THE GLOBAL SYSTEM

(A Situation Study)

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INTRODUCTION

The "World" is a complex and perplexing, if many splendidored thing! Having the Earth as its natural habitat, the world is the social system of humanity. Although incoherent, decentralized and dynamic, it is a system nevertheless, because it has certain ordered relations and processes to qualify it as such.

Looking at the world as a global system has some advantages, not the least of which is intellectual. This means that, it provides a conceptual framework and methodology to understand its nature and operation. Without such comprehension, the world would seem to be "full of sound and fury signifying nothing." Since human beings forever seek to explain things to their satisfaction, systems theory serves adequately for many people.

On the basis of that theory, this study will present a form and method of grasping the general characteristics and significant activities in the contemporary world. In order to do so in a limited time and space, it sacrifices depth to breadth and contends itself with a macroscopic tour d'horizon, rather than a detailed view of all aspects.

The procedure we shall follow in this quest consists of a series of steps grouped around various themes, based on a method developed elsewhere.*

I-DIAGNOSIS

The first stage of our study looks at the present state of the world and tries to describe its most significant characteristics. These characteristics form the state-vectors of the global system and determine its overall behavior. The criterion of significance in choosing the vectors is the generally accepted conceptual framework of the social sciences.

Accordingly, the social system is made up of three principal sectors: economic; political; cultural. Using this classical trichotomy, we construct a three-dimensional space in which is situated the totality of our concerns. Within the parameters of this space, we shall identify the salient points of the system and discern the quality of their structure and function.

In this sense, the act of diagnosis is the process of finding out the symptoms of problematic conditions in a system.* In our case the symptoms are various social indicators and the problems are unacceptable situations which represent social pathologies. The global diagnosis we are attempting here will therefore point out the main problems of the contemporary world in the three areas of social relevance mentioned above.

*For details of the diagnostic methodology, see: P.J.Arnopoulos: Social Pathology Diagnosis. GAMMA, Montreal, 1982.
1. **Socio-Economics**

The first dimension in which we shall look for problems is the economy: i.e. the system of production and consumption of wealth in a global scale. On the basis of this production and consumption system, we determine the class structure of the world. The significance of this structure is that it supports the quality of life of people everywhere. The most striking indicator in this dimension, is the inequality of wealth distribution among the peoples on this earth. Both indices of Gross National Product and per capita income highlight the wide spread between the rich and poor societies of the world. (See GNP and PCI Tables).

From the figures on these tables, we can construct a one dimensional continuum showing the relative position of all countries in terms of their socio-economic standing. Accordingly, the world may be divided into the rich and poor nations or upper, middle and lower class groups. (See range diagram).

It is apparent from looking at this range that the gap between its extremes constitutes the main symptom of the global economic problems we are facing today. The well-known North-South confrontation represents the frustrations due to a deep sense of injustice shared by most people in the world about the maldistribution of the earth's commonwealth. This then can be taken as the central socio-economic problem, symptomatic of our present condition.
2. Geo-politics

The second dimension to be considered now is that of the polity: i.e. the system of global power distribution. This system determines the collective influence states can exert upon each other on the basis of their destructive capacity. The main actors here are states as geo-political entities in control of various violence tools, such as military establishments.

Just as in the case of wealth distribution, a striking indicator in this dimension as well is the inequality of power among states. Unlike economies, however, the central political problem of the world is not between the powerful and the impotent, but between the centers of power. As it happens in the contemporary world, the two most powerful centers are the United States and the Soviet Union. These two antithetical powers serve as opposites poles of attraction and repulsion for many other states, thus creating the well-known East-West confrontation.

It is significant to draw the political situation of the world along an East-West axis, on which spheres of influence may be drawn grouping the Eastern and Western alliances as well as the Neutrals in between (see range diagram). In this dimension, the main symptom manifests itself as the arms-race between the two camps which underlies the threat of war as the most dangerous problem in the world today.
The third dimension completing our framework is that of community i.e. the system of cultural similarity and diversity in the world. This system reflects the collective identity of people and defines the boundaries among different communities. In this respect Ethnicity is the central cohesive force in the modern world.

The principle of ethnicity is institutionalized in the national-state which is "sovereign" over a particular territory, inhabited by a particular nation. Unfortunately, the boundaries of the 150-odd states today do not coincide exactly with the territories claimed by many ethnic groups. The discrepancies result in intercultural frictions and conflicts which threaten to break down nation-states into small fragments.

This centrifugal tendency is countered by a centripetal force emanating from the homogenization of the world due to increasing interdependence. The institutions most responsible for this countertrend are the Transnational Corporations in the private sector and International Organization in the public. These new global actors push towards the integration of nation-states into larger supra-national communities, thus threatening state sovereignty. The result of these two opposing forces puts great stresses and strains upon national systems in all parts of the world.

The present situation in this dimension can best be illustrated by a continuum of ascending levels from the local
community to the global system, with the nation-state in the middle (see diagram) This micro-macro range, shows the various types of modern societies according to their territorial jurisdiction, from the smallest to the largest.

From that diagram, one can infer that the symptoms of the present malaise lie in the breakdown of cultures on one level and their fusion on another. The problem, therefore, is which level will succeed in capturing the highest loyalties of most people, thus shifting the source of legitimacy from the nation-state to a wider or narrower unit.

Having outlined the separate dimensions of the global system, we are now ready to combine them into a three-dimensional construct showing how they related to each other. We have done so by utilizing the Cartesian field coordinates to create an economic-political-cultural space (see diagram).

As an illustration of the use of this schema, let us focus on only two of the three dimensions: i.e. the socio-economic and geo-political. The resulting E-W by N-S diagram, shows four nation-states, one in each of the four quadrants: USA exemplifying the NW; USSR for the NW; China for SE and India for SW. Four important bilateral conflicts in the world happen between these pairs: the central E-W conflict between US-SU and the main N-S between US-India, while a secondary E-W conflict is the Indo-Chinese one and a N-S is the Sino-Soviet. These divisions also result in strange diagonal alliances (NW-SE and NE-SW) between U.S. and China on the one hand and Soviet Union and India on the other.
SYSTEM DIMENSIONS

SOCIO-ECONOMIC RANGE

WEALTH

OECD

NIC's

LDC's

POVERTY

UPPER

MIDDLE

LOWER

GEO-POLITICAL RANGE

LIBERAL

NATO

NAC's

WPO

SOCIAL

RIGHT

CENTER

LEFT

ETHNO-CENTRIC RANGE

GLOBAL

IGO's

MNC's

STATES

TRIBES

LOCAL

MACRO

MESO

MICRO

TWO-DIMENSIONAL FIELD

USA

USSR

INDIA

CHINA

N

W

E

S

DISCORD

ACCORD
A similar "vector analysis" may be attempted if we bring in the third G-L dimension, but we leave that to the imagination of the reader. In concluding this chapter, we want to reiterate the overall diagnosis for the global system, that is the world is torn by several cross-cutting conflicts which pose various economic, political and cultural problems threatening the whole structure of its social system.
II-ANALYSIS

On the basis of the preceding diagnosis, we shall presently undertake an analysis of the global situation. As diagnosis concentrates on perceiving and describing certain conditions, so does analysis aims at conceptualizing and explaining these conditions. To do so, analysis goes beyond the phenomena to discover cause-effect relationships or interdependent factors which explain why the diagnosis is what it is.

Analysis begins by searching for salient points or events which it picks out for careful study. These outstanding factors are similar to diagnostic symptoms, only here the analysis regresses in time to find the sequence of events and the correlations which tie them together. Of course, establishing causality is very difficult to do for open systems, such as the global society. For this reason, we should be content to arrive at some hypothetical explanations which might eventually lead to social theories.

Since open-dynamic systems function as a result of certain inputs we shall discern these inputs and then follow them through the social system to find out their impacts which finally lead to certain outputs. This input-output analysis is the closest thing we can do to a cause-effect study, so we shall outline its main elements in this chapter.

These elements will be of three kinds: material; energy and information. We have chosen these categories because of their primary and exhaustive nature. This means that
everything happening in a system is either one of these three types or a combination of them. These and only these three inputs enter society in one way or another, undergo a conversion depending on the structures and function of the system and then exit in some other form of these three elementary types.

The principal catalytic agent in the social system which makes this transformation possible is science and technology. We take this as our main hypothesis on which we shall build our explanation.* Although S & T has been around human societies for a long time, it is only recently that its impact has become as dramatic. So much so that it is now the dominant generator of social change. We shall support this contention in the following three sections.

1. **Material Goods**

To begin with, we look how the material aspects of the global system have been changing due to the progress of S & T. Cross-cutting all three sections of society, S & T have primarily affected the economic infrastructure and then spilled over to the cultural structure and the political superstructure of the system. Technology multiplies productivity, therefore increases the flow of material goods in industrial economies.

At the same time however, it increases the differences between industrial and non-industrial systems, so that the gaps between haves and have-nots become wider. The widespread poverty diagnosed in the previous chapter, evidently stems from a combination of natural resources scarcity and differential rates of economic development. The effects of this maldistribution are not difficult to see.

On the one hand some countries have an overabundance of goods resulting in consumer societies which deplete natural resources and degrade the environment. On the other hand, other countries are underdeveloped and stagnate, while their resources are exploited for foreign consumption. The unequal application of S & T on different societies and different sectors, create over-population and undernourishment in some, as well as wealth and luxury in others.

The political implications of these material inequalities are serious because they create unstable conditions which incubate wars and revolutions. Alternatively
they enforce terror and oppression.

2. **High Energy**

The global energy situation coincides with its material condition. That is to say: a similar pattern of high production and unequal distribution exists in both cases. The matter-energy continuum, thus, represents two aspects of the same reality.

Since the industrial revolution, the production and consumption, or more precisely, the rate of energy conversion, in the world has risen tremendously. This rise however, has not happened equally in all parts of the world. Because the production of material goods requires the use of energy, both events took place in the same countries, situated mainly in the northern hemisphere.

These high energy countries thereby gave their societies a high quality and quantity of life in many respects, but at a high cost of environmental degradation and pollution as well as various social pathologies. At the heart of the latter is the tendency of high energy systems to centralize power. This spill over from the economic to the socio-political sector became necessary in order to control the high energy flowing throughout the system.

As society becomes more complex and dynamic, the state takes on more responsibility and involvement, thus syphoning off power from the community at large. Under the circumstances, the average citizen feels isolation and impotence which eventually leads to alienation. This situation repeats itself both in the individual and collective level, so that one can speak
of alienated classes and countries in the international as well as the national systems.

3. **Information Media**

The latest significant entrant into the global system is information. Along with matter and energy, information provides societies with the means to control their environment. What has changed lately is the relative importance of these three components by the gain of information at the expense of the other two in the post-industrial society.

With the increasing complexity and dynamism of social systems, information has become a necessary ingredient of control. Since knowledge is power, those who possess information become as influential as those who own material goods or energy resources. The gatekeepers of communications and the manipulators of data are forming the new elites of the contemporary world. These, along with the computer and robotic scientists, are merging with technocrats everywhere to dominate social systems.

Moreover, the tendency of value agglutination, concentrates all three power sources into the same few groups or countries, so that the disenfranchized of the earth are generally both ignorant and poor. The exception to this rule is what creates dangerous political situations, when the informed-poor agitate for more equitable redistribution of wealth. The explosion of rising expectations throughout the world fed by global communications is leading to frustration...
of unfulfilled demands and finally to the anomie of apathy or nihilism.

In order to draw the overall analytic picture of what was said so far in this chapter, we present the diagram in the previous page. In constructing the diagram we have combined the input-output process with the cross-impact matrix. Accordingly, the vertical dimension represents the three fields of S & T, while the horizontal dimension shows the three sectors of the social system.

The inputs of materials, energy and information on the left, flow through and are converted by the economic, cultural and political structures of society, coming out on the right as system outputs. These flows suggest some causal relationships mentioned in the text thus illustrating the etiology we have adopted for this study.

As a result we can reiterate that, as an independent variable, S & T has caused certain systemic changes, through the intervening functions of various social factors. The effects of these interactions present both positive and negative aspects and pose certain problems as well as opportunities for mankind.

It is these potential dangers and crises which challenge our imagination and force us to action. Thus, as we move from analysis to prognosis, we trace the trends established in the past to their probable extension in the future. This we shall attempt in the next chapter.
III-PROGNOSIS

The final stage of our methodology is to make some projections into the future, based on what we have noticed in the past and present. This process is a logical as well as a psychological necessity for human beings whose time horizon extends both forwards and backwards. By adding the chronological dimension here to the spatial and functional ones we introduced so far, we can complete this situation study.

Unlike diagnosis and analysis, prognosis deals with events that have not yet happened and may not happen at all. It is therefore different and more difficult to research scientifically. If it were not for the human predestination of delving into the future, we would not have touched it at all. This natural imperative thus forces us to make some forecast of things to come; since even if knowledge about the future did not exist, we would have to invent it.

Accordingly, our choice in this matter is not whether to forecast but how to do so. We shall not go here into the details of prognostic methodology, since we did that in another study.* Instead, we shall go straight into the substance of our forecasts, which we consider at the three following phases.

1. **Heavy Trends**

The foregoing diagnosis and analysis leads us to believe that the contemporary technological revolution is the central generating force of social change. Since the previous industrial revolution, two hundred years ago, the world has been subjected to two conflicting paradigms: nationalism and imperialism.

At one time or another one of these two has dominated the world. Since the middle of this century, the rebirth of nationalism has broken down the old empires and established the present international system. The recent technological revolution however, has been undermining this system and seeks to supplement it in a new guise of trans-nationalism.

The natural forces of attraction and repulsion, which both unite and divide the world, are again at a critical juncture which will decide the dominant paradigm for the next century. Compounding this conflict are the ideological forces of liberalism and socialism which fight for conservative or radical solutions and evolutionary or revolutionary changes.

At present, it seems that liberalism is allied with transnationalism and socialism with nationalism. These two great coalitions are locked in battle at many fronts and levels. The outcome of this mega-conflict is not yet evident, since there are various indicators which point at different directions. If we accept the dialectical process of thesis, antithesis: synthesis, however, the result will most likely
be some combination of all these trends.

2. **Impact Levels**

The heavy trends we have mentioned and their contradictory indicators operate at various dimensions of reality. We shall here glance at the three significant ones introduced in the first chapter.

In the socio-economic front, the North-South confrontation will continue at the same intensity as the widening gap between the rich and poor nations. The demands for a *New International Economic Order* will increase, but with different formulae and between different coalitions as various development patterns bring together new partners and create new adversaries.

On the other extreme, the East-West cold war will alternate with detente periods between the two superpowers. *Disarmament* negotiations and arms control measures will alternate with further qualitative and quantitative arms races between the military blocks as well as among the non-aligned nations. Although regional conflicts will continue in the Middle East & Africa, it is highly improbable that a strategic nuclear war will occur in the foreseeable future.

Superimposed on these two cross-cutting fronts, the geo-functional confrontation between the nation-state and the transnational corporation will also continue unabated. Superpowers and TNC's seem to be dominating this conflict as the smaller states get caught in the middle. The overlapping *jurisdictions* between public and private institutions will
thus rise to a higher level, thereby compounding the problems in the other two dimensions.

3. General Projections

In spite of these multi-dimensional conflicts the broad structural characteristics of the world will remain the same. Neither states nor TNC's, neither East-West nor North-South will eclipse each other. All these institutions, alliances and groups will persist with minor changes well into the twenty-first century.

The stabilizing factors which help preserve the global system will still be the balance of power between opposing interests and ideologies. This balance will keep both centripetal and centrifugal forces in check. Economic interdependence will counter political sovereignty and cultural identity, thus making social change a dialectic process.

Alternating the cycles of this process will be the pragmatic influence of the United Nations Agencies as well as the growing network of intergovernmental and non-governmental organizations. These specialized functional institutions will both cause and reflect a growing trans-nationalism throughout the world.

At the same time, nationalism will be tempered by the necessities of inter-nationalism, accompanied by the evolution of international law and supra-national
communities. This evolution will be especially strong at the regional or continental level, lead by the European Community. Together, the transnationalism of NGO's and the internationalism of IGO's will continue to push the world towards a cosmopolis or global village.

This concludes a very sketchy prognosis of the foreseeable future of the global system. For a synoptic view of these forecasts and the forces that guide them, we have drawn the flow chart in the previous page.

The chart begins with the industrial and ends with the post-industrial era, with the technological revolution as its linch-pin. Within these two milestones, intertwine the various trends we have mentioned. The supports and oppositions that these trends offer each other determine the outcomes in the long run.

The diverging and converging aspects of the diagram indicate the dialectic cycles in which anti-thetic trends synthesize to form new ideas and institutions. Of course, these general trends do not show important details. All parts of the global system do not transcend each cycle together. Only some societies will enter the post-industrial era at the same time, while others are still behind.

Yet, regardless of all these contradictions, certain aggregate trends can be discerned and their probable directions projected within an acceptable margin of error. This has been done as a first approximation here to illustrate the present situation study.
MACRO-HISTORICAL DIALECTICS

PAST

FUNCTIONAL IMPERIALISM

INDUSTRIAL REVOLUTION

SOCIO-ECONOMIC DEPENDENCE

NEO-FUNCTIONAL TRANS-NATIONALISM

ETHNO-CENTRIC INTERDEPENDENCE

REGIONAL INTERNATIONALISM

SPATIAL NATIONALISM

GEO-POLITICAL INDEPENDENCE

FUTURE

HEAVY TREND FLOW CHART.
CONCLUSION

The overview of what has been presented so far would seem to be that the global system is suffering from serious economic, political and cultural ills. The causes for these ills lie in the uneven technological revolution which has created great maldistributions in materials, energy and information within and between social systems. If these factors persist to unbalance the world's equilibrium, we can expect increasing controversy and confrontations, as well as deteriorating conditions and conflicts in many sectors and regions of the globe.

The evaluation from all this is that the world situation is critical but not hopeless! The tendency of systems to run down if unattended or malattended operates in this case as well. Yet, if human ingenuity overcomes human stupidity, these trends can be reversed or at least prolonged. If the collective intelligence and morality of humanity is put to the task, there is a large probability that we will survive this latest and gravest condition of the global system.

How to do that, of course, is a most difficult question which will not be tackled here. The situation study ends with the definition, explanations, and projects of the problem. As to the solution, it would require another study to consider values, options and strategies which might work under the
circumstances.* Such prescriptive study or policy planning, however, is the next phase of this methodology, to be treated elsewhere, later on.

SELECTED BIBLIOGRAPHY


THE GAMMA INSTITUTE

The GAMMA Institute is an interdisciplinary, interuniversity research center specializing in forecasting and planning studies. It was founded in 1974 on the initiative of four professors from the Universities of Montreal and McGill, and since 1983 has the status of an independent non-profit organization governed by the Laws of Canada.

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