

## **ANALYSIS OF ECONOMIC PROTECTIONISM FROM THE PERSPECTIVE OF CONSTRUCTAL THEORY**

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### **Abstract**

*In this article, I will try to use and apply the thinking apparatus created by the Constructal Theory to economic protectionism. Economic protectionism is approached mainly through the prism of F. List and M. Manoilescu. We consider the emergence of states necessary; the reasons for the existence of states will be briefly addressed in the article; therefore, we consider it appropriate to use the logic of Constructal Theory (C.T.) to analyze the economy of a state. The state is a way of life of social organization; in fact, it is an obligatory step to achieve social relations and that is why it is necessary to find ways of state economic development using the concepts of the mentioned theory. The existence of a state cannot be ruled out; a state must be developed; protectionism may be feasible; that is why protectionism must be analyzed and this is what we will do in this article. C.T. is created by Professor Adrian Bejan of Duke University in America. It is a Theory initially built in the conceptual framework of thermodynamics, but later proved its applicability in many fields including economics. It is a theory generated by an intuition of Professor Bejan that identifies existence (being) with the flow. Everything is a flow and takes place within a flow system, a system surrounded by a certain environment. Human existence takes place within this general flow and is also a flow. Professor Bejan intuited that the flow of a system is not chaotic but follows certain mathematical and logical rules and principles. The conclusions of C.T. in economics approaches the statements of the Austrian School of Economics and Law. But in this article, we will force C.T. and we will direct the light provided by it to other approaches to economics, that is, to understand and analyze, through its prism, economic protectionism the existence of the state. We will finally address some concrete, historical problems and we will try to break them into pieces, to understand their mechanism, and to find solutions. My article is a completely new approach both in the field of protectionism and especially in the use of C.T. concepts. We conclude that we can use C.T. to better understand the existence of states, protectionism and that we can think of ways to economically develop states. At a certain level and with certain compromises on both sides we can reconcile C.T and protectionism in its light form.*

### **Keywords**

*Constructal Theory; flow system; protectionism; socialism; economic cycle; crisis.*

### **Introduction**

In this article we will try to approach economic protectionism through the eyes of C.T. Protectionism is thought mainly through the theories developed by F. List and M. Manoilescu. I will seek to find the area of overlap between two seemingly irreconcilable theories: C.T. and economic protectionism. I think that at a certain point Professor Adrian Bejan was wrong. We cannot analyze only the ends of a system: the point and the whole (i.e. the individual and the global system). In the interval between extremes there are very important, independent systems of organization: the states. These must be considered taking into account: the individuals of which they are composed and the global system in which they are included. It remains to be seen what underlies the formation of a state and why they are different from each other.

The approach I am trying to take is completely new. C. T. leads to the Austrian School and yet I state in this article: the state is important and the economy of a state can be understood (theoretically and practically) through the thinking apparatus of C.T. so that we can accelerate development.

For C.T. everything is flow. At first, the flow is diffuse (unorganized) then it turns into an organized flow through flow channels. There are precise mathematical relationships everywhere: between diffuse and channel flow; between the flow of different types of channels; between flow and outside; between the different sizes and measures of the channels; between different types of channels; between the measures of speeds and times.

In biology, the question has always been at what level the laws of natural selection act and what is the basic unit of selection. University careers were created, intellectual celebrities were created, and high-circulation books were written by biologists who looked at things differently depending on the place, level, and direction in which they pointed their flashlight. The basic unit was thought to be: the gene, the individual, the population, the species, the ecotope, and the ecosystem as a whole (each basic unit gave rise to a treaty and a way of looking at things). But all these are integrated into each other, the laws act at every level and as a whole. It is difficult to understand for the limited capacity of man how the whole evolves as a whole and in parts.

Mostly C.T. tries to avoid common mistakes and limitations inherent in a theory; which looks at only a small part of the truth and then tries to extrapolate it to the whole system. C.T. starts from the individual and his goals and aspirations, then gradually a hierarchical structure of flow is formed consisting of different stages of hierarchy. Hierarchy is mandatory, it is necessary for a more efficient flow. The system constantly adapts, if left free, and the difference in wealth is implicit (inherent) in efficient operation. Although it starts with the individual, Adrian Bejan emphasizes that the system as a whole is what matters.

C.T reaches approximately the same conclusions as the Austrian School because the two schools point their flashlight at two places: the individual and the system as a whole. The intermediate stages of reality disappear, steps that must be considered important and that require a theoretical analysis and penetration into the functioning mechanisms.

In this article we will try to penetrate with the help of C.T. in the formation of states and the protectionist economies of the state; as hierarchical steps in the formation of the global flow system. To achieve this, we will have to take into account other elements that economists usually go over quickly. They function as barriers in the global flow system. They can be thought of as the limits of the flow channel. They form the ideational system of thinking and feeling of a population. The religion, way of thinking, beliefs, and feelings of an entire population form a system of thinking through which the information system passes; this information system is the foundation of the flow of goods/services.

### **Fundamentals of analysis**

C. T. considers that flow systems are formed in areas where resources exist and from there radially propagate outwards. The extension is done mathematically respecting

certain proportions. Flow systems formed in disparate areas by development connect and form a larger flow system. I consider that on the route of connection between important flow systems, states are formed. States are formed not only because of resources but also because of psychic factors (discussed in this article). Not every flow system formed around a resource becomes a state. A critical force mass of the system is required.

Nothing can be thought of outside a pre-existing system of conceptions within a population. Nothing can be created in the objective world if it was not first conceived in a population. The ideational system of a population differentiates populations from each other. It makes some more suitable for a job, others more suitable for another type of work, differentiate their skills and abilities. Original creations within a population materialize through an individual or the original collaboration of several individuals.

If the material system determines the ideal system or there is mutual conditioning, this aspect goes beyond the present work. Instead, we can see globally, according to C.T., flow systems that integrate other flow systems. When a certain critical mass of development is reached (within a system) a clear differentiation from other neighboring flow systems occurs. Here I am referring to the emergence of states that differ from each other. The state seen as a flow system has different characteristics from the neighboring system and the greater the distance in space and time the greater the difference. Empires were attempts to unite different systems of flow and attempt to make them more efficient, but different ideational systems (which were part of empires) fragmented empires into different states. To include states in larger flow systems requires effort (theoretically and practically) because each of these states tries to differentiate its borders and create different flow systems from its neighbors.

For the emergence of states, we can think of as a resource: geography or the distribution of resources on a certain territory; as indeed says C.T. I will part here with Adrian Bejan and I will say that the emergence of states has at its origin in the thinking structure of a population that includes: religion, will, archetypal images. There are populations with greater internal strength and they include minor populations within them; which they suffocate and include altogether.

For simplicity, I will talk about the will to power. Reaching a critical mass of willpower in a certain area will lead to the creation of a state. The state is an important stage of the general flow system, it is an important level of organization, it can be thought of as a line of fragmentation in the global system. Of course, all states are included in the global system, but the state is an important step in the organization (and thinking) of the general flow system. Why? Because it is based on the will to power (archetypal images of thinking). Those who form the state as a flow system want to differentiate themselves from neighboring systems.

The desire of an isolated individual is to be included in a certain flow system, depending on the affinities of thought. In the past, a conscious choice was unlikely to take place; obstacles to the movement or circulation of information were numerous. Today a conscious choice is possible. Unlike the old states (which offer an affinity for a sentimental living), the U.S. offers an affinity for philosophy, for conscious thinking. So today the borders of states are permeable to different ideational structures.

States form unitary flow systems; unity is given by the system of values and beliefs in the first place. The vascularization of states, thought of as flow systems, is different. Political systems favor or impede freedom of movement. We have the example of an 18th century Spain that destroyed all its potential and deliberately (through its legislation, through fanaticism) stopped any normal course of evolution, ankylosed the system, and did not let it evolve. The decision-makers believed that they had achieved a perfect political system and no change was needed. Classes favored by a certain state refused to change the system as a whole.

There are three ways to look at perfection in a system. *One*. The belief that perfection is behind you, in a golden age and you are doing everything possible to change the system by turning it back to the past. It is the way of thinking of Plato, European antiquity, and the Chinese before communism. *Two*. The belief that perfection is at the forefront and is quite well defined and the current system must do everything in its power to move towards that ideal state and be willing to make any sacrifice. It is the communist faith and the Nazi faith. *Three*. The ideals to which we refer are permanent and parallel to the development at any moment, ideals to which we refer permanently. They only give rules of a trend, they are general rules that offer a broad framework of development and behavior but offer certain barriers, limits, which define the walls of the flow system. The flow channels in this third case are formed by the limits given by the ideal behavioral prescriptions. Here I include Christianity.

Social plans, as strict recipes to follow, can never be fully fulfilled. A social plan is successful only as simple trends and *by and large*. This is because the social sciences cannot fully anticipate the behavior of the object of their science; this being: man as a whole. Social plans are approximate and constantly reviewable. A single individual, taken as a separate entity, cannot know (not even him) how he will react, what decisions he will make in all situations in his life. No individual can anticipate all the situations in his life in which he will have to make decisions. The factors on which the reactions of an individual's behavior in various events in his life depend, go beyond the scope of this paper.

The properties, the characteristics by which a group can be defined cannot be reduced to the characteristics of individuals; the group is much more than a sum of individuals. Groups behave impossibly. Minor things change their properties and direction of action. The interaction of individuals gives rise to a multitude of particular situations in which individuals have to make various decisions. A momentary inspiration of a single individual changes the course of action of the whole group. No individual can know himself absolutely; even less, will it be known how a group of such people acts.

The state, as already mentioned, can be thought of as an independent vascular system. Its hierarchical structure and operation comply with the general rules of C.T. That is, it tends to flow more easily and efficiently. Goods transported through certain flow channels are in different percentage ratios of similarity or difference with goods transported through other channels. That is, some goods are identical in all flow systems, some are present only on certain channels, others are present in only one channel.

What does protectionism mean in terms of C.T.? It can only mean an attempt to accentuate vascularization of certain areas to the detriment of others. The resources of

a system are limited. The attempt at strong artificial vascularization (forced industrialization) is the taking over of resources from areas where they would have been distributed naturally and their direction (by the state administration) to certain bureaucratically favored areas. An administration that anticipates certain profits in certain investment areas.

The main factor behind protectionism is the will to power. The struggle between various vascular systems (state level) makes everyone try a race to forced industrialization, with the thought of anticipated future benefits, independence of production, and strength to maintain their structure; possibly imposing its structure on other systems.

### Issues to discuss

I consider that there are two problems of a state (flow system) to be explained in the C.T.: *One*, the permeability of the borders compared to a neighboring system; *Two* operations of the flow system inside the borders.

For an easier understanding of the issues discussed, the vision of a state is analogous to a cell structure in biology. We will use the metaphor: *the membrane* between the states of flow systems. This is represented by barriers, regulations on imports. Decreasing the permeability (raising barriers to imports) of membranes between state flow systems also could lead to positive effects within a state flow system. These positive effects are linked to forced industrialization and the freedom of the system within borders.

We can subsume some of the effects of protectionism: forced consumption of resources, production of unnecessary goods (for which there is no demand), forced vascularization of some areas to the detriment of others. Example: First. The current automotive industry. It produces more than it needs, it consumes more resources than the consumer market is willing to absorb, reduced innovation (because state subsidies stifle innovation). It is necessary so that profits do not fall in this industry (in which resources are forcibly invested): a technology change, supported by state law so that the car fleet is changed. I see the second example in the communist economy. Forced vascularization by industrialization with the removal of resources from areas where they did not serve the industry. The result is a production in stock for which no outlets were found.

More precisely: a system that is forced to industrialize inland, due to barriers to imports and at the same time has freedom of movement inland, this system can give positive effects. That is inner freedom plus protection at the border = rapid development. This formula can shorten the time required for industrialization. A free indoor system capable of changing its configuration and having the freedom to adapt its architecture to changes in the outdoor environment can have the ability to generate positive effects when raising barriers at the border. For Example, England of sec. XVI - XX.

A flow system to give rise to positive effects on protectionism needs critical mass (of a minimum amount required) in terms of area, natural resources, population, means of transport, stage of development, value system, and beliefs. The Inca and Aztec empires had sufficient resources, a large population, sufficient capital goods did not have an adequate system of beliefs and values, and a sufficient stage of spiritual material development to cope with a more evolved flow system, i.e. the Spanish one.

Flow systems that have the freedom to change the architecture diminished inside fanaticism, legislation cannot benefit from any positive effect of protectionism. On the contrary, what is bad inside the system is accentuated, and what is good disappears. Example Spain of sec. XVII-XIX.

To respect the scientific truth, the advantages of forced industrialization (artificial and forced vascularization) must also be reviewed. These would be increasing productivity for the economy as a whole; hiring workers with more purchasing power than those left in agriculture; increase general purchasing power; increasing the efficiency of the economy as a whole; raising the level of agriculture. Agriculture is raised by mechanization; reducing the number of agricultural workers needed; increase production; raising prices for agricultural products and incomes.

We want to discuss artificial hyper vascularization. In which direction do we overstate the economy of a state through the forced actions of the state economic administration? In all known directions or only in certain directions? The first is the Stalinist approach, the second is according to Manoilescu's theory. The first leads to serious errors because we do not have objective criteria to separate the industrial branches from each other (the flow channels that form the system as a whole), and thus we do not know from where to withdraw resources (flow) and where to direct them; the only real criterion is the goodwill of a man or group of people. Manoilescu's approach requires a certain stage of the economy to see which inclinations a certain state (economy) is heading towards and then to accentuate those inclinations. And this second mode suffers from problems because the system can adapt (change) over time so that what was valid at a certain time is no longer valid over a certain period, but the exact opposite is true. Any intervention is a forcing of the freedom of one system in one direction and the withdrawal from others.

There will certainly be an endless two-point discussion. *The first point* of the discussion is the degree of freedom between the flow system of a state and the external environment. More precisely, the degree of permeability of the membrane between the flow system that forms a state and the outside. *The second point* of discussion is the degree of freedom of the indoor flow system. And further on this point: how much to try to over vascularize certain areas to the detriment of others. That is, how much to withdraw sources from certain areas and where to direct them.

The Austrian School and C.T. it essentially says to leave the system completely free. Because these schools look at the system as a whole. The global system will certainly adapt to the most efficient way of flowing mass/ideas. The problem arises when we insert in the global system the cultural differences and the archetypal images of different groups of people. These together with geography will form the history of the states. States will inherently vascularize differently, with different speed and power depending on the characteristics of the subsumed population. The cause of these characteristics cannot be identified but can only be ascertained and described. The result will be a spatial succession of states with different development. How will a less developed state succeed in overtaking the other more developed ones? Leave everything free, hoping that your flow system will adapt effectively to the external environment, or intervene? And if he intervenes where he intervenes, in what direction?

I believe that a state must intervene in the membranes that delimit it so that these membranes have a selective permeability according to the needs of internal development. At the same time, the interior must have as much freedom as possible so that the system adapts its hierarchical configuration. I consider a viable alternative: building moderate flow reserves at the central level and managing them very carefully to moderately vascularize certain areas that need help (e.g. health, education, army, strategic branches).

Where do economic cycles and crises fit into what is presented? Understanding that hierarchical flow systems must be left free, and the forced vascularization of certain areas to the detriment of others (by directing resources administratively or through the banking financial system); raising artificial barriers at the border of states on the flow of goods/materials/information will inherently lead to a crisis. The system as a whole is stronger than the state administrations, it is subject to immaterial principles, principles to which both the material and the immaterial world are subject. These principles guide the global flow system in certain directions, and the change of directions bureaucratically deviates the system from its direction, and sooner or later it will try to return to its womb, in the natural direction. During crises, the system as a whole must be left free, as the Austrian School says in theory so that it can find its natural trajectory.

Although the consequences of C.T. applied in economics say that freedom and non-intervention are the best ways to deal with the system as a whole, I believe that we can think of states as independent flow systems connected to the global system; connected but not fatally connected. And in continuation of the above idea, that we can still proceed to a change in small steps, artificially the flow of the state system. This change must occur after a deep knowledge of how the global system flows, and interventions must be progressive, especially through selective permeabilization of the membranes that delimit the state flow systems and by emphasizing the exploitation of own resources. Crises will be the price that will have to be paid, but it must be a price assumed.

A river with its tributaries is subject to construction law, this does not mean that this river cannot be artificially influenced by the construction of canals, dams, sills, dams, etc. so that the force of the river is optimally exploited by man. Certainly, society and its economy are subject to many variables as I said above, most of them unknown, but a deep theoretical knowledge plus the adoption of small steps (trial and error) I think can be adopted.

### **Development of the analysis**

Related to the two problems discussed above, we will try to answer two other problems: *One* the relationship between states on different lines of evolution and *Two* the problem of colonialism, i.e. the relationship between the structure of a state and non-state stretches (i.e. colonialism).

The relationship between states at different stages of development and evolution means states with different hierarchical flow systems. That is, a system with strong vascularity; dense; with wide hierarchical structures and on numerous levels (like Russian dolls: one in the other); with a wide circulation of goods/information; with an efficient and productive system (transports a lot of goods, high energy consumption, but low

consumption per unit transported), faces a system with a weak and rare vascularization; with a weak and few hierarchical structures in which the circulation is weak (little transport, low energy consumption, but high consumption per unit transported).

Think of two countries at different stages of development. If both systems were left free they would certainly connect and the exchange of goods/ideas would intensify. The vascularization of the first system would spread over the second and further vascularization would be accentuated in both systems. The result: certainly the hierarchical structures would amplify in both systems and even more so in the diminished one. Growth would be in both systems, but at an increased rate in the most primitive, they would try to become uniform; to create a single larger system that adapts its configuration to local resources (both natural and to the aptitude potential of people). Systems are constantly changing in configuration to exploit potential environmental resources as efficiently as possible. The result would be an expansion of the global system (consisting of the two smaller systems) into space over new territories and a general enrichment. The center always expands and the periphery widens. Freedom would lead to the exploitation of resources specific to each area (natural resources, intellectual resources, skills, inclinations) and to transport them throughout the system. Example: England and Spain or Portugal in the 19th century

But things never happened this way. The will to power (which divided the world in us and them), led to bureaucratic legislation, which tried to over vascularize one state to the detriment of another. More precisely, one system tries to suck the resources (flow) of the other system, stopping the development of the weaker system; system that lacks the energy (resources) needed for development. Through corruption (bribery) or war (violence), the most developed system tried to capture the flow of the weakest and integrate it into its flow.

I would give as an example here Romania (after the revolution) opposite the European states. The absorption of the flow from one state by another can be done by special commercial laws that lead to the selective permeability of borders to different goods; accentuating the flow in certain areas and areas to the detriment of the other with fewer resources. Raising selective artificial barriers; narrowing of flow channels; creating different resistances for the longitudinal walls of the channels, all lead to attracting the flow from one area (countries) to another.

I would also include here the actions of the Central Bank. In the 1929-1937 crisis suite, the two U.S. Central Banks and France stored most of the gold, preventing it from entering the market. Both underestimated their currency only as a reason for not allowing the general flow. England overestimated its currency. They all tried to change the flow by corrupting the information transmission material and the power of movement (i.e. money). The result was the devastation of the economic circuit.

The second issue under discussion is the relationship between an evolved, hierarchical, and state-shaped flow system and the population of an unorganized area in a state form. The problem of colonialism.

The political structure is hierarchical (and as C.T. says) this facilitates the flow; that is, facilitating the flow is the purpose of its formation; training that can also be called spontaneous. The political structure at least in its initial formation is not rationally



thought out (as formation); it simply arises. After its elaboration, its change and direction can be the result of rational decisions.

The difference between the higher and lower primitive forms of the state organization is in the different number of hierarchical levels within the systems. A higher state system comprises numerous hierarchical levels both vertically and horizontally that allow the existence of an ample vascularized system; system that consists of many other intermediate hierarchical systems. An inferior organization system has several (one or two) hierarchical steps that lead to the existence of a very limited vascularization.

I consider the state the last stage of organization, before the global organization and the last stage that has a rational system of government.

Populations unorganized into state forms and having primitive forms of organization will be absorbed by larger systems. Increased vascularity, of an area adjacent to a hierarchical state system, is inherent; although there is a diversion of the flow to the central area. So in time, all areas will be organized by the state. A critical mass of development must be reached (surface, flow) until the state organization is reached.

Individuals do not matter in the stages of evolution of flow systems. What matters is the system as a whole. Hence the tragedy of individual destinies. The local system connected to a larger system will evolve inexorably. Its evolution will exist; no matter how much will be artificially altered and how much flow will be forcibly absorbed into the large system. Over time, the local system evolves, grows, adapts continuously to reduce the resistance of the external environment and to disperse them evenly in the system. Local resources are attracted to the big circuit and develop it. Despite all bureaucratic attempts to overstate certain areas and impoverish the periphery (colonialism, U.E.) the periphery develops, sometimes abnormally, but develops, absorbs resources, and retains a part that will gradually accumulate leading to the development of the local system.

A small local system that escapes isolation and connects to larger systems, the global system, will escape poverty, will evolve. The global system is made to evolve to include as much surface area as possible, as much flow as possible. Even the bureaucratic handicap will not be able to stop the general flow. The force of the high flow will break down bureaucratic barriers, create crises, but destroy the forces that oppose the flow. The condition is to connect a small system to a large stream.

Example. Spain of sec. XVIII. It destroyed its internal flow by eliminating Jews and Arabs (money and goods flow); preservation of old ankylosed systems (feudal system); elimination of all attempts to adapt the economic flow system to new changes (fanaticism); aberrant attempts to absorb resources from other areas to supplement internal shortcomings (colonialism, permanent wars). The result was social and economic primitivism. However, the connection to the global system broke down the barriers to adapting the system to streamline the flow, and thus Spain modernized by inoculating a new flexible flow system.

In the discussion of protectionism (through the eyes of C.T.) an aspect to be achieved is the kind of filters to be used between the membranes between states. Can any goods

potentially be filtered? Or should only certain categories of goods be excluded from filters?

F. List states that agricultural goods and raw materials should not be included in any filter. Because agricultural products are exchanged for agricultural products and what is extra to one is given to the other and vice versa. The agricultural products used for exchange are only those above what is needed and based on the exchange a larger nutritional base is used for the population. Raw materials should not be subjected to filters because they are used in industry and by their free passage finished products would be cheaper.

F. List considers that filters should be placed only on industrial products so that the industry in a state-run system can build its industry. List does not specify what type of industry, leaving this to the suspicion of the reader. Continuing Manoilescu considers that those industries for which a country has proven inclinations in time must be over vascularized. Inclination due to the natural resources it has or to intellectual inclinations that a certain population has. It is thus necessary to allow a period of non-interventionist economic development of a nation, to observe in which industrial direction it develops naturally, spontaneously. Manoilescu proposes formulas for calculating the productivity of industrial fields in a country and proposes the injection of steroids only to those fields that are in the first half of productivity.

I see an example of aberrant protectionism in the communist economy in Romania. Trying to industrialize a country in all possible areas; to open enterprises in all known industrial fields; to try to distribute industries evenly across the country, comes into contradiction with previous protectionist theories and is at the opposite pole of the C.T and the Austrian School. I consider that the errors of the developed Multilateral Society are best highlighted by C.T.

A flow system forms an architecture so that local resources are exploited efficiently. Concentrations of vascularization and flow occur in areas with resources. Here a hierarchy of flow develops (i.e. the industrial branches appear) which develops in the stages necessary for each raw material. That is, it starts from extraction, processing, and stops at the finished product and distribution. In no case do flows and vascularization occur for resources that do not exist. At most, there are the ends of the flow channels (those regarding the distribution) that bring certain goods, materials from other areas. The vascularity regarding the distribution starts from a concentrated level then dissipates and thins as they conquer the space. Depending on the amount of resources and demand, the system gradually becomes vascular.

Building flow systems for non-existent resources in the area means diminishing normal vascularity and spreading it artificially and deformed. It's just that the flow system of a state is not dead, it is alive, it is changing and trying to move towards its normal form. So the system can only be held in artificial form by force. This means reducing the flows in the system and using them in creating artificial flow barriers. But systems are stronger than artificial barriers and those who build them. Which means that at some point they will explode and flood the entire surface. It will take time for new channels to be created and for a new vascularization to build spontaneously.

Communism in Romania tried to uniformly enrich the Romanian population by spreading economic actions as evenly as possible. C. T. clearly states that uniformity cannot exist. Hierarchy is a mandatory condition, as is the difference in wealth. The system uses local resources. The artificial manipulation of the system in the desire to bring it according to ideal models (for communism it was a system like a fishnet with uniformly distributed knots, equal in size and with equal distances between them) means only general impoverishment.

Creating an enterprise in an area considered poor compared to the average, in the desire to increase the power of movement of the area, means only bringing flow from elsewhere, lengthening the natural supply channels, creating artificial channels, etc. All this only means a decrease in vascularity (channels and flow) in the system. Instead of the system naturally expanding and pushing the edge, the periphery, the whole system turns into a periphery. Areas with potential do not develop, and those without potential maintain their flow artificially by absorbing flow from elsewhere.

Development starts from the centers to the edge and not from the periphery to the center as communism tried to achieve economic and social development.

## **Conclusions**

The communist system was a classic example of how wrong beliefs and ideas can create disasters. A misunderstanding of the nature of social and economic development will lead to disaster. An idea that had good intentions at the beginning: to standardize the development, for everyone to raise their power of movement at the same time; it only led to general impoverishment. The economic system develops without taking into account unnatural ideas and develops without knowing the human notion of compassion (which was probably the basis of social ideas).

Communism was the only attempt (in human history) to return to the architecture (configuration) of previous flow systems; outdated systems at a certain stage of evolution. Effectively, it was tried to raise the water upstream against the natural tendency. An attempt was made to destroy the contemporary evolved system and build an old model. But flow systems are evolving strongly in the direction of increasing flow. The opposition is useless. The system can be manipulated and corrupted within certain limits, but the system will break down artificial barriers and flood the economic system with the risk of starting over with diffuse leaks and the rest. The transition to a primitive configuration could be achieved and maintained only by force (prison, camp) and by confiscating private property and maintaining all common property. This type of organization is synonymous with the diffuse flow of C.T., i.e. the stage prior to the formation of the first channels. The communists tried to achieve a diffuse flow as general as possible over the entire surface and to prevent the formation of a hierarchical architecture of the canals due to private property. Communism also tried to maintain a rigid, inflexible, and immovable bureaucratic channel structure. Preventing the evolution of a system is an illusion and doom to disaster. No matter how strong a bureaucratic system is: the system will move. The system moves through the quantity of consumer goods and capital that increases quantitatively and qualitatively; by changing ideas and mentalities; by demography etc. How much the material basis determines and conditions the superstructure of ideas is a discussion I cannot open.

They are probably in a relationship of mutual conditioning that cannot be broken down and analyzed in pieces.

An important issue to discuss is the optimal way to move from communism back to a society based on private property.

The proposal of the Austrian School to return the property in full to the old owners or their heirs, I consider, was a mistake. It was the inverse attempt of the communists. That is, a system (with a certain architecture) was forced to acquire a completely different configuration artificially (skipping any stages of evolution). An attempt was made to overlap an architecture, belonging to a certain historical moment, with force over another real existing architecture. The result was a combination of flows belonging to flow systems from different historical moments. With a hybrid, artificial, and damaging result.

Ideally, it would have been a discreet and easy direction towards a capitalist system of private property or non-intervention in any direction. Maintaining the type of organization (communist flow system) and allowing it to evolve. Bureaucratic decentralization, delegating power to enterprises (at the level of the basic organization of workers), would have been a better alternative. Organizing each enterprise according to the models they considered good would have been a viable alternative. The aim was to destroy the centralization of power and the uniform diffusion of power in the system. So that the flow resistances are distributed as evenly as possible. Maintaining the type of land tenure arrangements and using shares for the old owners I consider to have been an easy and efficient option (a small push to the system towards an efficient and easy evolution).

I consider that a more efficient targeting would have been the use of distributed shares only in the property of the workers who worked directly in that enterprise. Certainly, at the individual level, there would have been unfair distributions. A perfectly uniform distribution would have been impossible would have meant a return to communism, but as I said the change in the system occurs individually. What matters is the system as a whole. The system is changing to a more efficient flow and certainly, some will be sacrificed in terms of well-being compared to others, but the system as a whole and each one is more efficient, the well-being of all increases.

How the transition period was realized in Romania represents only the reversal (the mirror image) of what the communists did; with the same result. That is, a few rich, the majority impoverished, and a very thin middle class. Forcibly overlapping two flow systems (two architectures) from different evolutionary moments have only one result: the creation of a hybrid system with a lot of diffuse primitive flow, a system that will struggle to evolve towards the formation of channels, reducing resistance (and their uniform distribution).

Current theories of protectionism have no limits on state intervention in the economy. Only the power of imagination is the limit of current interventionism and protectionism (theoretically and practically). The state carries out actions on the economy at all levels of social organization. Many of these actions have dubious motivations behind the so-called lobby, in fact: influence peddling. Current protection policies have different names (they cover their questionable motivations with scientifically prestigious names) and a

laborious theoretical and practical basis. Mathematics and various types of scientific arguments try to support modern protectionism. The results are debatable at a practical and theoretical level (from the perspective of C.T.). No matter how decentralized the bureaucratic decision is so that decisions can be taken at a level appropriate to the problem, the bureaucracy depends on too many uneconomic variables close to goodwill and chance.

We consider that a slightly selective permeability at the level of state membranes to develop certain economic characteristics (organic to a certain area) is sufficient.

Freedom is important for the development of a system. C. T. indicates the need for as much freedom as possible at the level of individuals (like the Austrian School) so that the system can adapt quickly to change. Freedom creates the capacity for change at any hierarchical level for any type of change in the environment. The system evolves on its own to higher flow. The properties of a system with a high degree of freedom are emergent and cannot be reduced to the sum of its parts or its components. But we know that the system tends to flow more intensely and to a larger area.

The system creates hierarchy and inequality. These are inherent. The more freedom the system has and develops and grows, the greater the inequality. We must choose rapid development and inequality or slow down development and reduce inequality.

The global economic flow system has numerous hierarchical intermediate stages. An intermediate step of extreme importance is the state (as we have tried to prove). The classification of the hierarchical steps of the global flow system depends more on human thinking. They are neither absolute nor perennial.

*At the state level, the compromise between development and the reduction of inequality must be achieved. This must be done through protectionism. Protectionism has a lot to do with art, that is, finding the right measure and the right actions. Not to hinder development, but also not to lead to major inequalities and social movements. Experience is just as important as a priori thinking (because experience has too many limits).*

Through this article, we have shed light on the state and its possibilities for development from a different angle. The state is important, its existence is indispensable; C. T. helps to understand this concept and to develop it.

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