REFLECTIONS ON A HUMAN ECONOMY OF THE PEOPLE

hatever the roads to be taken in order to achieve the future, we can already feel in them some principles that impose themselves as necessarily implied.

First, the obligation of information or, better said, of knowledge, recommended this time not to the individual, as Socrates did it, but to the nation, to every nation.

Know yourself, nation! Know your own truth. Know the forms of life of the people who make up the richness of their moral and spiritual life, know your institutions, their characteristic type of permanent internal and external relations. Know all of these things with the total respect for the truth, however humble or rich it may be, with the awareness that you represent a superior reality in the order of existence.

This analysis can be done by each nation with its own means: it represents the revelation of the truth about itself.

But the preparation of the way to the future does not end with this process of knowledge.

Passing to action implies the application of a second principle, whose existence is hard to deny. It requires *a scientific elaboration* of the data obtained through the processes of knowledge and it is up to the technicians who may come from all corners of the world. They are going to build upon these data, models and plans that should be *specific* and *comprehensive* with respect to the entire life of that particular nation.

The third principle is identical to *the conscious will* of achieving, and it belongs to the nation's power as constituted into a state.

And, finally, because these states and nations are not lonely and isolated on this earth, but conditioned by all the others, *a principle of guarantee* is imposed with respect to these conditionings, meant to ensure the development of the operation through which the envisaged targets are pursued.

This principle requests the largest understanding, with the indispensable touch of love of every nation for each one of the others. Without this, no human undertaking may acquire a lasting existence.

In the spirit of these principles, we have built up the project of a model, which we called demo-economy, and which is different from other similar ones.

The tense atmosphere, created by the dramatic worries concerning the near future of humanity, started to clear up, once the most important studies on this problem have been published, maybe as a reaction to the excessive pessimism they implied. The alarm supported by the Club of Rome, based mainly on the Meadows report on the "growth", especially had an unexpected therapeutic effect.

This report was based on the contribution of four factors: the exponential growth of earth's population, simultaneously with the increase of the industrial production and the raw material consumption, as well as the deterioration of the natural habitat. The survey, as it has been presented, is really menacing, and includes elements that need more than just taking note of.

But it left aside the peoples' desire to live and the power of creation of the human mind, that may diminish to natural limits the effects of the above-mentioned increase. They have already started to take action in the most various ways.

It is particularly worth mentioning two aspects of the reaction to the kind of research mentioned above.

The former refers to the global, or, if you would rather call it, universal character of these researches extended to the entire surface of the Earth. The problems of development still can not find a natural basis in the reality of the national life of each organized state.

The fact that countries differ so much from one another in terms of physical and moral structure of their populations, level of organization and standard of life, inner motivations of their activities, land structure and climate, as well as the character of the countries around them, makes development factors too different from one another to treat them according to unique criteria. Through this, we would proclaim an illusory independence of the nations' fates considered in their common existence and a sort of indifference in this problem, be it a scientific one only.

What we would like to stress is just the fact that the research on any great problem regarding humanity in its wholeness has to start from a research on each nation separately, and not only from the model achieved by some of them.

The second aspect, generating a visible reaction to the nature and to the criteria of the researches that we are having in view, is their content in humanity, in factors of a more human nature that should be gone deeply into. They will largely guide our research on the achieving of a model attempting at giving as complete an image as possible on the existence, which our country represents as an exponent of its population. We are going to use more often, due to a personal habit, the term nation, meaning population, with all its organized forms constituting the country, leaving the word population represent the more restricted and more abstract sense, used mainly in demography. (Without any intention of making an absolute difference between these two words, which are up to a certain point equivalent.)

In the sense mentioned above, the nation constituting a country, or rather an organized state, is a system, namely an open system. We will hereinafter symbolize by Ω the world of the other countries, the surrounding world, which this system has continuous exchanges with, and we do not mean exchanges of information only, which constitute the essential condition for any vital system.

There are two main ways of investigating such a system: the one addressing the macro, or rather global, total aspects of the system, and the one addressing its atomic, irreducible components, or in more philosophical terms, the phenomenological aspects and the generative ones.

The macro aspects of these systems are objects of direct observation that can be grouped in one or several models, which are usually equivalent. The living cell of an animal body, considered as a system has a certain shape, color, weight and temperature and a cover with specific permeation qualities. For some scientific targets, this description is enough. One can differentiate a cell from any other object of our experience.

A factory is characterized by a building covering x hectares, with an energy consumption of y kW, n workers, a technical body of z persons, the respective budget, the raw materials specified according to the nature of the

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factory, with an annual output given by determined values, eventually adding profitability to this.

Another example of an open system that is also very simple in its global shape: the Sun, as a central element of the system it governs, is characterized by its physical dimensions, the emission of light, heat and other forms of energy, not detailed here, and also by its interactions with the other planets, with the suns of the local galaxy, by its complex movements of rotation and translation.

A human society, to deal directly with a country, has a macro aspect, to be found at its upper level in its Constitution, which is a model. Another more detailed model is given by the system of laws and institutions that are present at a certain moment, to which we have to add information on the population and its structure, certain data on the economy and its relationships with the other countries. *One macro-economic model of the annual life of a country is its budget*.

But a factory is a living organism, living through the people making it up, thinking and working there and maintaining a permanent exchange between the input, consisting in materials, ideas and information and the output, represented by its manufactured products. Their complex activity *explains* the macro aspects of the factory as a system.

The sun is a huge mass of hydrogen molecules, also animated by a large quantity of energy and radiation-carrying particles, with various characteristics. All these micro-components, whether material or energetic, in their interaction are finally the genetic cause of the great functions of the Sun, as global unity in the universe. The micro model of this body has other descriptive elements, otherwise connected among themselves and with the world around according to their own laws, apparently without any connection with the properties of the macro-model, but it is through these elements that science can explain it.

Science proper starts by constituting the genetic micro-models, which is very often done with the help of hypotheses, and is fulfilled when it is capable of explaining the macro phenomenology with the help of these micro-models.

The way science establishes a connection between the two aspects is a particular problem for each material system. Generally, we still have several problems to solve in this line of ideas.

In the systems like the ones we want to study, in which man is the main system-generating micro actor, the situation is special, due to the system consciousness, starting wan family consciousness and ending up with that of the entire national one (some would even go further). It solves and explains this connection. But consciousness can only enlighten, give sense to the various levels and movements made by each person within their own activities, performed according to their own specific rules.

The endeavor of science is to objectively explain how the micro-components and the interactions among them, individually or grouped in sub-systems, generate and explain the system as a whole.

It is true that human systems benefit from the light of the system consciousness of its components, but at the same time, they are much more complicated. They have a history, including not only the past, but also a history that is being continuously made and transformed, with the help of its own specific creative powers. Specific both as a society and through the people that make it up. I can not imagine Archimedes or Newton preaching in the wilderness, as I can not imagine Henry Ford conceiving his factory without the people he was working with. But neither can I imagine human society without such consciousness, meant to focus its creative capacities.

I have reached the end of my pleading for the necessity to build for human society as well, namely as it is naturally and organically divided into countries, models that should start from its elementary factor, i.e. man, with his/her biological, social and spiritual capacities. Man is a generating factor through his/her very existence all along these planes, sometimes even through the consciousness of the systems he belongs to. Without leaving aside the ultimate system, which is the state, whose being constitutes an irreducible datum in itself, like individuals, like nature, and we should add, like that exterior world that we suggested to note by letter Ω .

We thus satisfy a method that is characteristic to our European science, analyzing any bit of reality, down to the atoms that are making it up, down to its irreducible elements.

For those who are interested in my ideas on the theory of probabilities, this statement might seem contrary to my endeavors of late for liberating this theory from its foundation on the theory of sets, which constructs events as parts of a space of fictional elementary events, generally having a null measure or probability. The atoms of these systems are irreducible points, but meaningless as events of the considered system. This excess of abstractness, as comfortable as it may be sometimes, yet not even always achievable, betrays and does not serve the principles of atomist, causal and functional thinking characterizing the type of thinking science was based on. But man is not to be assimilated with a meaningless point. Therefore, the attempt at building a model of the human society, starting from its irreducible but concrete elements, which are the persons, the state as such, nature and the world outside, constitute a scientific program which only the difficulties of achieving can oppose to.

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