A System Dynamics for Recognition of the others People´s Perspective as Reinterpretation of the Essential´s assignment of the Systems Approach

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Abstract

The present paper propose a System Dynamics for recognition. The System Dynamics has been considered a thinking technology of the System Approach to modeling and computer simulation. Their uses has been defined for several areas such as optimation, planification, control, prospective, learning and representation. This paper propose and describe the process to define a reference fraiming for a System Dynamics that be presented to recognition of the others people´s perspective. This goal is definided in the way to consider the renognition of the others perspectives like such the fundamental goal of the system approach. The diversity of uses of system dynamics defining researhing areas related to the research area of this work. To finish, wil be presented a synthesis of the metodology and some reflections about systemics technologies and their instrumentalization (Enfrainming) process like a non recognition of the essential´s assigment of the Systems Approach.

Introduction

The recognition of the other people´s perspective forms fundamentals social process to the possibility to a most humanness world. The recognition of the other people´s perspective is fundamental to promote and forbear the diversity. The diversity find´s unit in the way of recognition. Diversity and recognition have been threatened by the greater threat of history, of hands of a unidirectional globalizing process that imposes to all the world-wide cultures a way of being occidental. The uncontrollable force of this movement, the war winds that reblow again with intensity in our present (for example: the international antiterrorist campaign, Middle East conflict, rupture of the Colombian process of peace, among others) and the social and family conflicts, make think that nonsingle it is pertinent, but urgent, to rethink the dynamic processes of the recognition, as well as appropriate therapies to revive, to reconstruct, to reproduce the possibilities of a coexistence. Through the way crossed by the investigation described in this document we will more just see as the Systems Approach assumes a process of recognition of the other people's perspective like herald for the construction of a more human world, (Bertalanfy, 1956, Churchman, 1968) and as it would be a System Dynamics to the service of this aim. The way proposed for the development of the work of investigation occurs through two levels of differentiated conceptual complexity.

In the first level, that we will call local or the psychological (Foucault, Michel. 1981) we are going to ask to him prominent authors of the System Dynamics on how it would be a System Dynamics for the recognition. We are going to listen to the answer that from their own perspective the authors would give us. As we will see next, the selected authors have come near by different routes from the proximities of the study area of the investigation. This to recognize of the other people's perspective with respect to uses of system dynamics such as (Hard or Analytical System Dynamics, System Dynamics for the Deep Learning process, Conversational System Dynamics, System Dynamics for Control, System Dynamics for the Strategy, among others) we will allow us to delimit the area of investigation defined by a System Dynamics that has like aim the recognition, that this inspiring by a recognition like its last aim, assuming the call of the Systems Approach to this aim, like an essential call. In this first level it is possible to locate, in the different practices from System Dynamics, the task of Group SIMON of Investigations.

In a second level, that we will call philosophical (To more ilustration see, Heidegger, Martín. What is To think, Serenity, The Question concerning Technology and Zuleta, Estanislao. Elogio de la Dificultad y otros ensayos.), we try to sketch some basic categories to understand the call of the Systems Approach by the recognition, to criticize the proposal of System Dynamics the recognition and to predefine a possible reach to the proposal of this investigation.

The results appear such in terms of two levels in which the investigation is defined. At a local level, this investigation gives a System Dynamics thought to recognize the other people's perspective, that located to a common land of confrontation the assumptions, the dynamic structures, implications and the reflections and that does possible to obtain a recognition (synthesis) in terms in agreements, discords, questions, restlessness and confusions, with respect to a situation common problem. At a philosophical level, an explanation in terms of the speech of ours even appears epoch, that proposes, like explanation to the weakening and to the forgetfulness of the Systems Approach and their technologies in the search of the recognition of the other people's perspective, the instrumentation epoch or the Enfrainming, of which they have been victim. (Heidegger, Martin. The Question concerning to Technology. What means to think). The results of this investigation are an attempt in the search of recognition and the reinterpretation of the essence of the Systems Approach, more not an overcoming to the Enframing.

Some initial conceptual agreements

It is pertinent to make some conceptual explanations that allow us to continue with the way of the reflection. Initially we are going to talk about to the idea of recognition in this work. When we speaking of recognition, we talked about the recognition to respect the difference. In this recognition, the unit is not in the agreement, but in the respect to the difference. Recognizing can take to common ideas, but this it is not his fundamental intention. We did not look for a recognition either to annul or to devastate the difference. It is tried, on the contrary, a recognition that allows to cultivate the difference, the variety, the diversity, the resistance. In this way to recognize it will allow us to distinguish to us and to differentiate to us, to live in the diversity, to respect and to be respected, allow to enrich the action when allowing us to consider variety of perspective. This recognition is for something more basic than the agreement. The unit,

the synthesis, of this recognition, is to live in the diversity. According to these considerations, what we understand by knowing, by science and language?

The human knowledge is not constructed of the pure perception, we don´t know the things into empty. As much in the daily life as in science, the human beings we played linguistics games (Witgtestein, 1962), that determine the conceptual objects and relations between objects, that define the phenomena that appear to us. In the reality things happen that based on our language, of our grammar, will appear to us like phenomena or no. The words, the concepts and the metaphors work like simplifications that allow us to make distinctions in the language, of objects makes in the lenguaje. In the language we make distinctions, we measured, we examined and we classified the things that the language lets think to us, perceive and see. In Science, like language, the human creation is free, in where the creativity is limited for the forms and objects that can be manageable by the same language. (Nietzche, 1890; Maturana, 1998). Single we will be able to think what it fits in the language and the objects to us constructed by the language; and the same language is limited by the epoch. The reality is single flow, single change and of single her we can make maps in terms of the categories of our speeches. Single we can construct like knowing, interpretations of the real thing.

All human practice is defined by a speech. In the words, the objects and the concepts of the speech episteme of the speech is materialized. (Foucault, Michel. The Archaeology of Knowledge). Episteme defines what a community brings to present like objects of its knowledge. The difference between epochs of the scientific development consists of changes in the speeches or the linguistics games, fruit of changes in episteme, the objects and the relations of the objects in the language. The logic determines the mechanism of generation of new concepts, of new objects. The internal coherence of the expositions from the language depends on the logic (or grammar) of the same language.

The coherence in the language takes to think to us about the coherence in the action. Different levels from action exist and is possible that in all of them coherence levels do not exist such. The pure action of the speech does not exist; the action of the speech much less is structured than the idea of the action, doing, the same speech. If we not practice the recognition when structuring the action, our action annuls to the other.

To recognize in searching of answers.
The answers in a local or psychological plane
The essence of the Systems Approach

The professor West Churchman in his book The Systems Approach, was defined the bases of an Systems Approach that characterized in four principles that called of perception and deception:

1. The Systems Approach begins when you see the world through the eyes of the other.
2. The Systems Approach continues to discover that all vision of the world are terribly restricted.
3. Don´t exist experts in the Systems Approach.
4. The Systems Approach is not a bad idea.

We can interpret, from this proposal, these words of professor Churchman about the essence of the Systems Approach. The Professor Churchman defines a frame of

reference for an Systems Approach in where recognizing the other people's position is constituted in its aim. We recognize when we can put to us in the place of the other. But, what difficulties imply to put to us in the place of the other. Why our way to be present at (understood from the perspective of Heidegger or Foucault) is incompatible more and more with relive other people's knowing? Will exist some way to escape of our own categories, to relive thinking and to know other people's from the own categories the other? We can say that the Systems Approach raises a special category being present at. This to be present at of the Systems Approach it allows to not totally relive partially the other people's points of view but, nor its own category, but category common a new space in where a rationality that allows, of partial way is defined at least, the encounter with the other, recognizing of the own perspective and recognizing the other people's perspective. The recognition occurs neither in the own land nor in the other people's one, but in a common but strange land in principle, of necessary growth for the found positions. Professor Churchman explains it of precise way. The Systems Approach discovers that any vision of the world terribly is restricted including the vision of the world of the same Systems Approach. One interprets in the exposition of Churchman the difficulty and deception that imply a task of such magnitude as the recognition. Thus, the recognition obtained in an Systems Approach never will be complete, neither sufficient, nor absolute, always will be a partial recognition.

To be expert to develop in the Systems Approach consists of maintaining a generalist mind, an attitude that tends bridges between the different perspective. For this he is indispensable to be no expert. The systems thinker must have the peculiar and little ability to provide encounter spaces, zones in where we dispassionately pruned enthusiastically and to try to understand the other people's rationality, the other people's perspective.

With respect to that professor Churchman calls in numeral 4 his final prejudice, all human being must consider itself to the search of an Systems Approach for the improvement in the understanding of the other people's perspective like an imperative of ethical type. The idea of an Systems Approach, as professor Churchman raises, is a good idea since she is inspired by an ideal of good life. This exposition is incompatible with the egoism, the badness or individuals or intranscendentals interests. (To more ilustration see, Bertalanffy, 1958 and Churchman, 1968)

Considering the previous reflection, it could be the System Dynamics, the paradigm, the language and the methodology of modelling (the speech), a motor that impels with its rationality of representation a common land of recognition of the other people's perspective? Are compatible the original ideas of the System Dynamics with this common land for the recognition? In order to respond to these questions at least initially, we are going to question to the System Dynamics, from the answer that would give professor us Jay Forrester, creator of System Dynamics and until the proposals of Professors Jhon Morecroft, creator of Strategic Dynamics, and to professor Barry Richmond, that silverplates concepts like the one of Conversational System Dynamics and Abilities of Critical Thought. (It can read a parallel recognition of the exposition of professor Churchman, on the part of professor Hernán Lopez Garay in the chapter named Geomorfología del Pensamiento Sistémico, in the titled book: Pensamiento Sistémico: Diversidad en Búsqueda de Unidad).

The answer of Jay Forrester.

The Data bases in the Human Mind.

Professor Forrester proposes like common to all the men three categories of information in Base de Mental Datos. The first category gives account of the representations of the observed and political structures. The second category makes reference to the espectatives about the conduct of the system represented structurally in the previous category. The third category gathers the observed conduct of the real system. (To more ilustration see Figure No 1)

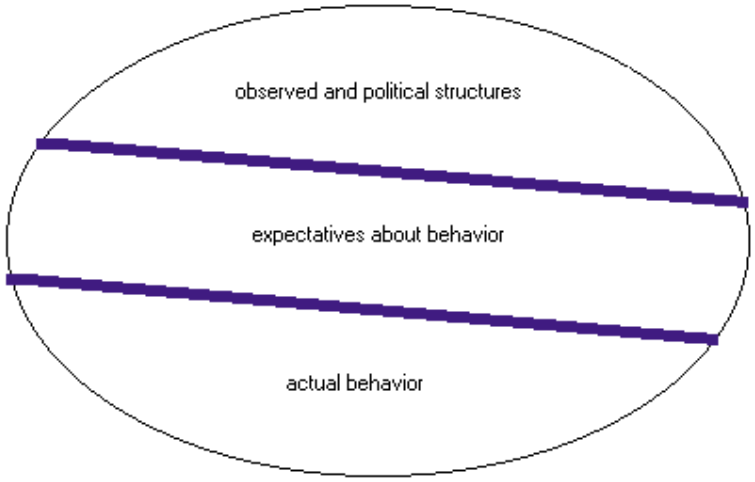

Figure No 1. Three categories of information in the mental data base

The problem of the low compression of the social systems according to professor Forrester, who pronounces itself by the appearance of contraintuitives behaviors, must to the low capacity of joint and coherence between these three categories of representation. That is to say, the representation in System Dynamics of the first category of representation or level of the observed and political structures must allow to improve the compression of the systems, when explicit doing this structure and obtaining by means of better dynamic projections, to improve the action in the real systems.

From this position of professor Forrester, a conscience cannot be deduced on a possible difference of thought platforms, of rationalities between knowing and representing of the other. The expression in System Dynamics of the assumptions of the representation of the system is then an expression sophisticated, superior to the expression in natural language, since it would allow the recognition of the incapacity of the representations of the natural language to give account in addition to the complexity of the systems today boarded, of the difficulty to deduce the dynamic consequences of the structures of the mental data bases. This exposition allows to conclude that the common language does not allow to develop, to deduce the dynamic implications of our assumptions, which would explain for example the behavior antiintuitive that presents/displays the human beings, the social systems. World-wide known game the Beer, it is a experience that allows to relive in own meat, the incapacity to understand and to take part social

systems consequence of the low capacity of the human beings stops in natural language, to project the dynamic consequences of the assumptions.

The answer of Strategic Dynamics.

This methodology is formulated with base in the System Dynamics by professors Jhon Morecroft and Kim Warren, raises like answer to our question by the recognition, which it is possible mathematically to represent in a simulation model strategies which they give account of the passed change, present and future of an organization. The methodology raises to define the strategic trajectories in observation.

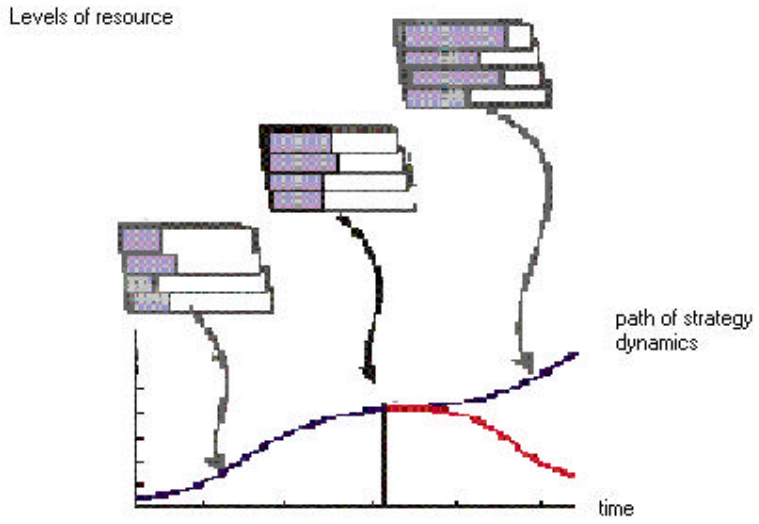

Figure No 2. Levels of resource determining Strategic path

In this methodologic level we observed as a common land when defining begins to define itself the situation problem on which it is going away to make the recognition. Soon, it is tried to obtain that our administrator, our manager, manages by means of concrete methodologic steps to represent the strategic heart of the raised situation problem. This is possible by means of a process of formalization that goes to identify the levels of resources of the organization, the flows or reasons of change that affects those levels of resources and the relations of influence between these levels of resource. At methodologic level the most important contribution of the exposition of Strategic Dynamics, is that the influence of the systemic thinker is reduced on the constructed model, since the same methodology prohangs because he is same pensador and possessor of the perspective constructs his model, that manages to express in a language of levels and flows, in a paradigm other people's to its own presence, its own expression. Within the framework of the experiences of the Group Simon de Investigaciones in modelling in System Dynamics already one had considered like worrisome the possibility of an intrinsic slant in the modelling, in the measurement that the systemic modeling maker could privilege certain aspects that relevantes considered. and to omit the irrelevant thing in its work of interpretation of the other people's

perspective. (Parra Valencia, Jorge Andrick. Acevedo, Celso. Propuesta de Modelo Económico de la Producción de Panela Bajo un Enfoque Sistémico).

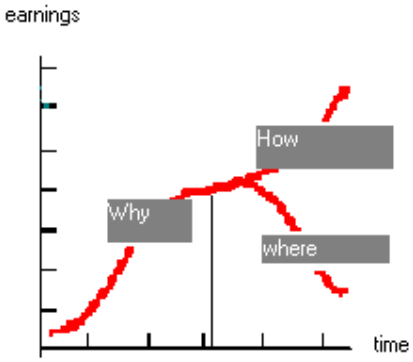

Figure No 3. Strategic Trayectória in Strategic Dynamics

Two perspectives for the answer of professor Barry Richmond.
The first wacht. The development of the abilities of critical thought.

Obtaining a recognition, would say professor Richmond, would be based on the development of 7 abilities of critical thought. These abilities are common to the human beings and all we have them in certain degree of development. The possibility of approaching the recognition of the other people's positions rests in the development of these abilities. The essence of the answer of professor Richmond is in following the phrase of its titled article Systems thinking: for critical thinking skills the 1990s and beyond. By viewing system thinking within the to broader context of critical thinking skills, and by reconizing the multidimensional nature of the thinking skills involved in system thinking, we can greatly reduces the for time it take people to apprehend this framework. The common land raised by professor access Richmond thanks when exerting and to practice abilities of critical thought. The thought of systems is a door to this common land and the practice of this thought is obtained working the basic forms of critical thought of systems.

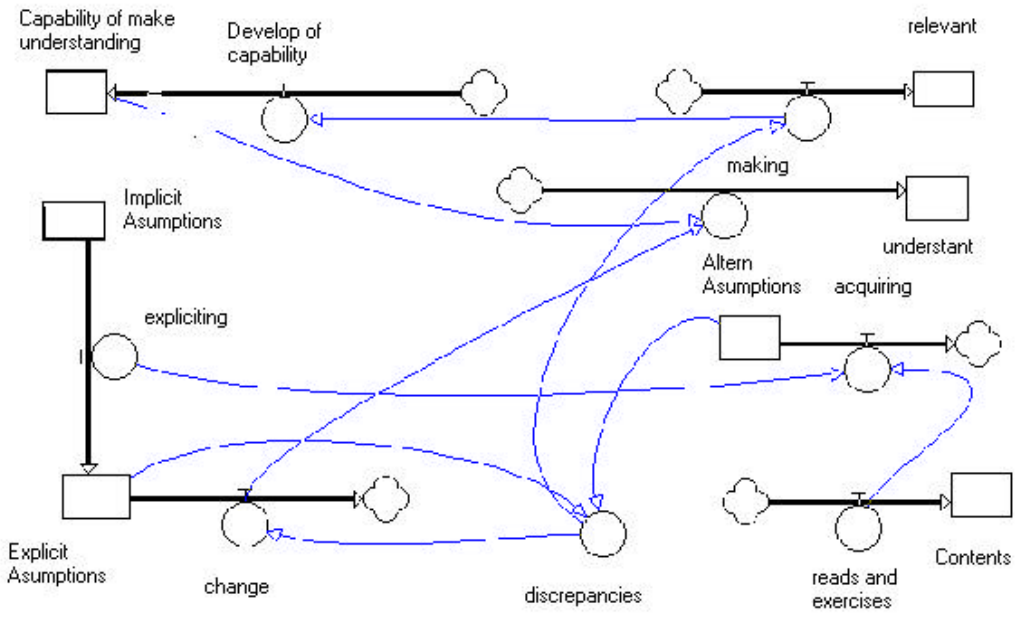

Figure No 4. Flows and Levels diagram for the deep understanting process (Intrepretation of original Idea of Professor Barry Richmond)

A second to watch of professor Barry Richmond. The Conversational System Dynamics

This position which chronological we can consider more recent than the proposal of abilities of critical thought, approaches the problematic one to develop intellectual abilities to think a world sostenible.. The expositions as those of professor Jorgen Randers present/display a panoramic one of the System Dynamics reorienting itself from an exposition of Limites of the Growth, towards an exposition of abilities of thought for Sustainability.. The exposition of the Sustainability or sustainable growth appears by professor Randers (Randers, 2000) a evolution from the concept of Limits of the Growth (Meadows, 1972), fruit of the work in the models of the world to the Club of Rome, in where it considered that the laws of sustainable physical growth not be in a finite world like ours. The laws of the economic development would work in a world infinite, but nonfinite. The concept of sustainability is a concept constructed at social level to represent the balance search, and to not only stay under a limit of the merely physical growth. The sustainability not only considers as an agenda search of balance in all you order them, at a physical level. In view of this exposition, it is postulated to the essential System Dynamics like in the process forming thought abilities to assume the education in Sosteniblidad. At a social and cultural level, the agenda of the sustainability would give covertura him, contain and be compatible with the idea of recognition of this work. Within this agenda, the pretension of a System Dynamics for the recognition is valid.

According to the exposition of professor Richmond, assuming the development of abilities of thought for the sustainability implies to develop a new capacity of learning and to construct a shared and systemic understanding. In this frame of things the System Dynamics presents/displays professor Richmond like the natural discipline to construct

this shared and systemic understanding. This way accelerating is justified the development on the part of the greater possible amount of people of the paradigm, language, methodology and tools of the System Dynamics. Strategy Dynamics is centered in a version of the Conversational System Dynamics, that allows to assume of rigorous way a thought of systems for the recognition.

The answer of Peter Senge.

The Systemics Archetypes and the search of synthesis in a common land the process of explicitación of the mental models does not have to be made in target or to the emptiness. It must be attended by groups that allow to differentiate the symptomatic solutions from the counter-productive solutions, to show as a structure defines a behavior. It does not mean that the reality is catched in one of these archetypes, but that they constitute in intellectual technologies for pensar in dynamic terms systemics. a problematic situation. Being faithful to the proposal of Senge, the development of the model would be made by means of the co-participation of the modelling makers. A model for each participant of the equipment would not be constructed, but that rather would work in a single model where it would make a recognition of the participation of each one in the model. Professor Senge proposes a common land that he defines himself by means of the practice of the five disciplines of the learning (Senge, 1990) that allows to put the ideas in and thus to be able to learn in common (greater information see, Parra Valencia, Jorge Andrick. Cervera, Sandra and Figueroa Yaneth. Proposal of Laboratory of Systemic Thought Based on Archetypes. In: Memories Latin American Congress of Educative Computer science. RIBIE 2000. Viña del Mar, Chile)

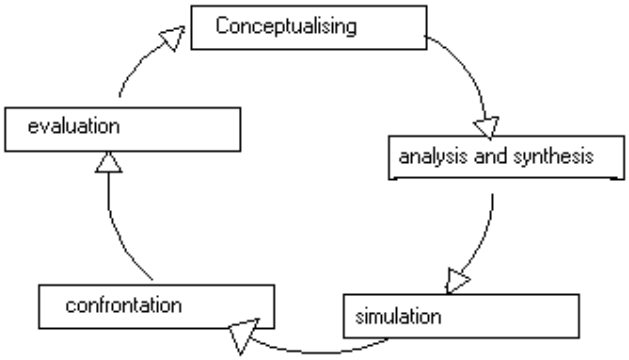

Figure No 5. Learning Process based on Systemic Archetypes

The answer of Peter Checkland.

The proposal of professor Checkland proposes a methodology that allows to approach complex situations, soft, characterized by its complexity, by the diversity of points of view that coexist determining actions within the system. The methodology in broad strokes, initiates defining a problematic situation of which the different actors to assume their recognition and study must construct holones, systemic wholes that represent their point of view. These systemics wholes, attainable in models in System Dynamics or another type of languages of systems, must characterize and specify the situation problem study object. The exercise of thought of systems consists of constructing these conceptual models and comparing them to each other and with the real world. In terms

of the orientation question of the thesis by a System Dynamics for the recognition, we could reinterpretar the call of Checkland by an Engineering of Systems that recognizes inherent the interpretative variety in the soft situations. For Checkland, in addition to the learning with respect to the situation problem and with respect to the Soft Systems Metodology for soft systems same, the process must allow the negotiation of viable actions that they look for to improve the problematic situation.

He is pertinent to examine the notion of inherent reality to the Soft Systems Methodology. The social reality is the result of a continuous process in which the human beings negotiate and renegotiate in context their interpretations and perceptions of the external world. This continuous one to negotiate allows to afloat remove manifestations from the reality that are validated in consensus. The perception of the reality is predetermined by the characteristics of the mental molds where the flow of the real thing is spilled. With a reality flow we will be able to give different forms him from the real, but not any form, since the same real flow and the mental molds (linguisticss paradigms, games, methods, cultures, speeches) determine the ranks where it appears the possible thing, what it is possible to be constructed with them. (the process it looks for agreements in viable actions to improve the situation problem).

Second Level of Recognition
Philosophical Level
A recognition to Michel Foucault

The professor Foulcault in its book the Words and the Things, offers an investigation that denominates Archaeology of Knowledge, in where it looks for the categories of thought which they define the conception and use of the words and the things. The recognition looked for in this thesis, happens through including/understanding of recognizing from the signs and the things. Let us see what the author has for us. Our language of today allows to speak us in the same one of the real thing and the absurd thing, but this situation of our present language not always was thus. The language allows us like the culture to order the world. The represented thing must have a place common his to imagine. Single in that common place the comparison is possible, the single juxtaposition is possible from a common place of imagining, the place of its coexistence. We spoke nowadays of recognition, appears to us like problematic, since the space common of encounter in the language and the representation is in ruins. What is what it is in ruins, that makes ask us us for the recognition? The point of contact would have to be a place and not the nonplace of the language. The beings can juxtapose themselves in the location. The difficulty of presents/displays is in which we cannot indicate the represented thing beyond the representation. The table of dissection of the thought is had lost. The table is a reference frame that allows to order the thought, that allows the encounter of disimiles things. In this frame it is possible the thought to order the dissimilar thing, to define and to locate in classes, the designation of similarities and differences, there where the language intercrosses with the space. We nowadays lived a disorder worse than the one on the incongruous thing. The great disorder of which professor Foulcalt alerts to us consists of sparkling of fragments of the table, in pieces of you order, without law nor geometry, the things are in different places, so different to each other that every time it is the more difficult to find a welcome place them. Foucault designates this phenomenon with the name of Heterotopia, forces that mine the language, preventing to name this and that, breaking

with the common or complicating names, threaten the synthesis, the one that constitute the words, but to that do not maintain to the words and the things united.

Preliminary Synthesis: Confrontation

With respect to locating itself: A System Dynamics for the recognition must define a scheme that allows him to orient its efforts no longer the obtaining of the same model, nor to its simulation, but in the abilities for the recognition of the other people's perspective. Recognizing of the other people's perspective happens through recognizing of the own perspective and it takes us space to a new of recognition that removes to us from the comfort of the own certainty and it takes to doubt to us the own perspective, to make our categories conscious, it takes to us to reknowledge of same us and therefore to recognize and to learn of the other people's perspective. Of the exposition of professor Checkland we can gather the following methodologic recommendations. In order to access at least partially the other people's perspective it must permanently be clarified and to be conscious that the constructed model responds to a definition of the situation problem, like first proposed common terrain feature. To the model thus it must specify to it him an intention, it must define the selected subsystems, the borders of the system, the components of the system and must include a coherence principle, that allows to make the rationality explicit from where the perspective considers. With respect to the modelling process: Gathering the recommendations of professor Barry Richmond, a System Dynamics for the amassment of the same one can be affirmed, to improve the capacity to make inferences in the time from structures, to make the development possible of abilities of thought for the sustainability. Between the most important elements of the methodologic proposal we have:

* Modelling based on Archetypes. The traditional positive and negative cycles of refeeding are basic archetypes that propose a structure that gives account of a behavior and that suggests policies to control the situation. The System Dynamics proposes as intellectual technology to assume the reality the group of the realimentado cycle. That is to say, on essence, the System Dynamics is based on the work with Archetypes. To make System Dynamics purer is to purify the process of one intellectual of metaphors, models, of groups, to represent, to think.

* Language of Levels and Flows. The use of causal diagrams is not recommended, because in them do not distinguish levels, neither flows, nor the change, nor allows to represent infrastructures, nor to define clearly the limits of the system. Not to mention the low rigor in terms of the dimensional consistency of the representation. It is fundamental for the possibility of doing dynamic inferences guessed right or to improve in this ability to assume a new scheme of representation based on levels and flows. This perspective sentence to disappear to the causal diagram.

*The flows for example come equipped with infinite clouds, sources or drains that help to give account of the limits of the system. The systemic dynamic language based on levels and flows avoids the game to connect any thing with any thing, avoids causal diagrams types “spaguetti” (expression of professor Richmond), because it orients the process of infrastructure representation and allows to define that it is changing in the system and what is being accumulated. These precisions are fundamental for the

capacity to simulate structures of systems mentally. This lexicon of the language of Levels and Flows (In the Flows and Levels Diagram) satisfies the development with a shared and systemic understanding. In terms of general characteristics, this language must be simple, easily assumeible, must be able to extend functions, cultures, disciplines and other local marks of reference. It must be operational, must count history of how it operates the system at the moment. It must be visual so that it facilitates the mental simulation and it must be sufficient to assume the laws of conservation of the matter and the algebraic of dimensional consistency laws. (Richarson, 1995).

* The connectors must be of two types mainly, flows generated by flows and flows generated by levels. The cycles of refeeding like basic archetypes, are assumed easily by most of the people. (Notion of vicious cycle). They are left questions opened on the recommendations of professor Richomond. What paper has the digital simulation in the recognition process? It will be indispensable or we will be able to do without her? To grief that the proposal of professor Richmond considers from a question related but different from the one from the present investigation, he is pertinent to ask itself What so coherent will be the proposed methodologic guidelines with the charge of an Systems Approach by a recognition of the other people's perspective. It is doubtless to think that the propose question from the investigation is much more ample and fundamental that the question that orients the recommendations of professor Richmond. Therefore we can affirm that not yet these guidelines are sufficient to answer our question totally on a System Dynamics for the recognition

A System Dynamics for the Recognition

The process of Recognition begin with that recognizes and that is recognized, both protagonists of the recognition process, must approach a common land that it is defined previously by an initial agreement in a problematic situation, the limits and the borders of the system. Both they will have to make a conceptualising process that will be able to assume compatible metaphors with the metaphor of the feedback system that supports the language of the System Dynamics. (For example, the systemics archetypes, the model of the viable system, the language of flows and levels, of feedback cycles. To see Sotaquirá, Ricardo. Conceptualización de las Organizaciones Humanas con Dinámica de Sistemas. Thesis of Masters in Informatics. Universidad Industrial de Santander, 1.999). By means of this conceptualising a structure must consider that allows to make explicitos the assumptions with respect to the raised situation problem and to confront as much at level of supposed that recognizes as who is recognized. These representations must allow to make projections dynamic of the raised structures. The dynamic projections or mental simulations can to each other be resisted like by means of a possible computacional simulation. This mutuum to also recognize and recognizing itself, must allow in addition to reflecting on the representations own and other people's of the phenomenon, to reframe the own conceptual representation, defining a process of deep dynamic learning (Sterman, Argiris, Dynner, Andrade, Parra, Ford). Between the processes of learning of it jeopardize in the recognition, forms the space of the recognition, the common place where the phenomenon of the synthesis takes place that is materialized in the agreements, discords, questions, restlessness and confusions.

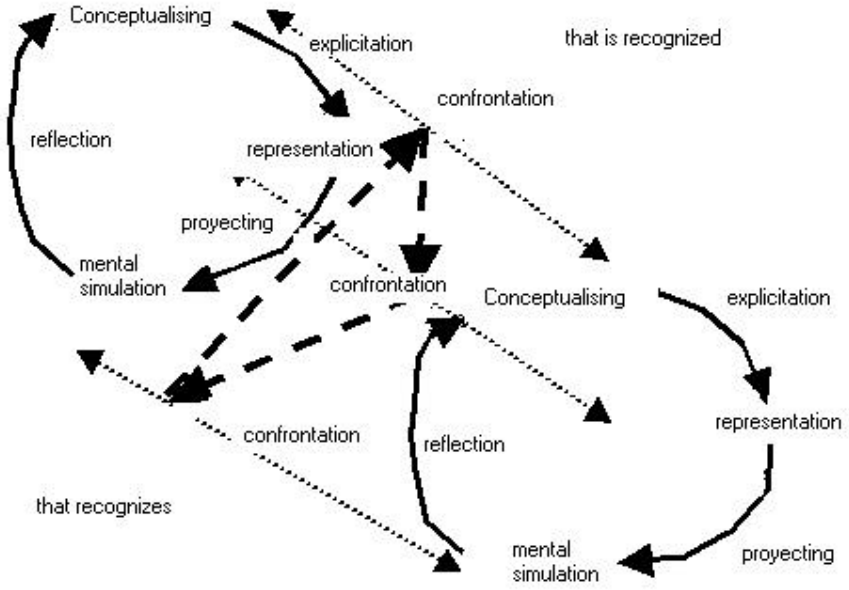

Figure No 6. System Dynamics and General Recognition Process Area either Learning Cycles

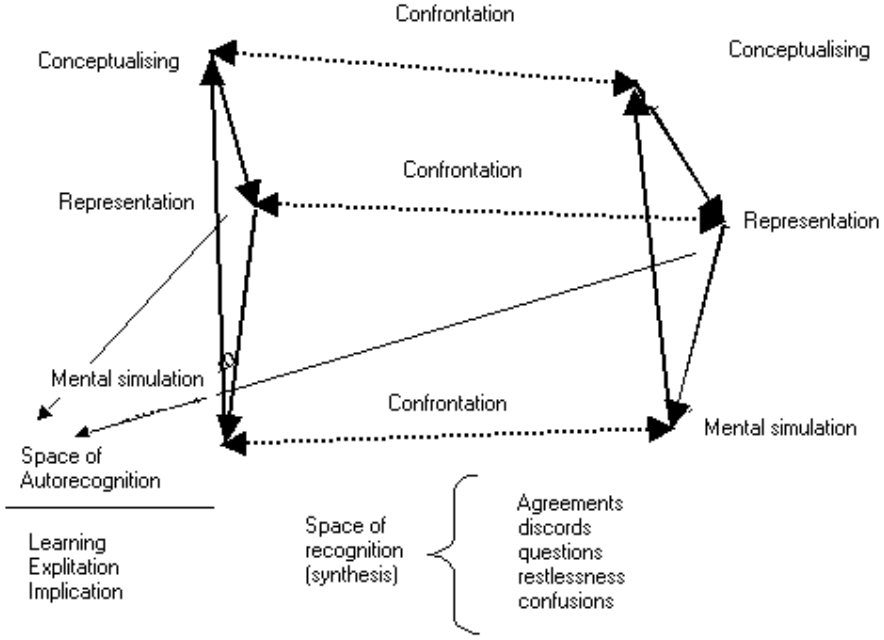

Figure No 7. General Recognition Process Area in Zoom

Conceptualising

Conceptualising is to think about terms of a metaphor, a mesh, an intellectual technology that allows us to approach the real thing. The perceived thing, the phenomenon, depends on the assumed metaphor. In terms of recognizing of the other people's perspective, the metaphor limits, but it is a badly necessary one. Any common

land, from encounter for the recognition, leaves to assume a common metaphor. One would look for then, to provide to the recognition process of the possible most universal metaphor. If we assumed the metaphor of the feedback system like metaphor of the propose System Dynamics by professor Forrester (Forrester, 1,961 and Sotaquirá, 1999), we could affirm some repairs on the universal character of this metaphor and until affirming that their closed and hegemonic character in terms of the recognition, would make to the nonapt System Dynamics to orient recognition processes. Before such eventuality, will be proposed in like metaphor of a System Dynamics for the recognition of a flexible metaphor of the feedback system according to the following table:

Name of submetaphor	**scope**	**Relation to represent**
Hydrodynamic system	Lineal thinking	A → B
Feedback loop system	Cycle thinking	A→B→A
Systemics Archetypes	Structures and behavior with meaning	A→B→A, B→C→B,A→C Syntomatics solutions

Table Not 1. Scope of complexity by submetaphors of the metaphor of the feedback system in a System Dynamics for the Recognition of the Other people's Perspective.

The stage of conceptualización of this System Dynamics will be a process of representation of a situation problem common in terms of the metaphor of the feedback system initially, but that could determine like insufficient this metaphor and consider a new one for the representation process.

Symbology of a System Dynamics for the recognition

In the causal diagrams of this System Dynamics, we are going to distinguish between material relations and information, to differentiate between accumulations from material or reasons from change, simbolos for the retardation of material as of information are included as much. Converters of units or transforming are incluiran to foment the dimensional consistency and the conservation of the matter.

Some reflections to finish

In our epoch, the one that appears as problematic the deficiency to us of the recognition in all you order them of the life. The Systems Approach arose like an answer to this deficiency, but its initial impulse by the recognition of the other people's perspective went away diluting with actitutes instrumental that misled to the same Systems Approach, that made possible the exit of the recognition idea of the speech of the Systems Approach; today, they are more family to us the optmización, the learning, the representation, the prospectiva, that in terms of the recognition, is versions degraded of the same one. Will not be that is necessary rethink on the systemic character of the Systemic Technologies, among them to the System Dynamics. If what we defined as systemic character is its capacity like intellectual technology of modelling for the recognition of the perspective other people's, to the Analitical Systems Dynamics much him lack, surely, because Forrester had in mind to respond to a question different from the question by the recognition of the other people's perspective. It is possible to think

that the systemic technologies are not conceiving and usnaso for the recognition and the relexión, but for the imposition. We lost, when degenerating itself the systemic technologies of recognition; we ended up acting in contravía with the same charge. We ended up fortifying what it was tried to attack. In order to finish, we can say that the reflection by the systemic character of the Systems Approach and their expressions, like the System Dynamics, not yet finishes, neither it is exhausted nor it had to be exhausted with this simple work. The invitation, is to assume critically, the question by the systemic character of the sistemic technologies.

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