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Comments on the Occasion of this Award



First of all I wish to thank you for the distinction that you wish to bestow on me. It is several years that we do not see each other, but your friendship is dear to me. Now as an act of appreciation and respect to you I wish to say a few words in relation to what I would have liked to present to you if I had been able to come. And I would have like to speak about a notion that I and my colleague Ximena Dávila Yáñez have been developing since we created together the Matriztic Institute in Santiago the year 2000, and that is called “Biologico-Cultural Matrix of Human Existence”. I shall not develop this notion in full in this short note, but I shall speak of it referring to its conceptual-operational roots.

All the work that Ximena and I are now doing entails the understanding of the biology of cognition and the biology of love, and I shall synthesize this understanding with the presentation of three systemic laws:

Systemic law 1: “Every thing said is said by an observer to another observer that could be him or herself.” The observer is a human being or some other being operating as a reflective human being in language.

Systemic law 2: “Whenever in a collection of elements some configuration of relations begin to be conserved, a space is opened for every thing else to change around the configuration of relations being conserved”. This is the spontaneous manner of arising composite entities.

Systemic law 3: “The result of a process does not ever participate in its genesis”.

Systemic laws are not ontological assumptions, nor are they definitions; they are abstractions that the observer makes of the configurations of operational coherences that he or she distinguishes in the different operational-experiential domains [in] which he or she operates in his or her living. So, they apply everywhere in the cosmos that the observer brings about with his or her living. Indeed, in this respect Systemic Laws are not different from any other law of nature since they arise in the same way and apply in the same cosmos.

At the end of the year 1999, Ximena (who worked then as a family consultant) approached me saying: “Prof., I have made a discovery; I have discovered that all the pain and suffering for which one asks relational help, is of cultural origin in this patriarchal culture in which we live.” And then she added: “Moreover, as the consulting person tells me of her or his pain, she or he unconsciously reveals to me the moment in the cultural relational matrix of

her or his living where the pain and suffering that she or he is now living originated; and in the same process she or he unconsciously reveals me also the path out of such pain and suffering in the cultural relational matrix that she or he is living now”. And in the flow of our conversations along the months she showed me that the pain arose in a moment of denial of love in the past but was not of the past because it existed in being continuously conserved in the present. This was a remarkable assertion that I did not take lightly. When Freud introduced a social view in his study of hysteria, he spoke of trauma and of repression; Ximena spoke of the negation of love in the cultural domain, and spoke of conservation of pain in the present.

We human beings exist in the present, in a continuously changing present, the past and the future do not exist as such, and they are manners of being now, in the present. The cosmos that we generate in our living occurs, exists, as a continuously changing present. The past is a way of explaining the present being lived arose in its continuous change by proposing a generative mechanism that would have given rise to it if the operational coherences of the now being lived were conserved. The future is a manner of living now in the proposition of what would happen if the operational coherences of the present being lived now are conserved in the continuously changing present being lived. Autopoiesis, living, occurs as an in a continuously changing present: living occurs in no time, in zero time. ¿But what is time, then? ¿Is it not time one dimension of the physical space? ¿What are we saying when we speak or talk about regulation and control?

These questions lead me to the following reflections and conversations with my colleagues of the Institute:

When we speak of regulation and control we intend to relate logically processes that occur in non-intersecting domains and which can only be correlated historically through the memory of their repeated but independent observation. In these circumstances, our ancestors using memory as an operational referent, invented time as an imaginary spatial dimension that would allowed them to connect semantically otherwise not related events that result in the historical structural change of a system. Let me use a pressure cooking pot as an example to illustrate what I mean. It is usually said that in a pressure cooking pot the “rider” that is placed on an opening on top of the lid of the pot, operates as a valve that lets the steam out to regulates the temperature of the water in it. What actually occurs is that the pressure cooking pot with water in it and under the fire, has a dynamic architecture whose structural changes result in some independent events occurring in several none-intersecting operational domains that an observer is able to correlate, and then put together in what seems to be a logically coherent causal story in the domain of cooking by saying that the rider regulates the temperature in the cooking process. The observer can do this only after inventing an imaginary spatial dimension that would allow him or her to connect through his or her memory as a single event processes that he or she has lived (or has imagined to have lived) in different presents that are otherwise unrelated.

I do not say that our ancestor reflected as I am doing now when they invented time. It was not necessary for them to do so, they just languaged it in their living together as a particular coordination of doings in the flow of their recursive coordinations of coordinations of doings as they lived together as languaging beings. Moreover, in doing so they generated

time in the same spontaneity as they generated each one and all the things, entities, notions concepts, ... of the worlds that they lived as they live together their languaging human living.

Time as an imaginary spatial dimension transformed the human operational-conceptual world as other imaginary notions like imaginary numbers have also done. I think that the invention and use of time as an imaginary new dimension of space in the three dimensional present in which our non-languaging existence occurs, permitted us cultural human beings to conceptually and operationally connect not-connected processes and events occurring in independent domains by creating the operational domain of descriptions as a manner of living in the flow of events in their succession in "time". The semantic notions that the imaginary dimension of time permitted to introduce in the description of the operation of systems became an operational dynamics connecting process that occur in domains that do not intersect because they occur in different presents. The use of semantic notions seemed to facilitate the understanding of the operation of systems by treating processes that occur in non-intersecting domains as if they occurred in our daily life which is where semantic notions operate.

The beauty of using the imaginary dimension of time in the description of what we do, we think, or we see in the flow of our living, is that it permits us to propose connections in the present that we are living with whatever we imagine that we are living or that have lived, regardless of whether they occurred in the same or in non-intersecting operational domains. The use of the imaginary spatial dimension time permits us to reflect on what we do and feel as if we were, without knowing it, in a shadow theater, relating things that we do not see that cannot be related because they occur in different non-intersecting operational domains. To do this, though has had an undesired additional consequence, namely, it has obscured our understanding of the architectural dynamics, which as a flow of structural change in the continuous changing present of existence, gives its historical unity to a system that in the flow of its own existence occurs without past and future as a continuous now. The most usual and difficult trap that comes from such blindness on the structural dynamics of systems, is resorting to reductionism in an attempt to escape the realization that past and future are cultural manners of living in the present.

We human beings cannot live as cultural human beings without time, but we live our biological continuous changing present without time, that is in zero time, as all living beings do even when we use the notion of time as a physical dimension, forgetting that it is an imaginary explanatory spatial dimension invented to bound the beginning and the end of systems in their operation as discrete entities. The cosmos that we bring about as cultural human beings exists in time, but all the process that we describe as occurring in by themselves in it occur in zero time. Organisms operate as discrete singular entities, or totalities, in a continuously changing present, and they exist as totalities bounded by borders generated through their own operation, without end or beginning because they occur outside our description in zero time. It is we cultural humans that exist in time who want a temporal closure for organisms, and wish to see them with beginning and end. But to do so we have to use time leaving out for a while semantic explanatory notions or semantic connections, and look at the organisms as dynamic architectures and see them as a continuously transforming structural dynamics in the present. If we manage to do so in our

imagination, we shall indeed see organisms as self-bounding four dimensions autopoietic totalities with the form of a sausage that is beginning at its conception, and that is ending at its death.

This can be illustrated with a drawing of a vertical sausage of processes to be looked through a slit that moves from its beginning to its end (or birth and death in an organism). [See illustration and instructions below – Ed.] If we do this, we will see at every moment as we look through the sliding slit a changing present disconnected from all other moments of changing present that we have already seen or that we think that we will see later. If all that we see in our living is a slice of our continuously changing presents, the imaginary spatial dimension of time offer us two basic possibilities to interconnect the separated presents of our living. One is to interconnect them with a thread of semantic notions such as control, information, purpose, or regulation, that are semantic notions that we easily use in our daily life in occasions where memory helps us not to confuse the description of a process with the process itself. The other basic possibility is to orient ourselves to see the changing dynamic architecture that the organism, with everything else in the cosmos or worlds that we bring about in our cultural living is. I consider that this second possibility is the one that will lead us to the understanding of our existence as cultural human beings because it will lead us to see how not-intersecting relational-operational domains arise continuously with what we do, as the recursive dynamics of the spontaneous generation of intrinsic novelty in the cosmos and worlds that we bring forth with our cultural living. Indeed, non-intersecting domains arise as we do distinctions, reflections, recursive operations, and we mostly do not see this because we usually treat what we do as if they were happening as part of the totality of our doing. As this happens to us, we usually correlate the independent processes in the not-intersecting domains without being fully aware that they do not intersect, and we propose logical relations between them which do not apply under the form of ad-hoc semantic relations. When we attend at the dynamic architecture of what we are doing we do not confuse domains and do not treat correlations as if they were logical relations resulting from their occurring in the same operational-relational domain. And finally if we attend to the dynamic architecture of systems, we will also realize that as they exist in a different domain than the domain of existence of their components, they affect each other through the operation of their components if these exist in the same domain. Much of the confusions and misunderstandings in relation to the use of notions such as language, consciousness, or mind arise from the use of semantic notions that obscure the vision of the changing dynamic architecture of the systems and the worlds that we generate in our human cultural existence.

We cultural human beings use in our daily living many imaginary explanatory notions, but what ever these may be, they operate through the realization of our living as autopoietic organisms in a space with four dimensions, one of which is imaginary time. But it does not matter that time should be an imaginary dimension, autopoiesis, living, occurs as a changing dynamic architecture, and as a result of that, all that we human beings do, regardless of whether we do what do as biological or cultural beings, occurs in one single domain, in the flow of our realization as autopoietic beings. We, cultural human beings, as all living beings, live as valid all that we live, and this is how we live in the same manner both imaginary and not imaginary spatial dimensions. That is, as autopoiesis occurs in a domain of three spatial dimensions plus one imaginary that is time, and all that occurs in

and with living systems, and particularly all that occurs in and with us occur in the realization of our living, all other imaginary relations that we create in our cultural living become valid for our living in zero time that we are living, whatever their historical consequences in other zero time in the flow of the cosmos that we bring forth with our living..

My colleagues and I in the Institute are using the understanding of the changing dynamic architecture in our living to understand the actual operation of systems without introducing semantic notions to explain what happens in them and with them. And in particular to understand how does the past that we generate as an explanatory notion in an imaginary dimension, operates in the zero time of the present conserving cultural pain and suffering.

In the course of our living we have just published in Spanish a book called “Habitar Humano, en seis ensayos de Biología-Cultural.” The title in English will be: “Human Habitats, in six essays of Cultural-Biology”.

Many thanks,

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