and actors' desires. Its actions appear similar to that of other unifying forces — such as belonging to a definite social class or to a nation or to a group of nations or to a particular civilization, etc.

6.3. The examples that follow are intended to substantiate these general remarks.

Undoubtedly, a (positive!) resonance comes between individuals or political actors who are more concerned with the resultant structure of what should be than with how such a structure would be brought to life; also a (positive) resonance will exist between individuals or political actors merely concerned with the process of negotiating what is desirable rather than with the result of this process.

To the first category belong the partisans of classical normative thinking: In GPID terms, those are the Second World bureaucrats; radicals from the First World, fascinated by the dream of an egalitarian society and standing for a fast and rigorous implementation of their dream; and authoritarian leaders and elites from the Third World, who promote internal modernization within centralized structures conceived as parts of a (normative) New World Order. People from these groups are all resonant in rapport to some beta 1 desires. Paradoxically, also resonant with them are the partisans of alternative normative views: people advocating the perpetuation of alpha verticality, the representatives of the "new right," those pleading for a genuine capitalist development of the Third World — all of them belong to the same spiritual class, as defined by D-structural resonance. By the way, the true believers should all be associated with this class.

The second category contains merely people who do not share firm certitudes, tempted more to explore than to prescribe, cautious to maintain the awareness of societal issues — sometimes screening their adjustment to what is by the lack of a definite attitude. Quite different individuals enter into this class: conservative bourgeois, encouraged by the slowness of change, designed to emerge naturally from a familiar manipulated political game (mis) interpreted as rules of negotiation; critically minded intellectuals, horrified by the outcome of certain abortive egalitarian experiments; people criticizing the bourgeois society without any valid alternative in view; those challenging critically from within the Second World, called dissidents (for the most part improperly); and people opposing authoritarianism in the Third World.

The formation of these invisible heterogeneous groups and their mutually dependent dynamics find in the concept of resonance a consistent framework for analysis. Actually, the motivation that brings certain people into a definite group and influences its internal coherence can be found in the opposite state of mind. This happened to many western radicals during the 1960s. Disappointed by "what was" in the bourgeois society and ready to change it, they became interested in what was happening on the side of non-bourgeois society (in the Second World and particularly

in China), promptly idealized the opposite reality and proclaimed "what is" there as "what should be." Consequently, they believed they were achieving resonance with the allegedly revolutionary Second World — although they remained in resonance with their own beliefs projected over an imaginary reality. We called this in a previous paper (Botez and Celac 1979) cross-deformation effect. In practice however, the false resonance from the cross-deformation effect works as a true one and plays an important role in the formation, the cohesion and the dynamics of the "invisible" social groups.

The same phenomenon occurs also at the level of nation-states. Undoubtedly, the governments of states with similar internal structures and similar objectives enter in resonance. Within the Second World, the holistic D-resonance operates as an unifying factor, based on the siege feeling of being surrounded by a hostile environment and on the common resistance to all possible challenge to the existing societal structure.[42] Resonance also exists between industrialized bourgeois democracies — despite all their conflicts and rivalries and beyond the official alliances. The resonance operates obviously between the have-not countries of the Third World.[43]

But there are other forms of resonance regarding some marginal conjunctures rather than the basic structural issues. A kind of structural resonance functions between countries ruled by strong leaders, overlooking many other factors. Romania gives an interesting example of a socialist country which maintained excellent relations with North Korea (under Kim Il Sung), Argentina (under Peron), Central Africa (under Bokassa), Iran (under the Shah), Egypt (under Sadat), China (under Mao), the US (under the Nixon administration). The resonance at the leader's level is therefore an important issue in understanding the way the states relate to each other.[44] In a symmetric manner, the D-functional resonance unites the adversaries of authoritarian rule; the free elections issue acquires an overwhelming importance for the Western countries in resonance and is frequently perceived as a general panacea to all societal problems.

The resonance links the nations belonging to the similar cultural heritage, historical tradition, or geographical setting and defines "areas" — Judeo-Christian, South-European, Islamic, Buddhist, Black-African, etc. D-resonance exists between multinational corporations. Resonance can be identified as sealing the solidarity of have nations into a monolithic North and of have-not nations into South as well. The dissonance at this level is called North-South conflict.

Summarizing the D-resonance brings into the game (more or less) invisible networks, invisible alliances, and invisible adversities among individuals, groups, nation-states and trans-national actors on the world stage. Invisible means here that in some cases no formal agreement or acknowledged disagreements substantiate the given network. It means also that the relationships between actors are not reducible to their direct sympathy or antipathy or alliance or opposition. In all cases, resonance (and dissonance) operate at the level of potentialities and drives, closely connected within real desirability. Resonance analysis can thus become a useful tool able to bring to light genuine desires and to distinguish them from those openly proclaimed (and promoted).

However, it would be simplistic to think that two individuals, groups, or actors in the international arena are either in resonance or in dissonance, or indifferent to each other. Things seem much more complex. Each individual or group receives many controversial signals and is challenged to enter into many resonant networks. The Eurocommunists, for instance, are, as communists, in D-structural resonance with the Second World and embrance its basic goals. But, as Westerners, they find themselves in D-functional dissonance with the Second World, because they disagree with the ways these goals are carried out. The same type of ratiocination can be applied in trying to describe US foreign policy toward China since 1977 or the Soviet Union's attitude toward Iran since the 1979 Islamic revolution.

VII. ASSESSING THE ROADS LEADING TO DESIRABLE SOCIETIES: SOME SUGGESTIONS

7.1. Building up a desirable society is frequently envisioned as a (linear) two-step process: First, to imagine the desired state, and second, on the basis of the established goal, to design and to implement the necessary strategies in order to attain the given goal.

Such a scheme, derived from the classical operation research approach to planning, is simply inappropriate to handle this problem. Even if up-dated by models à la mode involving continuous feedbacks, this view neglects the fuzziness of the goal, the large scale of the project, the long (or even very long) time span needed to fulfill such a task and — most important — the evolution of both the designers and the implementers who embarked on the road leading to the desired society. In short, if such a design-oriented approach could be accurate in the case of current jobs (in industry, regional planning, research plans) it is assuredly not fitted to large-scale, long-term, fuzzy social goals.

To simplify our commentaries, let us assume that a desirable society is of beta type: This limits considerably the fuzziness of the goal set for social action that develops within the existing society and is aimed at the desirable future.

We are all living in alpha societies (capitalist or socialist): it is from here that our journey must start. But are desired beta societies realistic successors of our present social settings, are they possible futures of the present, as Bertrand de Jouvenel would say? If so, how long will the transition period — or "the road" — be? Further, how can we assess the troubles and the joys of the journey? And finally, after costs and benefits of both the road and destination have been lucidly

evaluated, shall we proceed toward the chosen goal?

But there is one question which comes before the exploration of the beta-project feasibility. Perhaps the beta structure is after all the unavoidable future whose advent is prescribed by the laws governing social dynamics. If so, our task is very much simplified. Marxist doctrine on social change relies on this tenet; only the strategies to be used and the timing of the implementation of the world-wide communist beta society remain debatable. In its turn, (social) thermodynamics also foresees that by virtue of the Entropy Law, an inescapable march will draw mankind toward an "attractor" state, having many characteristics of the beta structure (Rifkin and Howard 1980). Again, if this is true there is nothing to do but to enter in resonance with the trends already at work.

Here new trouble appears: The existing trends seem to depart from the beta image. How should we interpret this? Maybe we are living in an exceptional period and what we are experiencing is purely accidental: The remote future will correct the heresies of our generation and set the world back on its way toward the beta attractor. In these circumstances, is there anything to be done?

In our view, to postulate that world dynamics is almost automatically monitored by inexorable laws is at least imprudent. Even such a coherent meta-paradigm as the thermodynamic approach to world evolution raises serious questions. In fact, the attractor affects the isolated systems in their inescapable urge for equilibrium. But is the isolation hypothesis verified in the case of social dynamics? The answer is no,[45] as Prigogine and Stengers point out: Human beings are not prisoners of terrible laws, being driven to eventually reach paradise. However, neither are we gods — as Galtung says (Galtung 1976, p. 3) — not even temporary gods to do whatever we want.

Let us now examine the beta future as a plan. In planning, the goals are always possible — they are considered compatible with existing resources and reachable by committed management, even if, in order to create a proactive posture toward planning, the goal-seeking system is idealized.

Idealization is directed toward converting managerial orientation from problem solving into systems design and recommending the redesign of the organization and of its environment to function in the way one ideally would like to see it (Emshof et al. 1978, p. 336). In other words, if we have a clear ideal, then the redesign of the system is possible and there are not too many forces acting against it.

In the previous sections, the beta project has been analysed. The least we can say is that it is not very clear; its fuzziness is even enhanced by the process of beta image-making itself, which also absorbs images of reality as it is — i.e., subjective interpolations of available information about the present:[46] different subjects brought up in different cultures, driven by different ideological commitments and having different interests honestly perceive the same social reality in different manners and react to this reality not as it is but to their (subjective) image of what is. If we remember that what should be is always dependent upon what is, we are led to the conclusion that subjecivity enlarges the spectre of possible variations on the beta theme and implicitly the lack of concreteness of the beta project.

Vagueness in social matters[47] is not always a damaging feature. At the same time, it could be consciously manipulated in order to prompt a proactive view favouring a certain issue and to gather as large a committed audience as possible to back it. In this particular instance, this is not a real danger: The beta project admits so many subjective interpretations that it is practically impossible to impose it (even after idealization) as a unique guide for universal action. In the following section, we shall attempt to identify the reasons and the social forces at work within the present alpha societies that oppose the drive toward a future beta organization of social life.

7.2. In the Second World, the alpha operational structures installed on behalf of the far-reaching beta goal are — as we have seen in chapter 4 — essentially stable. Then, what could perturb this society? Internally, the absolute power of the unique party (more exactly, of the party's

apparatus) is unchallengeable — especially in the center of this world (in the USSR and in China). Close ties are established between the center and the periphery. It seems thus reasonable to infer that, at least in the foreseeable future, the center will function as a guarantor of the fulfillment of the Leninist model — despite the real difficulties and the arguable results shown so far. The monolithic economic structure of the communist society, along with its political cohesiveness, encourages the formation of new social reflexes and annihilates the old ones. People become obedient, patient, and committed to this society, which provides them security and a slowly but steadily growing standard of living and frees them from the continuous challenge and competition needed to survive in the capitalist jungle.

The individual undergoes a specific learning process, in which his skills and social reflexes are adjusted to meet the requirements of the new social frame. As a result, the new person, perfectly adapted to the socialist environment, is no longer able to manage life in other social contexts. Going back to capitalism becomes — for the majority of people — not only impossible but more and more undesirable. People look sincerely at the advantages of the existing structure and avoid discussing its difficulties. The feeling that the revolution has been accomplished and that the socialist societies are on the correct road leading toward the desired beta goal justifies an honest withdrawal from public life. The masses[48] seem to accept the existing alpha operational structures and do not challenge them.[49] Let us also add to this the honest conviction, shaped by biased information (whose dissemination becomes possible in virtue of the state monopoly on information) that everywhere (and in particular in the West) life is bad and in some places even worse. The masochistic self-criticism developed within bourgeois society especially by radical intellectuals fully substantiates this catastrophic view of democracy as decadent and menacing. The answer is that finally, to be planned may not always be so horrible!

But is there any chance that the challenge to the existing alpha structure will come not from alpha's bottom but from its top?[50] This alternative also appears improbable. Indeed, within capitalist society,

the horizontality works basically at the level of haves, i.e., of the owners of the economic wealth; the equality among them is then transferred into the power structure of the elite;[51] while in the communist society, horizontality stems from the power structure, from which all other horizontalities are derived. That means that the top is the result of the functional alpha structure, and any modification at this level would question its very existence. That is why a successful movement toward more beta initiated by the top is unlikely.

There are other reasons for that. First, unless some considerable mistakes are made, leading to a critically low standard of living,[52] there will be no real popular pressure in favour of change. And, as we have seen, it is also unlikely that the top will take the initiative to abandon its privileged role. Second, people in power in communist countries have hardly acquired the necessary skills to manage anything but a totally centralized economy. As many other people, they too are subject to the same process in which they lose the obsolete skills[53] and acquire new ones, adapted to the needs of the socialist environment.

Some analysts (Brucan 1979/b) apparently believe that something must occur, especially because the existing centralized management does not perform efficiently; consequently, the elite itself will discover that it is in its own interest (and in the interest of society as a whole) to replace the overcentralized societal management by something new. As for us, we have little confidence in the feasibility of these technocratic aspirations. The communist world is not oriented toward performance: to maintain the existing structure is, for the ruling elites, much more important than to promote any change that would possibly question their legitimacy and social role.

Now, if by some chance a shift initiated from the top takes place, will it possibly be directed toward a more beta society? The alliance between modernization and class (or party) dictatorship creates new (and as yet unexplored) forms; it is difficult to assess whether a certain technocratic improvement of societal management will result in an advance toward the idealized beta society.

That does not mean that there are no changes in the communist world: Leaders are replaced by other leaders, people from the bottom are promoted to the top — and vice versa, people from the top lose their position, etc. More than that, larger groups of people can make their way into the elites, and a kind of meritocracy could possibly be installed. Social vertical mobility may improve too, although most probably all these changes will have little effect[54] on the people's everyday life. The possible mutations will respect the frames of this new species of alpha society. Leaders can change, but the communist notion of leadership does not.

How will this society evolve in a long-term perspective, faithful to its internal motivations and driving forces and indifferent (for the moment at least) to its environment? The inertial movement that propels the canonical communist society can only further stabilize the existing structures. If societal development is seen merely in terms of increased complexity (Chodak 1973), then the tasks to be performed by the societal management will become greater in number and difficulty. The ideologically minded leadership has to follow one of two possible ways, either to oversimplify the tasks — resulting in poor economic performance — or to accept the advent of a technocratic leadership. The possibility of a real decentralization is not to be taken into consideration: It challenges the central power (which is not willing to step down) and gives responsibility to groups of people (who, in all probability, are not willing to step in).

In the first variant — that of oversimplification — the leadership becomes more authoritarian while retaining power despite the arguable outcome. In the second case — that of technocratic rule — it becomes more skillful and able to cope with increasing complexities, legitimizing itself by results. Both variants enhance the role of central power and none of them challenges the existing alpha structure.

Does the inevitable succession of generations alter this picture? Is the communist youth interested in taking over such remarkable responsibilities and committed enough to carry them out?

Unfortunately, there are few serious studies about this crucial issue.[55] Thus, what will be said below are mostly personal observations on the subject.

First, it must be said that the revolution is a one-generation endeavour. The children of committed militants generally are not radically minded. Let us add that, by virtue of the communist ideology and operational hierarchy, power is not transmitted by inheritance (maybe a few privileges are): The communist elite (defined by its position in the power structure) is not (naturally) reproducing itself. In fact, the candidates for the real power have to be, by definition, sons of the people — and more precisely to belong to the working class. So far the newcomers simply have not wanted to share the power with the offspring of the elder elite. The future of this later group — usually disillusioned, without real political authority, with an ambiguous past, and no popular support — is totally at the mercy of the new elite. The dauphin have to choose either to obey — and thus partly to conserve their privileges[56] or not to obey and lose all of them or to emigrate, which obviously is not a solution for everybody. For these reasons, we do not believe in the real possibility of a "revolution of disillusioned children of the elites" in the Second World, as Galtung does (Galtung 1977).

Second, the children of ordinary people tend to exploit any opportunity for rapid social promotion rather than embark on an abstract — and maybe dangerous — attempt to change society. Moreover, they have been taught that the revolution has been accomplished. As for their personal feelings, they are rather cynical when speaking about the great expectations their parents put in the revolution. Finally, they are practically unable to cope with any lifestyle other than the communist form of collective life and have no ability to organize themselves outside the official organizations (which are, by the way, always dominated by adults belonging to the elder generation). Therefore, even if the youth is sometimes disappointed or feels frustrated, there is little chance that youth activism will in some manner become a perturbing factor within the existing order. Obviously, that does not mean that such an event may never occur: As Prigogine points out (Prigogine, Stengers, 1979), some fluc-

tuations may change the order. But in this case, there is a low probability that a youth movement animated by uncanonical communist aspirations will become powerful enough to change the inertial path followed by the core of the communist world.

Summarizing, the internal forces at work within the Second World are urging it towards a "new" organization — which will basically preserve the same operational alpha structure — at least in the foreseeable future.[57]

But what about the environment of the communist world? Could it possibly change this inner-motivated movement?

For the Third World, the egalitarian low-consumption patterns of the communist project, which focuses on the satisfaction of basic material needs — implicitly appealing to those obsessed by the idea of survival — seem more convincing than the sophisticated high-cost capitalist democracy. In addition, the benefits of the communist way can be anticipated, while the advantages of bourgeois democratic negotiation are far less predictable — and consequently less convincing for people. Those are some of the reasons why the Third World finds itself in structural resonance (and even desirability resonance) with the Second World.[58]

But are there any particular processes taking place within the Third World that possibly influence and bring about changes in the alpha structure of the Second World? We don't think so. Even if certain trends (such as nationalistic feelings or the comeback of fundamentalist religious fervour)[59] enter in resonance with some uncanonical settings within the Second World, these trends are not likely to acquire enough strength to modify the alpha structure of communist society. However, as in the case of an (eventually successful) internal youth movement, this is not totally impossible. Moreover, a nationalistic or religious movement might have the unforeseen effect of stabilizing the system as a result of repression legitimated in the frame of communist logic and ethic.

In its turn, the First World of the industrialized capitalist countries

will never challenge an alpha structure because it is the very prototype of alpha. Even more, within the expanded interdependence characteristic of the contemporary world, the First World is acting to reinforce the alpha structure in the Second World. The industrialized world, vigilant to conserve its economic prosperity, is always aware of global stability and even favours the political elites currently in power in the Second World rather than risking world-wide conflicts or new fanatical movements. In the past 10 years at least, the First World has stood on the defensive, perpetually supporting the status quo and consequently showing little if any interest in what was going on within the Second World.[60]

Nevertheless, the "free" world sometimes encourages uncanonical internal elements — as dissidents or human rights activists — who criticize from within the Second World. But this does not act against alpha: On the contrary, sometimes critically minded people consider the communist structure as not enough alpha, blaming the entire beta project for its failures and difficulties. The only phenomena taking place in the Second World, favourably received by certain western leaders, are the perturbations of the canonical communist model, perceived as proofs of its failure. That is the reason why they favour a leader-centred nationalistic society rather than one ideologically oriented toward a beta democracy societal organization.

To summarize, both the internal and external forces at work in the communist world are not seriously challenging the alpha structures. We believe that the Second World is the stable axis of the long-run dynamics of human society. The other worlds will be compelled to adapt to its firm inertial evolution.

7.3. As for the Third World, are the existing alpha structures in any danger, even in a very long perspective? It must choose between the road towards a survival society experienced by the Second World (to which it is attached through resonance) and the road leading to the hardly tangible consumer society (to which it is opposed by dissonance) and the messianic summons to something new (whose outcome is uncertain).

The pragmatic elites from the Third World, exposed to the dramatic pressure of mass poverty, are more and more tempted by socialist-communist solutions. That will possibly result in the growth of the Second World — seen more as a specific structure promoting a specific operation within the societal context and less as a Soviet-like or Chinese-like society or as directly manipulated from Moscow or Beijing.[61]

Implementation of the communist solution will transform unstable, mostly conjunctural alpha structures into stable long-term hierarchical organizations very much like those of the present communist world.[62] Let us also add that, for the new nations in search of their identity, centralization appears much more appealing than decentralization. This is a very strong pragmatic argument in favour of the installation of alpha structures in the Third World. So far, alpha has won in the Third World while the attempts to produce "something new" have not succeeded in mobilizing either popular support or audience among the political elites.[63]

7.4. The only world left is the First World — by definition alpha structured but, paradoxically enough, more open to experiments (Coen and Masini 1980, Friberg et al. 1978, P. d'Iribarne 1980, Valaskakis 1980). Some of the alternative ways of life are beta oriented, call for decentralization, promote voluntary simplicity and depend upon greater participation and self-reliance. But can such experimental strategies be transformed into full-scale projects? How long can the First World — isolated from the Second and the Third by structural dissonance and facing generalized and stable alpha hierarchies — promote new alternative forms of life, without jeopardizing its traditional leading role and its own survival? It is highly unlikely that overdevelopment (or maldevelopment) is so repulsive as to make people freely renounce its benefits, allowing others to become overdeveloped and to experience similar implications of the global problems related to resources, environment, energy, etc.

In conclusion, it seems more realistic to presume that the core of the First World, while tolerating intellectual experiments that ask for

drastic changes, will reinforce its secular alpha structures. The contemporaneity only adds to the old reasons behind alpha some new motivations, generated by encirclement and isolation in a hostile environment. In the First World too the alpha structures seems stable, despite the disappointment of its youth and the possibility of a revolution (presaged by the events in Western Europe in 1968) -- as Galtung suggests.

7.5. The alpha structures are therefore well anchored all over the world, even if the idealistic redesign of the existing order will eventually call for a shift toward beta. To build up a beta society is merely a far-reaching fuzzy goal, that cannot be arrived at in the foreseeable future; more than that it is not compatible with the inertial trends at work within the world system.[64] To enhance its feasibility, almost everything in the existing world must be effectively reshaped.

Further, within our generation apparently there are little real political will and popular support to make the beta goal an aim to be attained as a result of our action world-wide. To put it in the language of sociothermodynamics, we are therefore bound to recognize that actually we are outside the "field of attraction" of a beta society; more than that, the present alpha structures are stable, and the only predictive changes might be some fluctuations around this world-wide stable order. The real chance for the generous beta project to become reality rests with the change of this order, which will introduce new fluctuations, irreversibly directing the system from the existing equilibrium towards new regions far from the present equilibrium, compatible with the beta project.[65]

Thus, to speak about strategies and tactics aimed at or about resources necessary for the implementation of the beta project at the world level appears meaningless to us: To reach the beta goal cannot be a target for our generation. What we can do at most is to change the existing order, producing fluctuations able to modify the present attractor. Some necessary conditions for that are suggested by (societal) thermodynamics: to keep the system far from equilibrium; to influence some specific societal reactions (analogous to the chemical self-catalyses, see Prigogine and

Stengers, 1979). In the following, the term strategy will be used in connection with these structural changes — and not with the beta project as such. These latter aspects will be tackled in chapter VIII.

But what if, in spite of all arguments, a certain class of people sincerely believe in the rationality and the long run feasibility of the beta project? The only possible decision would probably be to start the implementation of the project, leaving to the successors the task of accomplishing it. This is the almost standard attitude of many messianic revolutionary elites, who expect that future generations will share their concerns and proceed along the road they have taken and who appease their doubts by believing that what eventually will be done will not be too embarassing if in the future the project has to be changed.

In this case, the moral issue about the right to engage one's successors in a project built on present views of happiness remains open. Even a generation can change while bringing a certain project to life. In communist countries, old revolutionary militants are sometimes deeply frustrated when they face the unexpected consequences of their initial commitment. They discover that any revolution — as French playwright Eugene Ionesco put it — has destroyed an Alexandria Library and that it is a far more troublesome task to build a new society than to dismantle the old one. Things appear to be much more complex than they seemed when the implementation of the project began; the efforts and the advantages of the road toward communism were estimated in a rather simplistic way. Neertheless, many people from younger generations enthusiastically joined the project; at the same time, a critical appraisal of the new society substantiates many doubts and voices are heard asking for the redesign of the project. The experience of the Second World proves that a long-run societal project is not easily perceived as desirable by several successive generations.[66]

The lucid analysis of the unique experience undertaken by the communist world puts a new light on one essential issue, which ensures the continuity of the negotiation around society's desires: the rules to carry on negotiations.

For several reasons, the issue of rules is an essential one. First, the social dialogue monitored by explicit rules gives a good intimation of how high — or low — the "temperature" of a given historical conjuncture is, in order to keep the social system far from equilibrium, thus giving access to new attractor states (particularly, beta society). Second, once set in motion, the dialogue may be extended to include an assessment of the changes brought about by the society's evolution — for not every change is desirable. Finally, if the rules are respected, the "colonization" of the future by our own images of what is desirable may be avoided.

VIII. CRITICAL LONG-TERM PLANNING: A THEORY OF STRATEGIC AWARENESS

8.1. But will an exchange of beta social structure for beta rules of negotiating social structure be enough to transform the beta project into a goal for long-term planning or at least into an idealized guideline, calling for the redesign of existing society?

We do not believe that it is enough. Our world is an alpha world, not only structurally but also functionally. That means that the verticality of social structure is at least as strong as the verticality of the process of negotiating it.[67]

As we saw previously, the key point of a possible social change, would be a shift from an alpha-dominated order of functioning towards a new order, in which the beta project (even at the level of rules of negotiation) works as an attractor. How can such a shift occur or how may it be provoked? Social thermodynamics suggests some necessary (but generally not sufficient) prerequisites for change — and also for the control of possible changes.

Prigogine and his associates point out that the only domain of functioning where stability and equilibrium are put into question is the domain of nonlinearity, namely the domain where there exist some self-directing feed-back phenomena (as social analogues of auto-cathalytic reactions in chemistry). Metaphorically, only through internalizing change in the inner space, can an (external) behaviour change spontaneously, due to internal entropy production.[68] The newborn structures might be of an entirely different nature. They have been called "dissipative" to stress their total dependence on the dissipative flows and reactions that appear when the system is far from equilibrium (Nicolis and Prigogine 1977).

In particular, the alpha can be replaced with something else — possibly with beta. Here are new reasons for the reformulation of science, education, or even norms of social and political ethics and of a new interpretation given to social learning (Botkin, Elmandjra, and Malitza 1979) as a necessary condition for any authentic change in society. This also gives substance to the feeling that development should start in these endogenous areas rather than let them automatically follow the modernization policies in economy. The continuous problematization of all social issues becomes, in this vision, a genuine development tool.

An essential role in this process is played by (random) fluctuations — i.e., by the deviations from the standard existing order. If the fluctuations are not strong enough to change the existing order, the system remains in a stationary state.

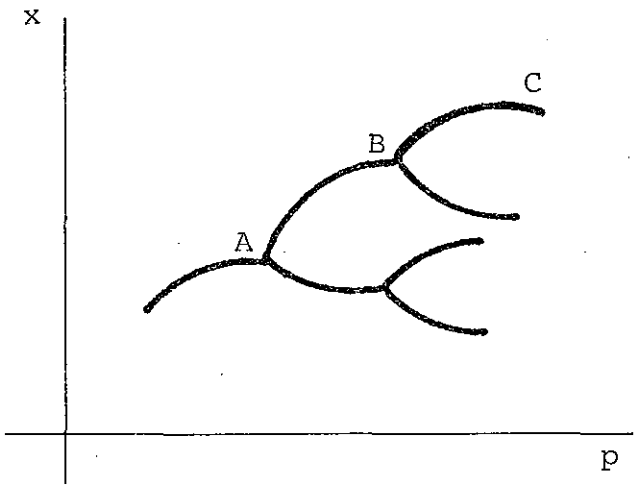
If the fluctuations in one domain enter in resonance with other domains and are amplified, they can change the existing order and introduce a new one. Now, how a given (social) system actually evolves in time depends on which particular fluctuations occurred (that is, it depends on the system's history). This process sustains the formation of dissipative structures and has been called by Prigogine and his associates order by fluctuation (or order through fluctuation — in Jantsch's terminology). Prigogine's paradigm gives a natural expression to the dual aspects of determinism and chance — or, in other words, to the relationship between historical necessity and innovative accidents. It also suggests, in our view, an interesting tool for handling change: the conscious provocation of (random) fluctuation in the "inner sphere."

The thermodynamics of societal systems far from equilibrium — and therefore able to change their order by self-organization — focuses on irreversible processes which increase the internal entropy production. To explore in this perspective how processes (on a human and social scale) such as enculturation, nationalization of productive forces or abolition of pluralistic political regimes progress may be really fascinating.

Irreversibility and spontaneity are not synonymous with one road. On

the contrary, thermodynamic evolution unfolds in bifurcations. History is, in fact, the account of past bifurcations, which coincide with moments of crises. Obviously, the future also is a field of choices, in which not everything is possible but in which a dramatic new freedom emerges — that of innovations.

After Allen (1980), the general bifurcation diagram for a complex system involving feedbacks displays the following shape:



where x is the system's descriptor and p is the system's parameter. As illustrated in this picture, a complex system involving feedbacks rises to a whole series of bifurcations. To understand its evolution requires the study of its passage not just along the particular branch where it happened to be at the initial time (e.g., at point B), but also of the possible structural reorganizations corresponding to its transition through bifurcation points further on new branches which are perhaps qualitatively different in character.

Introducing history into the explanation of a particular structure may prove truly significant for the study of social issues. That gives substance to the feeling often experienced by scholars of social phenomena that no coherent explanation of why the system attains a certain state (say C) can possibly be deduced only from its past trajectory without taking into account the possible past bifurcations (in this case in A and B).

In particular, we can infer that, in order to understand the present alpha structure, one needs a perspective on the entire history of that structure. And, more than that, given such a structure, not every other structure could possibly follow from (or be compatible with) the system's evolution.

8.2. To this thermodynamic view on what social change means, one particular aspect should be added — apparently (and surprisingly) neglected by Prigogine and his disciples: the human will.

In fact, if the discovery that the microcosm is not simple remains a revolutionary step for natural sciences, for social sciences — in which micro and macro refer to respectively human (or individual) and social (or group), the corresponding adagio — stating that the human is not simple — is rather banal. In addition, in this case, the microcosmic perspective is the essential one: Social change must be ultimately assessed from the point of view of the individual. Apparently, this opposes the macroscopic perspective prevalent in physics. For, in macroscopic (or even thermodynamic) terms, Nazi Germany and Great Britain have been quite similar — which is obviously not true if the two societies are assessed from the individual's standpoint.

Therefore, we are driven to add to the non-equilibrium thermodynamic scheme describing the mechanism of social change a non-thermodynamic issue: the conscious participation of the "particles" involved in the process. Obviously, this has no meaning for the agents involved in a chemical reaction. Consequently, the change within human society can (at least theoretically) be directed and controlled. Speaking about a strategy for (desired) change thus becomes significant.

Now we are able to formulate our problem correctly: How could an actual society, with alpha architecture and alpha rules of negotiating the social architecture, possibly change so as to enter the field of attraction of the beta project? And how to act without interfering with the freedom of choice of our successors?

It seems to us that the key issue of every open strategy that aims at change is to focus merely on the rules of social dialogue rather than on the social structure as such. This shift of perspective provides a concrete advantage: Modification within the functional structure can be recognized and evaluated more easily than any modification within the social structure itself. Looking at a particular alpha-functional structure (a political regime for instance), it is obviously easier to register if the eventual change drives the system towards more alpha (or more verticality) or towards more beta (or horizontality) than to evaluate the direction in which the structure of power itself moves.

Here lies the core of our operational approach to social desirability. As individuals, we firmly believe in the validity of a genuine beta ideal. Nevertheless, we are aware that our generation cannot attain this goal. We also understand that — as history and past bifurcations prove — not everything can be carried out by a given society at a given moment and that the field of negotiable social issues compatible with the actual conjuncture ought be realistically identified. For, obviously, this field is larger around the bifurcation points than in any other region.

Thus, desirability means for us not as much beta but rather less alpha than actually is (especially in the domain of social dialogue). From that, a criterion for assessing both social structures and the quality of social change can be derived; in particular here one can find a basis for a coherent criticism of what is going on in the world — taking as a starting point one's belief that the beta project is right and feasible in the long run.

This thermodynamic perspective on evolution opens the way to a new type of social long-term planning, which we propose to call Critical Long-term Planning.

In our view, the term planning is helpful for devising such an approach even if it differs from the content currently given to this notion. In fact, all known variants of planning are founded upon images of social

systems' evolution as seen in their dynamics. By definition planning takes into account past trajectories, envisions future states and transforms some of them into desirable goals which ought be attained, inventories the available resources, etc. What we propose here is to regard the evolution of social systems in a thermodynamic perspective, in which the idea of trajectory loses all meaning. Consequently, to speak about goals, necessary resources, appropriate strategies, etc., also becomes meaningless. Moreover, the new complementary principle states that the dynamic and thermodynamic perspectives (Prigogine 1980) are incompatible (or complementary). Therefore, the term planning is employed here somehow by extension, namely as the methaphorical analogue of the classical notion of planning within the thermodynamic perspective.

It is not our aim here to develop a comprehensive thermodynamic theory of social planning. Let us only point out that, in opposition to the classic content given to the term planning, the concept of goal — corresponding to a certain trajectory — must be replaced here by what we call an extended structured goal — corresponding to a probability distribution on a class of trajectories. This goal can possibly be attained not when the trajectories (along with the initial state) are put under control, but when the emergence of irreversible processes (analogues of auto-catalytic reactions within the field of social phenomena), along with the system's "TEMPERATURE" and its evolution in a region far from equilibrium (for instance, around points of bifurcation) are somehow checked. This is a new kind of indirect social management: it involves not only the system's dynamics, but also the system's structural changes.

This extended concept of planning will be taken in this particular context, in a rather peculiar sense. What we try to know is not what to do but what to avoid.

Let us note that, in the thermodynamic perspective adopted in this paper, what to desire and what to avoid are not as drastically separated as in the classic dynamic approach, where what to desire is connected with the system's future trajectories, while what to avoid is usually a part of the complementary space (and consequently displays a different structure).

In practical terms, we are dealing with abstract classes of possible states, formally bearing the same nature. Social systems can be directed through indirect management — especially, as we have seen, by orienting the social reactions in far from equilibrium circumstances towards desirable or undesirable states.

It is our basic hypothesis in this essay that what is to be avoided is much clearer than what we desire and that what the beta project should not look like is obviously more evident than what it does look like.

The concept of critical long-term planning fits precisely in this type of ratiocination: It is viewed as a planning process which sets as its goal the task of avoiding the classes of undesirable possible states of the given system, trying to transform them into impossible states. As we have seen, the first things to be avoided are the one-way roads (in particular, optimal roads) leading to a far too distant goal, even if such roads correspond to the idealized guidelines for idealized planning (Emshoff et al. 1978). Critical long-term planning is an open-ended planning process: Here the openness results not from an external prescription but from the self-reordering of the social system as to avoid closed alternatives. As a planning tool, this scheme involves basically the internal irreversible human and social processes (like education and participation). Obviously, the result is a continuous learning process (Botez and Celac 1981) in which the entire evolution of the system is continuously reassessed (including past bifurcations and equilibrium regions). One can find here new reasons in favour of the historical analysis used as a tool of social planning — for instance as Galtung does when he develops his perspective on the fall of the Roman Empire.

Theoretically, it is impossible to formulate laws or propose standard tools for critical long-term planning. In fact, as Prigogine once said, the thermodynamic viewpoint is structurally incompatible with universal laws (and implicitly with universal tools and solutions). More precisely the laws are able to describe systems in equilibrium but incapable of mirroring systems far from equilibrium.[69] It is equally true that change and evolution occur precisely when the system enters such critical

regimes. To turn the scales, here can be found a necessary — but certainly not sufficient — condition that enables the system to stay far from equilibrium: a continuous critical problematization of all social issues in a climate of awareness for evolution/revolution. The critical futurology of the late 1960s can be regarded as one of the sources of this view of planning.

Critical long-term planning can therefore be regarded as a kind of complementary (thermodynamic) version of idealized long-term planning in its classic dynamic form. Even if it lays down more what to avoid than what to do, critical planning could also provide a basis for individual or group involvement in social and political action — thus answering Galtung's questions: why, what, who, how, where, and when to act (Galtung, 1979).

This inquiring procedure can be developed further. In the first part of this paper (Global Modelling ... without Global Models?) we sketched some aspects of a technical character. In this case too, to justify for instance why an action should be undertaken could possibly result from the answers to definite questions (which will ascertain the alpha level of the social dialogue), such as:[70]

1. How many centres of power are there?
2. Who defines the policy alternatives, both the ones exposed to debates and the ones adopted as policies?
3. How is a policy "legitimized"?
4. Who supports and who opposes policies?
5. What makes a policy politically successful?
6. What is the political status of alternative policies?

There are few chances to obtain, from the answers, the picture of a perfect "horizontal" social dialogue. Thus, the what is clear: a less alpha (or better) society — namely, a society with more horizontality at the level of social dialogue. The who is close to the position and personal commitment of individuals or groups. The how can involve a very large spectre — criticism, persuasion, political militancy or even action. But the essential tools are those closed to the "management"

of internal irreversible processes, like education and participation.

The where is suggested by the weakest parts of the given alpha structure — for instance, the most visible vertical issue in the social dialogue (to be criticized) or the less stable part of these structures (to be challenged). Finally, the when is prescribed by both the individual and social tempos and timings: Bifurcations seem to offer the best opportunity for action.

Now we approach an explanation of the title of this essay: What is to be avoided as undesirable is in our view, any road loading to more alpha at the level of social dialogue than now exists in the society. Each of our actions virtually disrupts the existing order, throwing it either towards more alpha or towards less alpha. If the reactions and the inertia of the system are also taken into account, then any apparent trend toward something is rather uncertain. More probably, a kind of fluctuation makes the system oscillate around the existing alpha state. Societies to be avoided are — for us — those societies where such fluctuations can become strong enough to force the social dialogue to reorganize irreversibly toward more alpha, as happens when a dictatorship is installed.

This gives reason to believe that a strategical awareness is needed. When devising strategies, those who act should be aware that their strategy is — even if not in favour, certainly not against the trends in motion anyhow; that it actively pushes the trends in the desired direction; that it identifies the undesired alternatives and tries to transform them into impossible futures; and above all that it contains a genuine respect for the will of their as yet unborn successors, free to live and to desire on their own.

NOTES

1. "Pour un système isolé l'équilibre apparait comme un véritable 'attracteur' des états de non-équilibre ... . Arrivé à l'équilibre, le système a oublié ses conditions initiales ... . Seul compte le 'basin attracteur': tous les systèmes dont un état appartienne à ce basin se dirigeant vers le même état final, caractérisé par le même comportement, le même ensemble des propriétés ... . Une fois dans cet état ... le système ne cessera de fluctuer autour de l'état attracteur" (I.I. Prigogine, I. Stengers, La Nouvelle Alliance, pp. 138-141).

2. These problems are dealt with in M.C. Botez, et al., "Communist Ideals and Goals," in Goals in a Global Community, vol. II: The International Values and Goals Studies (E. Laszlo, J. Bierman, eds., 1977, pp. 159-174). See also Z. Brzezinski, 1976, Between Two Ages: America's Role in the Technetronic Era, part III: Communism. The Problem of Relevance, pp. 123-193.

3. In a private conversation, the great philosopher Mihajlo Marcović remembered that, when he was a young revolutionary, "good" meant "when we are old." He sincerely believed that the movement toward a kind of beta society was already in progress and even that this goal could be attained (at least in some essential features) during his own life.

4. The characteristics of one-way roads toward communism are analysed in M.C. Botez and M. Ioanid: The Second World: An Introduction in Scientific Communismology, Bucharest, 1979 (in manuscript).

5. It does not always happen like that — at least if Hitler's cynical remark is to be trusted: A mass movement — Hitler said once — reaches its goal when old militants no longer recognize their initial project (Quoted by Eric Hoffer in The True Believers).

6. Sometimes this is called idealized planning — i.e., calling for a redesign of the existing society to conform to an ideal. See J. Emshoff et al., "The Role of Idealization in Long-Range Planning," p. 336.

7. Our point of view on (individual and group) images of a desirable society-making process and on associated technical aspects has been introduced in our essay What a Desirable Image of a Desirable Society Looks Like, GPID Project paper, Bucharest, 1979.

8. Galbraith wrote once that in western (or western-like) affluent society, people no longer compare what they have — because the basic needs are comfortably satisfied (1958). We feel that this

phenomenon — but generated by different reasons — may be even stronger in egalitarian, even if poor, societies (such as China and North Korea).

9. In several Romanian folk tales one can find a canonical conflict: The hero, who is planning to marry, is considering two alternative girls; usually, one is beautiful but poor and the other is ugly but rich. There must be some compensation in life! In tales, almost always the poor but beautiful wins the competition and marries our hero.

   In old times — the anthropologists argue — the Romanian village was organized in a beta structure and in Vrancea county for instance a collectivist way of life has been developing for centuries. Most of these organizations were dismantled during the nineteenth century modernization and the socialist industrialization of recent decades.

10. Mallmann once remarked that, for the Latin American child, born in a hierarchical family headed by an authoritarian father and living in a hierarchical community led by an authoritarian teacher who gives lessons, the organization of the whole society as an alpha structure appears rather natural (Mallmann, communication at the GPID Project Meeting, Bucharest, June 1978).

11. By Second World we mean the Soviet Union, China, Poland, GDR, Czechoslovakia, Romania, Yugoslavia, Bulgaria, Albania, Hungary, Vietnam, Kampuchea, Laos, DSR of Korea, Mongolia, Cuba, Afghanistan, Angola, Guinea-Bissau, Ethiopia, PDR of Yemen. For details see our Global Modelling... without Models? (GPID-51, 1981).

12. Even some communist parties (from the non-communist world) are manifestly separating their ultimate goals from the existing real socialist experiences. These matters are tackled in, for instance, Santiago Carrillo's Eurocommunism and the State. The Eurocommunist analyses frequently end in a plea for a new communism, as (indirectly) opposed to the old communism (i.e., Soviet-like, Chinese-like, etc.).

13. The cross deformation effect has been described in Botez and Celac (1978), Notes on Societal Desirability.

14. The defectors from the communist (or Marxist) front belong to this class. We quote the former Marxist philosophers who joined the French "New Philosophy" or the "New Right"; also people like Koestler, Gide, Semprun.

15. In this really a classless society? Some analysts find it questionable. Djilas's "new class" or Voslensky's "nomenclature" or Dumitrescu's distinction between mandarins, intellectual-technocrats and "the others" are classes developed within socialist society. For details see Milovan Djilas (1957), Die Neue Klasse; M. Voslensky (1980), La Nomenclatura; C. Dumitrescu (1980), La cité totale.

16. In all probability the losers are more interested in change than the winners are. This phenomenon appears in both capitalism and socialism. Capitalism is by definition an achieving society (cf. A. Etziony, 1961); achieving doesn't obligatorily mean being at the top, but rather conforming one's view of achievement (as in the case of the middle class, whose conservatism is well known). Within socialist societies, the same phenomenon doubtless exists, although it is less studied. The winners promote uncritical and always positive images of socialist realities and of the triumphant road toward communism. The images of an (alternative) desirable future are perceived as challenging the existing structure of authority: everybody should therefore be persuaded that everything is (or at least will be) fine. The policies of reforms or planned change (in both capitalism and socialism) are initiatives issued from the top and reflect the same winners' mentality.

17. We reproduce here the articulation of Arrow's theorem, (after Raiffa and Keeney):

Assumption A (Complete Domain): There are at least two individual members in the group, at least three alternatives, and a group ordering is specified for all possible individual member's orderings.

Assumption B (Positive Association of Social and Individual Orderings): If the group ordering indicates alternative α is preferred to β for a certain group of individual rankings, and if (1) the individual's paired comparison between alternatives other than α are not changed, and (2) each individual's paired comparison between α and any other alternative either remains unchanged or is modified in α's favor, then the group ordering must imply α is still preferred to β.

Assumption C (Independence of Irrelevant Alternatives): If an alternative is eliminated from consideration and the preferance relations for the remaining alternatives remain unchanged for all the group members, then the new group ordering for the remaining alternatives should be identical to the original group ordering for these same alternatives.

Assumption D (Individual's Sovereignty): For each pair of alternatives α and β there is some set of individual orderings such that the group prefers α to β.

Assumption E (Nondictatorship): There is no individual with the property that whenever he prefers alternative α to β, the group will also prefer α to β regardless of the individual's preferences.

K.J. Arrow proved that assumptions A, B, C, D and E are inconsistent (Arrow's impossibility theorem). (Raiffa and Keeney 1978, pp. 523-524.) For details, see, for instance, Sen 1970; also Arrow 1978; and, for more technical details, Routley 1979.

18. At least technically, personal dictatorship does not coincide with class dictatorship — as seen in a Leninist approach to communism.

19. There are also other second-order consequences to the "expropriation of expropriators": the repression of an important faction of intellectuals (generally associated with the privileged establishment and therefore subjected to revolutionary vigilance); the destruction of the (usually tiny) political "class," i.e., of the social group that played a certain role in the bourgeois political game; the destruction of confidence in (bourgeois) democratic rules governing the political game; finally, even doubts about the identity of the individual as such (not as a member of his class) arise, with obvious implications for the meaning given to individuals' needs, aspirations, freedom, autonomy, rights, etc.

20. In the Programme of the Romanian Communist Party (Bucharest, 1974) it is stated that Romania is on the road toward a multisided developed socialist society.

21. A review of this topic has been given in Botez, et al., 1977.

22. The cult of the leader comes as a direct consequence of this conjuncture. In fact, the vector one country, one people, one party has a natural complement in the unique leader (who exerts unlimited power during an indefinite term). In order to justify such extraordinary powers, the leader must have some unusual personal merits. This process is exactly the converse of the ones based on the "Führer-Prinzip," when the unusual qualities of a certain person asked for a leader-oriented organization of the society.

    The cult of the leader in the communist societies is a natural outcome of the structure of power and not an accident. Its self-reproduction and perpetuation proves that. In contrast, in all other societies it is merely a temporary phenomenon.

23. At the Second Congress of Komsomol (Soviet Communist Youth Organization), in 1920, Lenin claimed that people who were then 15 would live and work in the communist era. Such people, who are now 75, have been promised by the programme of the communist party of the USSR that the classless communist society will be installed in its basic features in the 1980s. However, Leonid Brezhnev told the Twenty-Fifth Congress of the Communist Party of the USSR that the period of "developed socialism" will last for a long time (quoted by Voslensky 1980, p. 31).

24. For a Marxian (but pragmatic) analysis of these issue, see Sadovski, The Concept of Rationality and the Macro-Indicators of Goal Attainment in Socio-economic Development, HSDRGPID-39/UNUP-153, 1980.

25. As Che Guevara once said, if the goal were only to raise the people's standard of living, capitalist society would be more appropriate. That is not always sustained by realities, as S. Cole and G. Chichilniska argue. Even if globally the economic performance of capitalism is superior to that of communism, from the point of view of covering basic needs for the majority of the population, the latter can do better (personal communication).

26. The radical Western intellectuals, who criticize consumer society or denounce the dangers of bourgeois liberalism, are always readily quoted by official class-dictatorship media. In fact, their criticism offers an honest, deep and substantiated rejection of the (viewed as obsolete) alpha structure they belong to, in favour of its only existing alternative — the communist society. Thus, people living in the communist world receive new reasons to believe in the superiority of their society — not only from the official propaganda, but also (even more convincingly) from the sometimes masochistic self-criticism developed within the alternative societies.

27. This is the situation of the great majority of successful scientists in socialist countries. A responsible, disciplined social and political behaviour earns governmental support, the right to travel abroad and — if professional success is there — official sponsorship of international activities. It should not surprise anybody that the invisible academy of the international scientific community adopts them in their capacity as both professionals and representatives of the countries from which they came. As a result, these scientist-envoys become deeply motivated in their sincere support of the social structure that grants them a secure international professional stature.

28. This syndrome is brilliantly described by Erich Fromm in his essay Escape from Freedom.

29. The term "technological society" belongs to Jacques Ellul, "post-industrial" society to Daniel Bell, "technetronic society" to Z. Brzezinski, "active society" to A. Etzioni, "affluent society" to J.K. Galbraith.

30. See, for instance Bloch (1977).

31. For a Marxian analysis of the relationships between social classes and ethnicity, see Brucan (1979/a).

32. For a pertinent critical analysis of the nation-state ideology, see Alger, 1979, especially pp. 9-11.

33. For details, see for instance Robinson 1977.

34. For example, see Jungk, "Values and Goals of Alternative Cultures in Western Europe," and Festag, "Values and Goals of Alternative Cultures in America," as well as Kornoss, "Values and Goals of the European Community," and Markley et al., "Values and Goals in the United States," in Laszlo and Bierman (eds.), 1977, Goals in a Global Community; the very existence of alternatives substantiates our remarks.

35. An interesting discussion of these issues is developed by Amin, 1980, pp. 5-6.

36. Within the GPID Project, Alger developed a systematic view of these issues in his paper (1979). New arguments in favour of the rationality — and even the inevitability — of installing decentralized structures, based on a thermodynamic approach to social life, are given by Rifkin and Howard (1980).

37. A good review of these theories is given in Wallerstein 1974.

38. An international report has been Obstacles to The New Economic Order (directed by Laszlo).

39. For details, see Petersen 1968; also Jammer, The Philosophy of Quantum Mechanics, New York, Wiley, 1974.

40. For a different approach (but with not-so-different results) see Alger 1979.

41. Maruyama originally defined the relevance resonance as the convergence of goals and purposes (1961, 1969). He also described the intellectual resonance and the experiential resonance (Maruyama, 1972). The issue of resonance in social systems is still less discussed.

42. The recent posture of the Second World toward the rapid development of social events in Poland gives a good example in support of this thesis. Despite the existing differences in interests and promoted policies, virtually all the governments of socialist countries rigorously condemn the potential political pluralism emerging, along with the formation of the Solidarnosc trade unions. At the same time, despite the self-proclaimed non-political character of the free trade unions, they are supported by all the critics from within the Second World (and in particular, by the dissidents) as well as by the West.

43. Probably, using the resonance criterion, the First, Second and Third Worlds can be defined in a more realistic manner.

44. It is interesting to see how leader-centred societies project new views on their own past in order to legitimize themselves as structures desired throughout history. The Romanian official historiography exults the role played in the past by the king-leaders as exponents of national aspirations, thus contradicting the classical cliché of the doctrine of historical materialism that sees the leader as the representative of the ruling class in class-based societies. The leader-centred organization of society — it is suggested — is part of the national Romanian heritage forged during centuries of struggle against powerful invaders.

45. "Les seules lois macroscopiques universelles sont bien les lois qui décrivent l'évolution vers le désordre, vers les états d'équilibre ou les états stationnaires proches de l'équilibre; mais ces lois physiques ne constituent pas le contexte par rapport auquel le vivant doit se définir: non parce qu'il est vivant mais

parce que, physiquement, il ne remplit pas les conditions d'application de ces lois, les conditions sous desquelles ces lois sont pertinentes. Le vivant fonctionne loin d'équilibre, dans un domaine où les conséquences de la croissance de l'entropie ne peuvent plus être interprétées selon le principe d'ordre de Boltzmann, il fonctionne dans un domaine où les processus producteurs d'entropie, les processus qui dissipent l'énergie, jouent un role constructif, sont source d'ordre. Dans ce domaine, l'idée de loi universelle fait place à celle d'exploration de stabilités et d'instabilités singulierès, l'opposition entre le hasard des configurations initiales particulières et la généralité prévisible des évolutions qu'elles déterminent fait place à la coéxistence de zones de bifurcation et de zones de stabilité, à la dialectique des fluctuations incontrôlables et des lois moyennes déterministes" (I. Prigogine, I. Stengers, La Nouvelle Alliance, p. 193).

46. Botez, Complexity Syndrome in J.B. Calhoun (ed). This epistemological frame has been called by Kenneth Boulding "the image paradigm."

47. Solomon Marcus recently developed a formalized analysis of the vagueness (personal communication).

48. By "masses" we mean here people from the basis of the alpha structure.

49. A unique counter-example to this remark has been given by Polish workers. At the time this paper was written, the challenge to power in Poland had just begun, and it was not clear how things would develop further.

We will not elaborate here a comprehensive analysis of this uncanonical socialist event. Let us only mention, in good Marxist tradition, that it provides proof of the leading role of the working class even in a socialist context. Despite many other forms of contestation and intellectual dissidence, the workers are the only category able to challenge the power.

How did things happen? At least in the beginning, the workers' movement was stirred up by some evident mistakes of the former administration (which actually led to a lower standard of material life) rather than by its structure. It can be stated that if the mistakes had been avoided, the movement would have been unnecessary.

But Poland displays a particular situation in another respect. In this country, the traditional bipolarity of power — namely, the national state and the out-of-the state authority of the Catholic Church — has been perpetuated after the communist take-over. This is, in our mind, an essential element that explains why the practice of total monopoly of power — successfully implemented in other communist countries — has failed in Poland. There is only a slight probability that the Polish experience will be repeated in the USSR, in Romania, or in Bulgaria, to remain in Eastern Europe. Let us add to this that Poland has also a long history of economic and political development, a mature working class, a strong workers' movement tradition (don't forget the "Polish" strike!) and a certain experience

with bourgeois democracy.

Finally, from the lessons of Poland in 1980 not only the working class but also the establishment in other communist countries will benefit — as they did in 1968, after the Prague Spring — especially by learning how to prevent and how to cope more successfully with such a challenge. The events of 1980 and 1981 will not bring about any drastic change in the classical approach to social evolution in the core of the Second World.

50. Apparently, in Czechoslovakia in 1968 the challenge came from the top.

51. In his foreword to Voslensky's La Nomenclature (1980), Ellenstein points out that "Voslensky a raison de dire qu'à la difference de l'Occident capitaliste, où la grande bourgeoisie possède et pour cette raison gouverne, en Union Soviétique la Nomenklatura gouverne et pour cette raison possède."

52. It is our point that such mistakes can be avoided in the future — or their effect can be counteracted by the support of the forces interested in combating the destabilization of the world situation.

53. Such skills as the ability to communicate with the electorate, the responsibility for the assumed task, the respect for the result of the ballot are likely to disappear.

54. Compared to what was happening before — obviously, excepting violence and purges — the post-Stalinist era (or the post-Maoist era) brought little change in the flow of everyday life.

55. An exception is the book edited by Ornauer, Wiberg, Sicinski, and Galtung about the Images of the World in the Year 2000 (Ornauer et al., eds., 1976).

56. The successors of old militants in the USSR are seeking positions in the foreign service or in the top cultural establishment.

57. Other aspects of the same problem are tackled in Sachs, 1979, A Communist Alternative for Eastern Europe? in IFDA Dossier 8, June 1979, which reviews the book of Bahro on The Alternative in Eastern Europe, NLB, 1978.

58. The structural resonance may explain why almost all the advances of communist ideology in the post-World War II period happened in the Third World.

59. It is not certain at all that these movements (even with real mass support) can really challenge the existing alpha structure. Eventually such movements will break a multinational communist state into several one-nation states. From the point of view of the distribution of power in the world game, such events will have a significant impact, raising the weight of the socialist states in resonance with other powerful nationalistic and antiimperialistic

aspirations. But the alpha structures as such are not endangered by these events. As for the transition from a communist state to an Islamic one (equally improbable), even if it is difficult to say which of them will be more alpha, obviously none is beta.

60. Excepting the international campaign in favour of human rights, supported by the former US administration too, all that the free world wanted was to keep communism within its previous frontiers, tacitly granting in exchange non-interference in the internal affairs of the Second World (particularly, in its alpha organization) and sometimes positive co-operation. The new US policy toward the Second World has not yet been consistently formulated, but there are rumours (in Eastern Europe) that new agreements are being negotiated, reconsidering some Yalta-related issues (e.g. tolerance of dissident movements proportionately to the percentages of Western influence). However, such talks might be no more than simple speculations.

61. The socialist-communist solution does not always mean that either "Moscow penetration" or "Beijing infiltration" is in the background: theoretically, it can also be promoted by independent nationalist groups. In political terms, however, a strong resonance functions between these groups and the core of the Communist World.

62. That is the reason why, in the GPID paper on global modelling, we explored almost exclusively the growth of the Second World. One more argument can be added to this: Once installed the Communist structure is irreversible. The case of Chile is not relevant, because the communist system was not yet implemented when the generals' takeover reversed it.

63. That is in no way connected to intellectual quality, nor does it disprove the rationality of the proposals formulated under the banner of something new. Many studies elaborated within the GPID network advocate experimental orientation in social thinking. We quote, as examples, the many GPID papers by, among others, Roy 1980; Hossein Haeri and Taghi Farvar 1980; Atta Mills 1980; Preiswerk 1979; Ghee, 1980.

64. "To talk about the prospects of peace and development given the major trends in the world today is about as cheerful an enterprise as to talk about the prospects for health and mature human growth when a cholera epidemic is raging. ... The trends do not look engouraging at all" (Galtung, 1978/a). Obviously, Galtung compares existing trends with the model of a beta ideal society.

65. That is basically the order through fluctuations principle of Prigogine. For details see I. Prigogine, I. Stengers, La Nouvelle Alliance, ch. 4, p. 175-195.

66. The Romanian writer Mihnea Gheorghiu — himself a onetime militant, who now belongs to the political elite of the country — wrote

recently: "Taking into account the painful birth of the first socialist society, the contradictions and the dysfunctions observed in the growth of other socialist societies, any lucid contemporary analyst will state that the socialist economy and democracy would have been built with less efforts and sufferings in countries with mature economic and democratic bourgeois civilization..." (Gheorghiu 1980, p. 31).

67. One can speculate further about the distribution of structural verticality in the world as different from the distribution of functional verticality. For instance, in the First World, structural verticality is greater than in the Second World, while in the Second World functional verticality prevails and is in its turn greater than in the First World.

68. See, in this respect, our remarks concerning the differences between systems dynamics grammar (called Forrester Grammar) — describing equilibrium — and systems thermodynamics grammar (called Prigogine Grammar)- describing evolution in Botez and Celac, Global Modelling... without Global Models?

69. "Loin d'équilibre... l'idée de loi universelle fait place à celle de l'exploration de stabilités et d'instabilités singulières, l'opposition entre le hasard des configurations initialles particulières et la généralité prévisible de l'évolution qu'elles déterminent fait place à la coexistence de zones de bifurcation et de zones de stabilité, à la dialectique des fluctuations incontrôlables et des lois moyennes déterministes" (I. Prigogine, I. Stengers, La Nouvelle Alliance, p. 193).

70. Using a kind of inquiring procedure (which we already employed in the first part of this essay dedicated to Global Modelling), a typology of the existing societies as well as an estimation of the political distance between them (centred around the rules of social dialogue) can be developed. For a parallel approach, see also Gourevitch 1978, pp. 881-912.

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