#### THE SUPER RELATIONSHIP IN THE HUMAN SYSTEM

We live in a system and are its subjects. Systems can be two types: simple or complex.

A simple system can be formed from the relationships between two or more subjects as, for example, two or three points in a straight line or from the relationships between the behaviour or two or more elements as with such natural elements as carbon, oxygen, hydrogen or nitrogen.

### Figure 1

Straight line (relation between subjects)

Chemical reaction (relation between behaviour)

 $C \circ O = CO^{\frac{1}{2}}$ 

### Simple systems

A complex system is a set of objects and relations between objects and between their behaviour, in which the objects are part of the system, the behaviours are the properties, and the attributes of the objects and the relations hold the system together.

## Figure 2

Relations between objects
Objects
Behaviours
Relation between behaviours

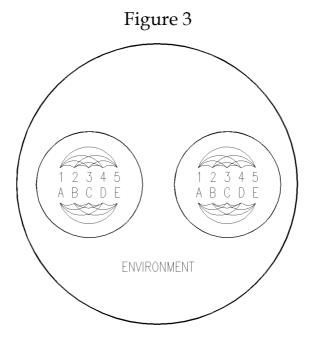


Complex systems

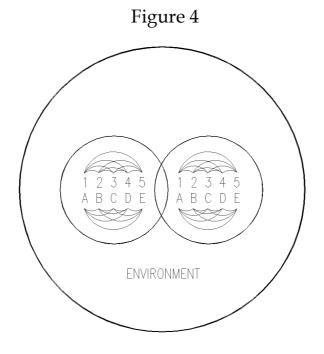
A human system is complex. Here the relationships are not merely relations between subjects or only the relationships between their behaviour. Both these types of relationships exist in the human system. Relations between individuals are established by rules but the relations between behaviour stems from each individual.

This means that we cannot possibly imagine change in a complex system solely by changing the rules or solely by changing individual behaviour. If just the rules are changed, the relationships between the behaviour of the individuals would be unchanged and these, in time, would reproduce the old rules. If only individual behaviour is changed, the rules would remain unchanged and, in time, force the subjects to readopt their former behaviour patterns. The result would be the overall immutability of the system.

Systems can be closed or open. The former do not have relationships with other systems within the same environment. The latter, have relations with the outside environment and, therefore, with other systems within the same environment.



Closed systems



Open systems

When a system is defined, we must also define its environment. The environment of a specific system is made up of all the subjects in whom a change in the behaviour of the subjects in the system influences the system itself but also other systems.

Organic systems are open in that they have relations with other systems in the same environment with which they exchange materials, energy and information.

If organic systems are open and if the human system is an organic system, the human system is an open system.

A social system, as an organic system, is an open system as regards environment. It is not an aggregation of elementary parts but a set of subjects hierarchically ordered on the basis of their importance to the entire system.

In this kind of system the functional units at every level of the hierarchy have two values: on the one hand, they act as the whole as regards the hierarchically less important subjects and, on the other, they act as parts as regards the hierarchically more important subjects.

We can talk about dyadic systems in which each part has a dual value: one towards the top and the other towards the bottom.

# Dyadic systems

It is important to examine the effects of the values in dyadic systems. The terrestrial systems is a dyadic system in which man is at a higher hierarchical level than the planet. In this way, man acts a the whole compared with plants and plants acts as parts in the system when

compared with man. In their turn, plants act as the whole if compared with minerals.

We should add another concept. The unit is stronger than the sum of the forces of its parts. But unit does not mean whole. Unit also means homogeneousness in intention. When ten parts address a part that is hierarchically higher, they represent the sum of the weight of the ten if they have a common interest. They represent a higher weight than the sum of the ten parts of the have common fundamental goals. In practical terms, the homogeneousness wills of the individuals towards a common final goal multiplies the force of the group.

Now let's apply these concepts to the human system. A family is a social human system, an organic open system. The functional units are the family as a whole, the parents and the children. The family acts as a whole towards parents and children. The parents are a whole towards the children and the children act as parts towards the parents and the family. The parents are parts as regards the family.

Each part of a system is related to the parts the form it and any change in one part will cause changes in all the parts and in the whole system. This is the concept of totality or the whole. But change is not synonymous with improvement. The rules or the behaviours could be different but the effects could remain much the same. And, in effect, this is how things have gone up to now in the substantial relationships between rules and behaviour.

This state of affairs suggests that a system, in addition to being a set of objects and relationships among objects and their behaviour is also a set of relationships stemming from the relations between objects and the relations between the behaviour of the objects themselves.

### Figure 6

Objects
Relationships between objects
Super relationship
Relationships between behaviour
A B C D E

### The human system

A human system, then, is made up of three sets: relationships between subjects, relationships between the behaviour patterns of the subjects, relationships between the first two. This third relationship is the one that causes effects on the system and its environment. We could call it a super-relationship.

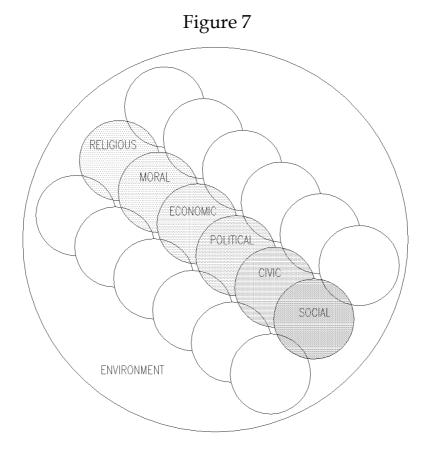
The task of this super-relationship, or the reactive process between the two sets of relationships is organization and this becomes a determining factor. The organization performed by the super-relationship, the interactions, is very important for the future of the specific elements formed by the genesis but equally important for the result, the actual situation. This is because the organization of the relations between subjective and behavioural relationships, in contrast with the origin, the cause and effects of social phenomena, produce future processes by itself.

But this is not enough. The human system is made up of a number of sub-systems: the social sub-system governs interpersonal relations; the civil, governs relations between subjects and the collectivity; the economic governs relations between different subjects and environmental resources; the political governs relations between subjects and the authorities (the State); the moral governs the relations between thought and action for each individual; the religious tends of establish

relations between each subjects and the whole including what we do not know.

These sub-systems, as particular processes within the human system, interact among themselves. Thus a change in just one system will affect all the other systems and, at the same time, the entire environment in which the human system operates. Let's give an example. The economic system permits natural resources to be transformed into consumer goods by production processes. The first production process was the cultivation of the soil - agriculture.

The method of cultivating the soil and allocating the results (crops) affected the interpersonal relations between those who produced and those who consumed (social relations), between those who produced, those who consumed, the set of all the producers and the set of all the consumers (civic relations), between those who produce, those who consume and the State (political relations). between the way of thinking and the way of life (moral relations), between man and the unknown (religious concepts) and between the human system and the soil (the human system's environment).



Sub-systems in the human system

At this point we must answer this question: how can the human system be changed? We could reply that the human system, like all other systems, will change on its own. Evolution is, basically, continuous spontaneous change. But if it is true that there is an element in every system that cannot be explained in terms of the other elements in the system, it is also possible that there is a law that governs the evolution of systems and cannot be explained with the other laws in the system. To discover this rule, in other words, to discover the nature of the super-relationship within the human system, would mean modifying at least the time in which evolution takes place and, perhaps, the effects, the states at definite moments in time, of the evolutionary process itself. Let's try. To do this, we must take all the relationships into account:

- 1) between the subjects in a system;
- 2) between the behaviour of the subjects in the system;

- 3) between the system and the environment;
- 4) between the subjects of the system and the environment outside the system;
- 5) between the behaviour of the subjects and the external system;
- 6) between the system and its sub-systems.

We have said that there is a hierarchy in dyadic systems according to which each part has a double weighting: it acts as a totality towards the bottom and as a part towards the top. From this point of view, we must exclude the possibility that a part can direct modify the behaviour of the hierarchically higher part. In fact, the lower part can modify the relationship with the higher part but not its behaviour.

How, then, can a system be changed if we cannot modify the relationships between subjects and the relationships between the behaviour of the subjects within the same system? Among other, when we talk about human relationships, we are fully aware that we are referring to at least six sub-systems.

The only thing that we can do is to try and change the part at the same level in a sub-system. Modifying the behaviour of a part at the same level means also changing the relationship with the part. Thus for the two parts at the same level the relationship between them and their behaviour is changed.

For example, T and C have a certain relationship, X and have respectively behaviour A and B. The adoption of behaviour A' by T causes a B' behaviour in C and a relationship X' between T and C. This can be proven. If T adopts a behaviour A' and shows that he is better off with this A' type behaviour, C will be induced to approach, by imitation A's behaviour and thus to adopt a behaviour similar to T's. We can define this as behaviour A" - not identical to, but similar to A'. Similarly, the relationship between T and C will be modified: instead of being X' it will be X". This is the super-relationship effect.

With an X" relationship and A' and A" types of behaviour, T can C can act together towards the top with a weighting of <u>two parts</u> instead of just one. Certainly, they are not the totality but their weighting is higher than if they acted as individual parts.

Having modified their relationship and behaviour, T and C address the outside with T adopting an A' and C the A" behaviour. The other parts with which T and C will come in contact with will adopt behaviour patterns similar to A' and A" and, as a result, thanks to the super-relationship effect, will set up a relationship similar to X" not only with T and C but also among themselves.

At a certain point, the weightings of the actions of all the parts, or of a large majority of them, towards the hierarchically higher part, will become a partial totality and thus largely overcome the limitations that a single part normally has when it addresses the hierarchically higher part.

At this point the relationships between parts at different hierarchic level will be changed and the higher hierarchic part will be induced to change its (or their) behaviour. The original change in behaviour in one part has produced a change in the super-relationship between parts at different hierarchic levels within a sub-system and thus changes the status of the sub-system itself.

The effect of a change in the super-relationship will be reflected on the sub-systems in much the same way as the change in the behaviour of a subject in a subsystem affects the sub-system itself. At the end, the entire human system will have been changed. That leaves the environment. This is interdependent on the human system and largely defines the relationships and behaviour patterns of the subjects. But the environment, in turn, is a system for which the human system is a sub-system. The super-relationship should also have an impact on the environment.

Let's make a hypothesis. Let's presume that each one of us throws a piece of paper into the street rather than in the litter bins provided. In fact, let's

assume that there are not even any litter bins. Let's assume that the factories produce pollution and the State regards the citizens as its subjects. If one of us complains about the factory, this has no weight because the factory, as an organized part, is at a higher level than we are. Similarly, if one of us complains about the attitude of a representative of the State, this has no effect.

But let's take a look at what could happen if one of us were to keep the piece of paper in our pocket rather than dropping it onto the street and suggests to another that he do likewise. This latter will modify his behaviour which will become similar to that of the first who began not to throw litter onto the street. The relationship between the two will be changed in that, by accepting the same stand (remembering not to litter), they will have a better understanding of their reciprocal reasons. The change in the relationship between the two and the change in their behaviour is based on a common goal, the weighting of the action done by the two of them together will be higher than the sum of their individual weightings.

If these two subjects contacts others, these others will adopt a behaviour pattern similar to their and will establish various relationships among themselves. all these subjects could then address the owner of the factory that produces pollution or to the government minister accustomed to treating citizens as subjects. The set of these subjects directed towards a common purpose will produce a weighting that is far higher than that of a single part and will induce the businessman and the minister to change first their behaviour and, thereafter, the relationship with the citizens.

The change in the businessman's and the minister's behaviour and the new relationships they set up with the citizens will produce effects on the economic and political sub-systems. Changes in these two sub-systems will affect other sub-systems and will produce an effect on the entire human system that will affect the environment. There will be less litter, less pollution, more political participation, more economic responsibility and less negative consequences for the environment.

To obtain these effects someone must begin to behave better. Then, instead of thinking only about his own behaviour, this person must confront another with whom, later, he will contact others until the behaviour of the first two has not been imitated by a group. The relationship between the change in the first subject to started the process is an example of the rule that cannot be explained by the other rules of the system. And yet it exists, can be adopted and can provoke the change of an entire system and its environment.