Inventing the Future in an Age of Contingency

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Edited by
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PRESENTATION:
TIME AS SYSTEMIC CONVERGENCE

ANDREA PITASI

1. Prologue

While discussing some papers at the 2012 WCSA conference in Vienna, I noticed a strange phenomenon: systemic scholars were quoting Heidegger more and more, downsizing at a very simplistic and misleading level his thought which brilliantly describes the limits of the systemic vision as it took shape between 1950 and about 1980. The systemic vision of the 1980s, which is rather obsolete among scholars, is currently a dynamic trend in public opinion which is increasingly using terms such as self-referential, system, and complex but in decontextualized and often misleading ways. This terminological misuse and the misleading interpretation of Heidegger's thought leads to a self-defeating presentation of the systemic approach. This self-defeating attitude clearly emerges when systems theory copes with time in general and the concept of future in particular. That is why, two years later in Budapest, the 2014 WCSA conference was titled INVENTING THE FUTURE IN AN AGE OF CONTINGENCY.

THE SYSTEMIC APPROACH PARADIGM SHIFTS PARADIGM (P)		
PARADIGM (P)	**KEY AUTHORS**	**KEY CONCEPTS**
P1) Whole/Part	Ross Ashby Nobert Wiener Talcott Parsons Ludwig von Bertalanffy Anthony Stafford Beer Ervin Laszlo	Culture, control, personality, integration, homeostasis stability, wholeness, structures, parts
P2) System/ Environment	Heinz von Forester Niklas Luhmann	Functional differentiation system, communication, order from noise
P3) Autopoiesis	Humberto Maturana Francisco Varela Niklas Luhmann	Self-production of inner components, rhizome, complexity, functional equivalent fluctuation, horizon
P4) Enormous Constellation System	Richard Normann Daniel Dennett (2004) Niklas Luhmann	Fluctuating constellation, autopoietic reconfiguration, memetic complexity, catalog, global platform, enormity

Table 1 – The systemic paradigm shifts (Pitasi in Pitasi-Mancini, 2012)

The past systemic paradigms which I call P1, P2, and P3 and summarize above, had severe problems in coping with time, especially with the idea of future. P1 simply meant future as traditional reproduction of the past through the present: cultural and strongly controlled reproduction; no relevant change. This vision was very rigid and, in epistemological terms, ontologically rooted. P2 and P3 converge from this point of view, linking Luhmann's communication coding with Foucualt's order of discourse which describes time and future unspecific as a rigidly controlled deontological discourse which must be reproduced coherently and consistently but with no ontological or empirical implications. History can be rewritten, so to speak, and the future mirrors the rewritten version of history.

In P4, time becomes a systemic, convergent spiral. It implies radically different paradigm shifts, toolkits, and working styles for the systemic sciences applied to social, legal, and economical studies.

For example, in terms of working styles, sociological works can be divided into relatively few categories.

1. **Qualitative locally based works**. They are rather focused on small-scale ethnographical information and participant observation. Probably the most famous and exemplary sociological research of this kind is Whyte's "Street Corner Society," (1993)

2. **Quantitative middle-range works attempting to balance theory and empirical research**. Robert K. Merton's Theory and Social Structure is the masterpiece which embodies this working style at its peak. These working styles did not have great generalization standards. Merton's key work implicitly framed the problem of generalization when he considered the systematization of the most relevant theoretical-empirical findings to expand their range. The matter of comparison also emerged dramatically through the growing internationalization of what Elias called the civilization process.

3. **Comparative Sociology, both diachronically and synchronically, emerged as a vision key to expanding the sociological horizons beyond the specific territorial and time limitations which are features of the two other working styles**. Comparative Sociology generated high quality contributions to compare "entities" (social and institutional ones). This working style implied very broad but neat and simple scenarios in which the entities were compared and produced very wide but simple scenarios

in which complex interconnections were rather weak. Variety increases by hybridization and then comparisons become very unlikely. The convergence concept in the age of complexity scenarios is not a mere socio-cultural convergence. What is convergence then? Before answering this question, one further step in mapping sociological working styles is required.

4. **General sociological theory, a great stream focused on the epistemological construction of conceptual and semantic systematization of scientific knowledge by converging the key foundations and findings of interdisciplinary studies**. No convergence would ever be possible without this kind of working style. This fourth working style was also the incubator of systemic shifts from P1 to P4.

What sociological working styles are effective?

Observing the history of sociology in terms of working styles, sociological works can be divided into relatively few categories which I described briefly above. We can expand on them as follows.

1. **Qualitative locally based works**. These works are not characterized by wide theoretical frameworks, historical depth or huge amounts of data; they are rather focused on small-scale ethnographical information and participant observation. Probably the most famous and exemplary sociological research of this kind is Whyte's "Street Corner Society" but Middletown (Lynd & Lynd, 1929) was probably the very first champion. These are craft-ship works, certainly fascinating and intriguing even if at a very low generalization level and scientifically not very reliable or reproducible. Visual ethnography methods introduced since the end of the 1970s were an attempt to develop more valid and reliable procedures (Grady, 2001 and 2008).

2. **Quantitative, middle-range works attempting to balance theory and empirical research in a kind of circular and mutual double check between theory and fieldwork.** Robert King Merton's Theory and Social Structure (1949) is the masterpiece, embodying the best of this working style.

Neither of these working styles had great generalization standards, especially the former. They were both focused on the territorial and time limitation of the research subject. Merton's key work (1949) implicitly framed the problem of generalization when he considered the systematization of the most relevant theoretical-empirical findings to expand range. The

matter of comparison also emerged dramatically through the growing internationalization of what Elias called the civilization process (Elias, 1969 and 1982).

3. **Comparative Sociology, both diachronically and synchronically, emerged as a vison key to expanding the sociological horizons beyond the specific territorial and time limitations which are features of the two other working styles**. Comparative Sociology generated high quality contributions to compare "entities" (social and institutional), for example Goudsblom's writings (Goudsblom, 1994). Nevertheless, this working style implied very neat and simple scenarios in which the entities were compared and thus very wide but simple scenarios in which complex interconnections were rather weak.

That is why the editors of the superb Concise Encyclopedia of Comparative Sociology wrote pointedly: "If, as globalization seems to have implied, there were to be eventual social and cultural convergence in the world, comparative sociological research would wane as there would be fewer distinct entities to compare" (Asaki et al., 2014: XII).

Be aware that globalization does not imply fewer entities: globalization implies fewer distinct and neatly separated entities which in the past shaped the stereotypes of the taken-for-granted world (Berger & Luckmann, 1995). Globalization implies an increasing density and variety of entities but these are recombinational hybridizations (genetically and mimetically) which express, on one side an increased variety and density of entities, and, on the other, the vanishing of "pure," specific local entities. Variety increases by hybridization and then comparisons become very unlikely; the convergence concept in the age of complexity scenarios is not a mere socio-cultural convergence.

4. A fourth working style is general sociological theory which is a significant stream of work focused on the epistemological construction of conceptual and semantic systematization of scientific knowledge by letting the key foundations and findings of interdisciplinary studies converge. No convergence would ever be possible without this kind of working style, the masterpieces of which are Luhmann's "Social Systems" (1995) and "Theory of Society" (2012 and 2013).

What is convergence then? In the theoretical paragraph, I will introduce the metaconvergence spiral to answer this. However, before

entering the next theoretical stage, one further step in mapping sociological working styles is required.

2. The theoretical challenge: Rethinking systems convergently

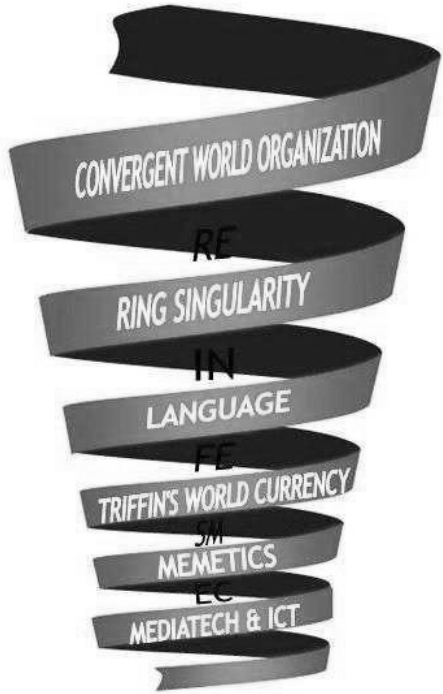

Figure 1. The Metaconvergence Spiral

In the metaconvergence spiral shown in Figure 1, there are six platforms (coded in the blue/dark areas of the spiral and listed top down in the figure):

- Convergent world organization
- Ring singularity
- Language
- Triffin's world currency
- Memetics
- Mediatech & ICT (can also be described as digitalization)

and five types of convergent catalogs coded in the white areas listed top down as follows:

A. Ethological Copies (EC)
B. Symbolic Multipliers (SM)
C. Functional Equivalents (FE)
D. Innovations (IN)
E. Reconfigurations (RE)

The metaconvergence of platforms and catalogs is not a mere dialectical synthesis between a thesis (platform) and an antithesis (catalog); the metaconvergence spiral is rather an increasing dematerialization and differentiation process redesigning and reconfiguring the dynamic and unstable flows among EC/SM/FE/IN/RE, in which the increasing EC density implies inflation of copies and deflation of value, and the RE variety describes the opposite side of the bifurcation shaping four key scenarios of high/low density linked with high/low variety as follows:

HD/ HV HD/LV HV/ LD LV/LD

Moreover, the variety-density link mirrors the internal differentiation coding of the platform expansion. For example, currency platforming is binary coded with institutional sovereignty and language platforming is coded with vernacularization. The vernacularization process is currently decreasing (Cavalli Sforza, 2001) just like the amount of currencies representing sovereign entities; the Euro is a simple example of how many currencies disappeared in recent decades (the German Mark, the Dutch Guilder, the Spanish Peseta, the Italian Lira and so on). Other currencies continue to exist (mostly in Africa and South America) but they are rather irrelevant, and further currencies are satellites of just one, stronger currency (the Australian, Canadian and Hong Kong currencies are named dollars). The convergence of currencies and its turbulence can be explained though some methodology fractal principles (Mandelbrot, 2006).

3. Research design and methodology

The hardest challenge for non-systemic scholars, and for public-opinion scholars trying to understand complex systems, is the ambivalence between complexity ontology and its implicit nihilism (Montuori, 1998). This ambivalence can be solved with a little help from epistemological creativity (Montuori, 2013). Our methodological key question is what are we conceptualizing, classifying, assessing, and measuring when we

conceptualize, classify, assess, and measure complex systemic trends? First of all, we are talking about unstable, nonlinear, turbulent flows, not about clearly shaped entities: moods in public opinion, winds, earthquakes, stock exchange trends, and viral pandemics share the same epistemology, methodology, and divergence at the theoretical and technical levels, although functional equivalents are pretty evident (Wilczek, 2008). The evolutions of sociological thinking and of social global change have always been interconnected since sociological research was essentially qualitative and "local" meant communitarian, while "macro" meant "national." Then the internationalization trend elicited by the key role of comparative sociology turned "national" into "local," "communitarian" into "meaningless environmental noise," and "macro" into "global." But global implied a key paradigm shift: from thinking sociologically as thinking comparatively into thinking sociologically as thinking convergently. The metaconvergence spiral I present in this paper is the added value of this writing toward a convergent systemic thought.

4. Time as systemic convergence

Time is no longer to be considered a line, nor a circle, nor the trajectory of an arrow. The social construction of collapsed space and time in a single point, as hypothesized by Kandinsky's painting, is also largely obsolete, depending on Moore's Effect. The point is a self-expanding globe. How does it expand through spiral-like trends as described above? The spiral requires going beyond the myth of rational prediction, as expressed in some naive macroeconomics or sociological research. Construction and the invention of time in general, and of the future in particular, play a much bigger role than "forecasts." Spiral is an invention, a construction no more no less than Schumpeter's, Kuznets' or Kondratiev's cycles. Thus the spiral is shaped through macrofacts and macrotrends but with no illusion to be an objectivity or the independent observer model.

5. Epilogue: Rethinking systemically

In the world where everyday life is taken for granted, many operations evolve sequentially. For example, the TV news lists breaking stories but is seldom able to present the links among them. Many people write down their daily checklist but they rarely set this list in a wider and more strategic and systemic vision. These TV producers realized Heidegger's key lesson in life: We live in a limitless evolutionary horizon.

Humans usually need operational limits for practical reasons. For example, they switch the mobile off to rest or have a nap. The misleading phenomenon is, metaphorically speaking, that these people expect the world to stop when they sleep and that if they become sleepwalkers, the world will go slower and will be more easily controlled. A wide systemic vision (P2, P3, and P4) is aware that systemic macrotrends and shifts do not have much to do with human-based micro action. The micro search for limits (often camouflaged by security, safety, and stability) as a kind of naive attempt to stop time and be in an eternal present is a very common human attitude. Nevertheless, our planet evolved through the ages, destroying and creating new species in a non-stop dynamic. The same thing in politics: If we compare the world map in 1948 and 2015, we can easily understand evolution in macrotrends.

Heidegger's pop lesson (the one public opinion usually takes for granted) is that life is aimed at fulfillment (Vollendung), and when a life or an age is fulfilled, then there is a new turning point (Kehre). In this way, evolution and time look like cycles or circles. This is not what Heidegger meant. Vollendung and Kehre are steps on a path (Unterweg) which is limitless and endless: Limitless evolution is open to the possible, defined as "Gegnet" by Heidegger.

Gegnet implies a wider opening and a more turbulent scenario which powerfully attracts toward/rejects from the convergent spiral of time.

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IN SEARCH OF THE LOST MODEL

ALFREDO L. SPILZINGER

It all started a few years ago while I was sharing a "pastis" with my wife in Café de Flore, at number 172 Boulevard St. Germain in Paris.

I was sitting at the same table at which, back in the 1930s, Jean-Paul Sartre had gathered his intellectual friends to discuss man, his reality, and despair.

Having gone through colleges in various countries studying accounting, economics, finance, sociology, epistemology, and quantum dynamics, the discovery of complex science had shone a light into my intellectual life. I understood what I was looking for.

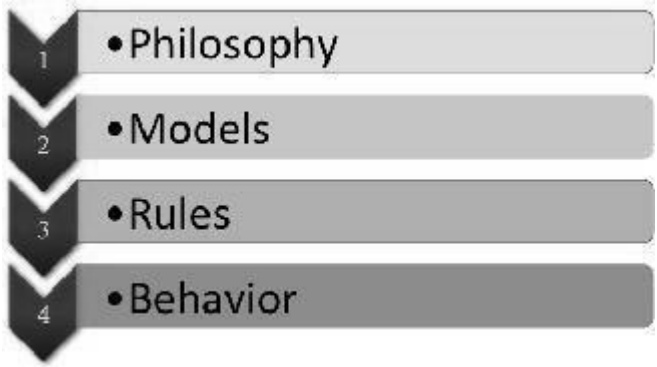
That was to understand man in his permanent mutation and in his being an instrument of change that would allow him to survive in a highly competitive world.

And to understand that at that same table used by Sartre, it was as if I could share discussions with people that had left a very special mark on mankind. And just as in that labyrinth of speeches by famous people, I started to be a spectator and transcriber of discussions between those minds that have brightened us in recent centuries. Those discussions were trying to undress the man living in his active solitude and fighting for his survival in an organization that we came to call democracy, an imperfect system that, until now, we have not been able to replace with anything better.

Democracy gave birth to capitalism, its beloved son, to manage the resources of mother earth and distribute them, not equally, between the nearly seven billion people who now populate this strange satellite spinning wildly around the sun.

I did not look for complexity. On the contrary, complex science met me in Santa Fe Associates, where I was able to interact with very special people who had been working in that area since 1940.

And finally, I learned that every complex matter must be analyzed in four essential stages of implementation.



To understand a complex system of any organization requires establishing its theory or philosophy (be it a country or a simple home), a philosophy summarizing why we were interacting and what we want to achieve with that organization, setting values and objectives. That is defining its culture, consistent in the long term.

From that defining step, an array of actions and objectives that must be implemented to meet the defined culture develops. A model that, while it may be amended, usually mutates following the beat and rhythm of the life of the organization.

In this model, we can write the rules that will be the dimensions within which we will move to implement the model and this can change as the need arises.

And finally, the behavior of their agents will give feedback or options for modifying the model or the rules to allow those actors to live comfortably within the model.

But we cannot write rules directly from the philosophy without going through the model

What happens in the complex world of the twenty-first century, is that in everyday life, we are suffering a reality that is not consistent with those principles.

Modern man was born some 150,000 years ago when he started to emerge from the Boblos caverns in Africa to begin a journey toward Europe bordering the Mediterranean at a rate of one kilometer per year. He was fighting for his life, first against animals – for defense, food and shelter. Then he had to fight against other men to prevent the theft of what he had attained. Fighting was, thus, his measure of life.

He was born and developed in a forest that, as Maturana says, is autopoietic. It was self-organized and self-reproduced where no general manager, human resources director, or finance manager existed.

Large trees share the land with fungi, with roses and with shrubbery. Elephants, tigers, and birds share their surroundings with butterflies and insects. And everything seems to continue living without special rules, just taking care to avoid becoming food for others.

And so was man's life, from its earliest steps, on a course to finally reach the longed-for "demos – kratos." That is the original Greek definition for democracy, the government for "the many," for the benefit of "the many," and to make life easier. Democracy started in the eighteenth century to bring peace to man's permanent fight.

And that "demos kratos," once installed, created a special "oikos – nomos" (Greek for the organization of the house). Democracy was intended to be the best form of government, creative in its organization, able to implement an economic system that gave birth to that beloved son: capitalism.

The system appeared to be very clear. But it was necessary to build up teams of leaders ("the few") to manage and organize cities, countries, and regions so as to fulfill the mandate of their constituents, "the many."

But a different reality was uncovered. It was necessary to define how to choose "the few" that were to govern "the many."

And there, the Greek polis was enthroned in the system as an applicative form of politics. The organization of the city (polis), the nation, or the region demanded a team of "the few" to receive the mandate of "the many" to govern. The group of the few understood that they could govern "the many," requiring simply an exchange of powers.

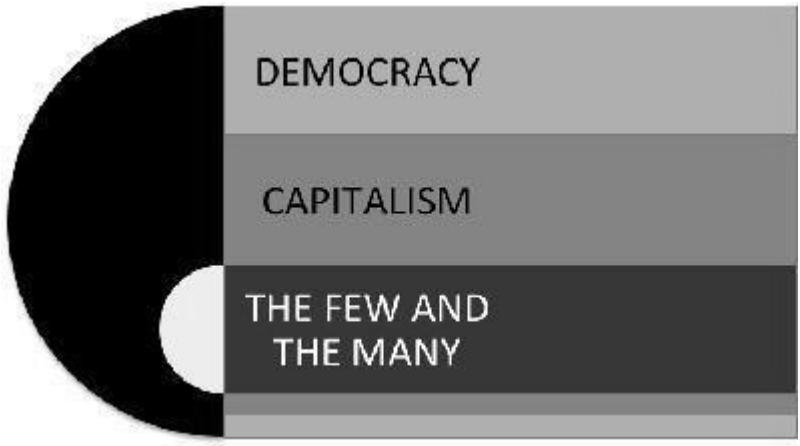
That exchange consisted of promising "the many" not to continue fighting and to assure their safety from the otherness and from the risks of

nature, such was their role in democracy. In exchange, “the few” asked “the many” to give them their votes. Then they would not fight anymore.

In the end, it was just a problem of set economies and it was necessary to evaluate this process under the set theory.

But “the many” were born and evolved, based on their epigenetic principles, to continue fighting. And they could not be defeated by defending something.

So in this interchange of powers, “the few” agreed to leave to “the many” a stage in which they could continue fighting: the market. They would have said: Fight for survival in that space and download in that scenario all your existential adrenaline.



And this was adjusted to the existing reality. “The few” began to rule “the many,” and the latter started to fight in the economic field. But those “few” also needed additional resources to continue governing and also to survive.

They needed financial resources, structured at the beginning in the form of taxes, but they needed more support. “Few sets” found benefit in the alliances with the power sets of the many with whom they also interchanged power for money.

Thus, coalitions were formed among “the few” and selected sets of “the many” to conduct the whole structure while in the meantime, the many struggled to survive.

The detailed terms of association between “the few” and associated sets is in the most remote corner of the lost secrets.

Some of “the many” survived, others did not. But for “the few” and their new associates, that did not matter. They survived permanently, transferring power among themselves. That power is what the few had to direct toward “the many.”

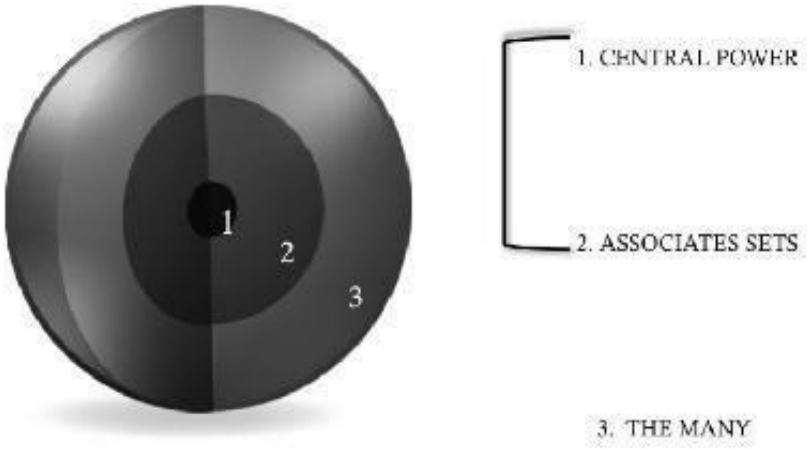
And this system does not work, anywhere in the world. In the early twentieth century, some intellectuals tried to implement a new direction for this kind of government. The theories of Karl Marx gained some support in a number of countries. Communism. The aim was to substitute individual decisions taken by “the many” for centralized decisions taken by the government, “the few,” to convince the people that state capitalism was more ethical than capitalism in the hands of “the few” and their associated sets. But that experiment ended in resounding failure with the demolition of the Berlin Wall in 1989. No capitalism so conceived can succeed either in private hands or in those of the state. In all cases, “the many” remain outsiders in every distribution of income. And, even worse, they have the least freedom.

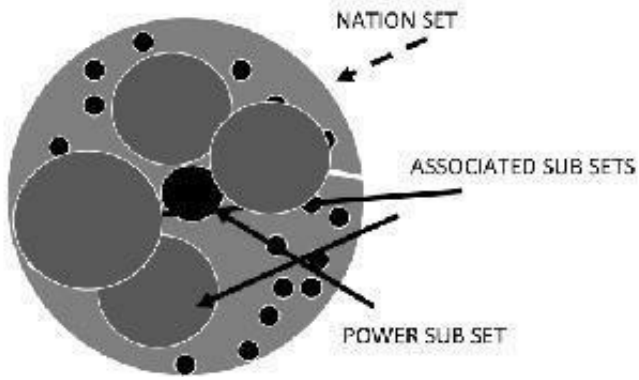
If one day a plane crashed into the Himalayas with 500 passengers on board, certainly the security forces would alert the world. If, instead of one aircraft, there were ten in the same day, which would mean 5,000 people dead, the alarm would be even more desperate.

And if that tragic fact should occur every day for a month, the United Nations, NATO, and the world would assign security forces to find a solution.

However, in Africa, 5,000 children a day (approximately one every 17 seconds) die from diseases like malaria.

Because the few have other reasons to be concerned, the problem lies in defining how re-election could be achieved at the end of their mandates and how the few will transmit their power to partners or in some cases to apparent enemies. Among “the few,” “enemy” is just a political word without a precise sense because, at the end, they need each other.





The absence of complex thinking has reduced communities to deterministic and mechanistic procedures. We push a button at one end, and a product is automatically produced at the other end. In other words, you give me votes, and I will pay you with services to protect your life.

Meanwhile, economists in the world have tried to make us understand, through complicated equations, what will be the reactions of "the many" in a special place they call "the market."

They believe their speculation could help "the many" to act in their daily fight.

Their way of thinking is: The market already exists, so start fighting accordingly, with our assumptions on marginal propensity, to demand and supply curve declination, or statistics on what happened in the recent past.

Big mistake!

In the first place, the market did not pre-exist as an independent entity. It is just a space in which transactions take place, one by one. The market is a way to transliterate transaction. It starts to appear and to be active with each transaction and disappears at the end of each transaction. It is not plane space but a curve like the Einsteinian cosmological space and, therefore, suffers from the attraction forces of those who move each transaction in a certain orientation, different from that of any other transactions.

When someone says something works on the financial markets, he is tremendously confused. There is no such market. There exist operations and interactions. Once a deal is closed, the market disappears.

The second issue is that people are living, original, unique and unrepeatable entities and cannot be considered as variables of equations. Those experts did not consider people to be complex entities whose reactions do not fit into an equation in the style used by Ludwig Boltzmann, for example.

Since the beginning of the twentieth century, when Boltzmann wrote of his discoveries in the physical area, he explained every event within the physical mechanic area through mathematical equations. And he wrote hundreds of those equations.

The intellectual community in different specialties entered into a vortex that we call "bolzmannmania."

No thesis or conclusion could be effective in the field of science or economics if it did not have equations to support them. People became, for them, fixed numbers of integrals and derivatives that would mark the

economic sense of any interaction with the rest of “the many” and in some cases with “the few.”

Beyond those equations, 5,000 children continue dying every day in Africa, and thousands of Latin American and Southeast Asian people remain below the poverty line. They were not taken into account by those equations.

They could not precisely measure an end to the poverty of “the many,” for instance. How many is many? If 23% of Bolivia's population is living on less than $2 a day, the IMF says they survive below the poverty line. And it is a large percentage.

But in Mexico, that figure is 10.3% of the population. That small? Because in Tanzania, it is 89.9% of the population, and, in Italy, 8.7%.

The overall average of 2.7 billion people worldwide who survive below the poverty line represents 38.6% of the world population living on less than $2 a day, while more than 850,000 people (1.25 % of the earth's population) cannot be fed.

Each year, more people are dying due to hunger than malaria, tuberculosis, and HIV combined. For analysts, it is just a percentage of the total population, another figure. But for those who die, the ratio is 100%.

We are obviously speaking of fuzzy boundaries again because human beings are not numbers but complex living entities, original, unique, and unrepeatable

Meanwhile, who analyzes these figures and prescribes austerity measures? The general manager of the IMF earns an annual income of $565,000 (plus other side benefits like air fares, cars, drivers, secretaries, and the like) free of any tax. That is something like $2,150 per working day.

Meanwhile, “the many” are exposed to the solitude of his daily struggle just because countries have not designed economic policies capable of defining a model that would end these inequalities.

Has there ever been such a model? The philosophy of democratic countries has been clear, but the model for defining their application does not exist, at least for the consequences we warn against.

Instead, rules were written, but without a supporting model behind them, "the few" have decided upon perhaps the worst option—writing rules generated directly from philosophy, but without a model that could be generally agreed upon with the many.

It is time for "the many" to defend their existence. Because, quoting Grossberg, we might ask ourselves: "What if we dared to play God?"

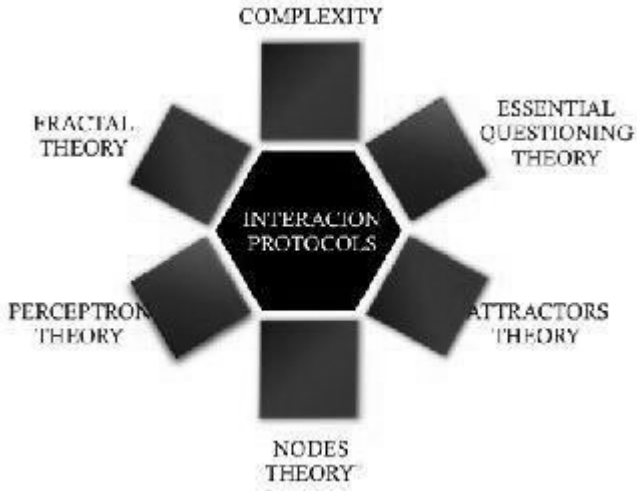
I have been discussing with the scientist Eshel Ben Jacob, an influential figure in establishing the now rapidly evolving Physics of Living Systems (Biological Physics and Physical Biology) disciplines, how bacteria are evolving in such a way that they can communicate among themselves when danger is approaching.

In summary, if those bacteria, as Ben Jacob assures, can self-organize into hierarchically structured colonies of 109 to 1,012 bacteria, each utilizing a great variety of biochemical communication agents such as simple molecules, polymers, peptides, complex proteins, genetic material, and also "cassettes of genetic information" such as plasmids and viruses, are we prevented from doing the same?

Inside our organism, 100 billion bacteria are currently living. It is a number several times bigger than the number of cells in our body. So if we do not want or we are not allowed to behave like a prokaryotic, is it because we are not duly prepared to win the life battle?

We need to understand that this symphony that we run together is unfinished. There is an absent model, like Schubert's Symphony, which lacks a final movement.

The sets of living beings must necessarily understand that they operate within complex scenarios, and our research gives us three new spaces to consider:



1. Interaction protocols. The way to understand received interactions is to understand properly what to do and to achieve maximum effort in doing so.

If, instead of considering ourselves just as actors working alone within a set of many, we understand that we are a set of nodes in that network, the value of the whole effort working together is much greater. It is like a fisherman's net. Once a node is broken, many of the fish will escape through the hole, and the effort will be the same with the result lower than if the node of that net had been safe.

Those who still appreciate equations could say that the value of a set of nodes on a network is based on Einstein's relativity:

Interaction=mc^2

But in this case, the mass which is the network of nodes is m=2n, where n equals the number of nodes in the set.

Therefore:

Value of the net N=2n (299 752 458 m/s)^2

(if we discard the moment c^2 as a constant k)

Value of Interaction=2 n . k

If we compare, as an example, a network of 120 nodes with a value of one point each, by the time they interact alone, the total value of the said network would be 120.

But the value, if acting as a set of 120 nodes, would be=1.329 x 10^{36} (i.e. 1329 followed by 33 zeros).

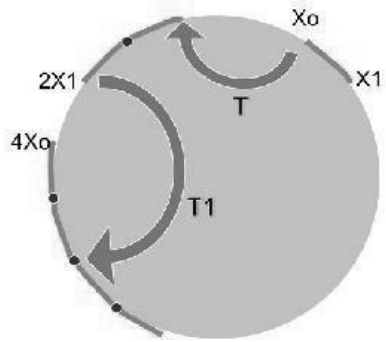
Therefore, the difference between acting individually (which would give an output of 120 units) would become 1.107 x 10^{34} (i.e. 1107 followed by 31 zeros) that is 11,070,000,000,000,000,000,000,000,000,000,000 times bigger than 120 points.

Why then do "the many" act as small individual groups, instead of firing our synapses, intertwined and at the same time?

To paraphrase Frank Rosenblatt, we are losing the big opportunity to fire two shots of synapses and, by doing so, produce more than double the value proportional to war which produces only a single shot. We have applied the perceptron concept created by Rosenblatt just for brain connections, to human interaction and the way to gain more value from them.

The most important matter to be taken into consideration is that the space in which we interact with it is not just plane space. It is a round space. Therefore, when we interact in certain mode, the power of that interaction arrives larger at its destination.

That is the reason why a network action is so different to individual actions.



In the above graphic, we can demonstrate that the X0 – X1 line of action arrives with double effect and that 2X1 arrives at its destination as 4X0.

The Einstein space definition has changed all our concepts of how cases may affect third parties.

And this failure to achieve more profit with the same effort occurs simply because there is no model that allows us to produce interaction as a network. Nobody cares if "the many" have that possibility.

2. Moreover, every living being generates for itself a metaprogram filtering interconnections received from abroad, decoding them according to their own epigenesist.

And considering that metaprogram with fuzzy logic intelligence, we could say that, by the time a person receives instructions to do or to understand something, that filter is negative. It is because interaction protocols have predetermined a different interpretation of that synapse.

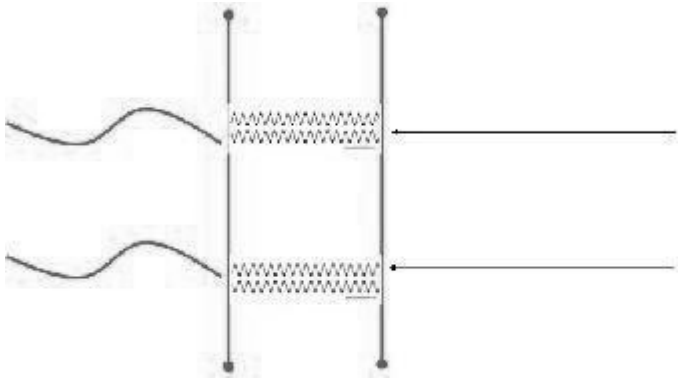
When Iran states that the country only needs to enrich uranium for medical and energy production purposes, the community concludes instead that Iran wants to produce nuclear weapons.

When Hamas preaches peace, the international community interprets this as them needing time to launch more missiles against Israel.

When Russia states that it recognizes the application of peoples' self-determination, the community understands that indeed Russia wishes to take over the territory of Crimea.

When the USA provides $3 billion in compensation to emerging countries for effects of climate change, the community understands that the USA will itself continue to emit carbon monoxide into the atmosphere.

When an Argentine economy minister says that the peso will not be devalued against the US currency, every Argentine understands that it is time to go to buy dollars because a devaluation will occur in the near future.



3. To try to design the model, we must apply **systemic breakdown**, a deconstruction (in the terms used by Jacques Derrida) of what exists but without breaking either the whole or the parts. It refers to unbundling the parts to analyze how components interact with other parties.

This detailed analysis will certainly reveal the changes necessary in the model architecture to get the quality we require. It is definitely an evolution rather than a revolution.

We must be sure that the model will defend the people philosophy and make the necessary architectural decisions. Once discovered, those qualities could rebuild the model and make it work properly.

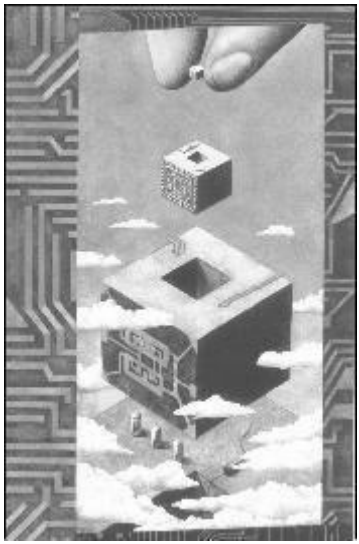
The task is not easy. But nothing is easy when it comes to complex systems.

Trying to summarize in a few pages, twenty years of research is a complicated task, especially when it comes to complexity.

What I can say is that we live at an incomplete stage. The Greek "demos kratos" has enabled a revaluation of rights. But these rights are violated in the economic area.

"The few" still defend their perennial rights, while "the many" are waiting for a new holistic approach enabling them to ascertain the missing model, the one that could count with the consensus of "the many."

The journey through the unfinished symphony that is developed in the book defending my thesis has allowed me to introduce myself through musical instruments in the space of interaction.



And in this journey, I want to emphasize the need to reconcile ourselves with otherness, those beings who go unnoticed because nobody looks at them, avoiding the fact that we are all "the other." And we must remember that we exist because someone recognizes us as parts.

If we accept the Biblical stories as a record of human knowledge, then God finished the earth in seven days. But we wonder what happened to Him on the eighth day? Has He disappeared? Has He died, as Nietzsche said?

I personally think that He is sitting in the front row of a theater where we, the characters, enter the scene stage left, where we start to recite parts that nobody has written. Therefore, we improvise speech all the time.

In that sense, we have to interact with other similar characters who do not know either how the play started but, even worse, how it will end. All of us know that our time on stage is limited and we will be definitively leaving stage right. But God is still seated on the first row, admiring how we design the parliamentary model, because that it is our own responsibility.