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The ternary approach: a modeling tool and a method to handle complex perceived reality

**Claude Lambert**

Manager of Prosoft Sàrl, analyst-programmer, President of S & O, member and trainer in G.I.R.O.S, initiator and trainer in "Complexitude Workshop".

51, rue du Paquis / Halanzy / B-6792 Belgique

lambert_c@prosoft.lu

G rard Gigand

Manager of Battente S rl (buildings, general renovation), Master of Science in Education, GRAF (Research Group on Self-Study), initiator and trainer in "Complexitude Workshop".

4, Route de Vauvert / Ormoy-La-Rivi re / F-91150 France

gerard.gigand@complexitude.org

Abstract

In this paper, we propose a journey whose departure is a legitimate need to define the context and at the same time the system and its boundaries. We suggest that this process is both common and intentional apart from the systemic practice. It helps to make sense of observation. Unusually it is suggested here in this work we cannot build on solid foundations and determined but on the fundamental lack linked to the observation process itself. On a first step, we develop the theme of the limit, without confusing it with the border. We explain the concept of Limit through the following three constants: incompleteness, indeterminacy and self-reference. We show that these three expressions are both singular and coextensive. In their overlapping antagonistic relationships occur. Based on the interplay between these concepts, we develop a method of understanding of the perceived complexity. Then we will briefly present a rigorous and practical heuristic tool implementation. This is a development of knowledge that takes its source in the heart of unknowability. Like Hubble has shown that there is no center to the universe, we propose to place the unknowability at the center of the process of observation. That means we place the observer at the heart of a world to understand and to act, rather than man at the center of a universe to explain and demonstrate.

Keywords:

Limit, unknowability, invariance, incompleteness, self-reference, indeterminacy, antagonism, included third.

Introduction

As Gianfranco Minati wrote in his article "Knowledge to manage the knowledge Society"¹, knowledge of the future must incorporate incompleteness, self-reference, uncertainty, indeterminacy, processes, circularity,... in order to give meaning to the phenomena perceived as complex. To support his

¹ Minati Gianfranco, The learning Organisation, Vol.19 N°4, 2012, p.350-368, Emerald, UK

approach, we present here a method and a practical tool to appropriate phenomena perceived as complex.

In this article, we start from a specific time of the systemic approach of organizations: the definition of the observed system. Even this operation may seem very restrictive, this is a common practice in everyday life. When we go to our workplace, we adapt our behavior to the known system rules (explicit and / or implicit) in which we act. How to approach an organization and define a unit is a way of defining a system, its border. In other words, we contextualize. An inability to contextualize causes inconsistent behavior and erroneous assessments.

It is good to specify that we do not claim that the systems are in nature, the system is defined by the observer. The latter defined to account for consistency of operation attributed to him, without forgetting that the observer is included in the picture he describes. Some definitions of systems have a relatively stable locally intersubjective agreement: the country, the company, the association. In other cases, these definitions vary culturally: the family, the nation,... About living beings system, the boundaries of the body system also vary according to the approaches. Some people mark boundary to the epidermis, while others to a variable distance according to their scientific or non-scientific disciplines. Finally, some systems have very difficult discernible boundaries: a flame, a whirlwind ... on a social level: a mob, an event ...

Anyway, at the time of system definition, the observer circumscribing the system defined the context of it and the interactions it has with his context.

Why is it that related to the knowledge society? We define knowledge as representation that we have of reality. We will not dwell on technological developments allowing access to information quickly, the accumulation of information or more democratic access to this information. That is not about our purpose but we do not pretend that this does not affect the issues that led to the approach described here. If knowledge evolves through accumulation, it is primarily jumps in it that make the emergence of a new arrangement of reality under the control of a real paradigm shift. It is a useless to recall that in the present moment, most observers agree that it is necessary to make a jump to a new arrangement of reality, a new paradigm.

We come back to our main purpose. The observer at the approach of the organization is used in a first step, to clarify the request that is sent to him. Combining this request with ground observations he will model the operation of the organization using a number of systems principles that will be in interactions. From these interactions, he will develop gradually a representation of the structure of the organization. These interactions will lead the observer to a number of assumptions that will be validate or invalidate thereafter. In the course of his research, it will allow him to highlight the operability or non-operability of the system depending on the application and purpose. Based on this, he will propose a strategy or change management depending on its mandate.

The above is not only a description of a systemic response, but it can easily be understood as a general way to make sense of the phenomena observed in everyday life. All phenomena that are given to be observed are contextualized, we have a representation of the borders of our organization, our families, our nation. The essential difference with the systemic approach at the time of observation is the caution took by the consultant about intentional and self-referential aspect in this operation of contextualization, although this is not exclusive to the systemic observer.

In the field of intervention on organization we encounter difficulties manifested by conflict, discomfort, misunderstandings. These are affordable dissonance provided to choose a level of sufficiently wide for it to take effect in the whole observation. At a too low scale, some aspects will

remain unanswered or qualified as exceptions. At a too wide scale, they are regarded as the anecdotal or insignificant.

Socially, a few decades ago some malfunctions and accidents were considered as exceptions such as unemployment, social exclusion, depression ... Models that allowed management to answer by the exception prove now inadequacy when these manifestations of suffering widespread.

These events are a sign of the failure of some models.

In science, the lack of a model calls for a change in it. A striking example is the development of the theory of General Relativity. The laws of Newtonian mechanics are part of a body of theory based on a few assumptions: Euclidean geometry, independence and absoluteness of time and space, the indifference of the position of the observer,... This framework is defined; these laws prove highly relevant in an area median validity perfectly suited to most human activities. And even if very early, some observations have revealed dissonances, this was blamed on an error in the measurements or malfunctions. They were considered negligible compared to the overall relevance.

Yet certain phenomena could not be understood with this theory, in particular cosmological or microscopic dimensions. There called the need for new theories that are expressed by relativity and quantum theories.

Contrary to popular belief, the theory of General Relativity does not reject Newton's but encompasses it. This encasement of the Newtonian theory in the generalized Einstein theory gives meaning to phenomena that were beyond the range of validity of the Newtonian theory. It does not invalidate but contextualizes it. Einstein placed as invariant the speed of light, where Newton had presupposed the gravity.

We come back to the human organizations. A first approach to a company may seem easy: the boundaries of the organization are defined by the building in which runs its activities, the subsystems are departments, members are individuals employed by the company. We can extend our observations through other systemic principles: feedback, interaction....

But even at this level of resolution, the modern organization is more complex than it seems. It includes questions like: should we include financial stakeholders in the system? The family of the manager? Some subcontractors? ...

We must also take into account new factors: telecommuting, outsourcing,...

In a second step, we can move towards more complexity and observed the interactions between systemic principles such as correlation between the rules of the system and its purpose, its borders and its purpose, interactions between membership and system, etc...

At this level of observation inevitably appear antagonisms even more intricate: what to do when social or cultural affiliation of some members is inconsistent with the rules of the system? What to do when education traditionally devoted to parents is assigned to the school? What happens when the private life of its members enter the business of the corporate enterprise?

Facing such situations, contradictions emerged and paradoxes that can reveal a failure to take on account the levels of reality and layout of levels of reality.

The above discussion highlights the importance and also the difficulty of this particular time of contextualization.

We can move further into the process of contextualization to reach a decontextualization allowing itself to go to the limit, the challenge is not to drown in absence of reference.

Boundaries and limit

As Edgar Morin points out, the question of knowledge leads us directly to the unknown, which is to be discovered. The unknown seen as border stimulates and continues to stimulate all academic researchers as well as non-academic. This was the case during the industrial period; it will be even in the post-industrial period.

On the other hand, the development of a renewed knowledge cannot be based on assumptions of an old theory. New assumptions will not emerge from an old axiomatic point of view. A systems approach integrates the concept of logical levels, levels of reality, meta-position and is based on the view that we can continue this article.

It is here that the question of contextual flexibility and possibly integration of the limit come up. It is here that we need to clearly explain the difference between limits and boundaries. We do not understand the term of limit as a horizon from which we approach. By analogy, we can understand the perception of one man sailing on a planet that would be an ocean: no matter where he is, the horizon will be the same, boundary has no sense. Another analogy, whose representation in space is impossible, is the concept of curvature in the sense of Einstein's relativity.

The limit has several possible expressions: incompleteness, self-reference and indeterminacy. This statement requires some explanations.

The incompleteness

The limit has been demonstrated by different approaches in the scientific world. One of the characteristics of the limit has been expressed by the theorems proved by Kurt Gödel. It says that a sufficient theory to do arithmetic is necessarily incomplete in the sense that it exists in this theory statements that are not provable and whose negation is not provable. In other words, there are statements that can never determine remaining within the framework of the theory. The incompleteness is paradoxically an opening. It allows humans to exist and to get to know while it is subjected to a permanent gymnastics to intelligently manage the prodigious and terrible paradox to know the fact of the unknowability and permanent deficit that exists results of it!

If this is true in the mathematical field, we find the incompleteness in everyday life and history. Dictators are "victims" of it: their lust for power, the cult of personality and ideology leads to an untenable position because having no other information than they are ready to hear according to their ideology. This makes them unable to react because they no more get more relevant information. The incompleteness is not to be confused with incomplete or lack of knowledge. It is particularly evident in a self-weakening intimately linked the theory itself. Returning to our example, which marks the end of the dictatorship is the dictatorship itself, not a counterweight that would oppose it.

In our organizations, examples abound when we discuss about monopolistic situations, authoritarianism of the management,...

At a very general level of perception, incompleteness occurs within the same process for the blind spot, the place from where the optic nerve highlighting the paradox that from where we see, we do not see. At a higher level, we are also able to see where it is and step aside only shifts the problem. This

incompleteness character must not be understood as incomplete. It tells us that in some context, it is impossible to embrace the whole.

The self-reference

Another character of the limit is highlighted by the self-reference. The work of Kant contributed significantly to the explanation of self-reference. Closer to home, the need to include the observer in the results of some observations became obvious. The fact whether or not there is an intersubjective agreement on what is observed removes in no way the self-referential nature. Ultimately what is expressed can be summarized by the fact that I can see what I want see. This fact does not mean a selfish nature of man.

Edgar Morin speaks clearly about the difference between self-reference and self-centeredness: *"Self-reference is not substantially owned, organic or formal, which enables a system (living in this case) to refer to itself, which is the ability to self-computer to both as subject and object. Self-reference is summarized way in the act of referring to oneself. It is the ability to refer to itself while referring to what is not itself. [...]. It binds the self-reference and reference to what is different: the environment and environmental things. The character self-exo-referent compute pose and light source to the problem of possibilities and limits of objective knowledge for a living.²"*

The indeterminacy

Werner Karl Heisenberg, German physicist was one of the founders of quantum mechanics. He was awarded the Nobel Prize in Physics in 1932 for the theory of quantum mechanics. The indeterminacy principle states that for a particle, we cannot know its position and velocity simultaneously.

This principle was enshrined in spring 1927 by Heisenberg in the beginnings of quantum mechanics. Another expression of this limit stresses the obligation to select the characters observed. In daily life, for an object being studied, we can move from the observation of color to the form. Each of these view are fragmentary. Just like watching a landscape, we will use binoculars that allow us to see in the distance, while losing the accuracy of details of what is near. In an organization, the look of the manager will be directed towards certain characteristics of his organization, the head of human resources department and that of other financial manager still other aspects ... Being able to change for a specific point of view to another does not discredit this constant process of observation: the obligation to select, focus, identify.

According to the above, the limit can be expressed by three constants: incompleteness, indeterminacy and self-reference.

In terms of perception, the limit following these three constants can be expressed in terms of the incompleteness of the partial in deficit, self-reference by the partial biased and the indeterminacy by the partial fragmented. The theme of perception will be presented as a study at the end of this paper.

The invariance

We are at a point where we dare to argue that knowledge can build on fundamental lack, deficiency, or in other words the limit. We have just deployed the limit of perception process by three characteristics:

² Edgar Morin, *La méthode tome 3, la connaissance de la connaissance*, Seuil, 1986, p. 45.

incompleteness, indeterminacy and self-reference. By doing this, what allows us to suggest that these three versions of the Limit are more or less relevant? Indeed, if one of the expressions of the limit is not a constant, we could say that it is a simple circumvented default we need to correct by any effort. But if these three constants are present in any observation process, then we will have three pillars that will be paradoxically three expressions of lack.

We argue that these three expressions are constants because they benefit of a character of invariance. We define invariance as the impossibility to apply to a concept the same concept without inverting it. We can then verify that the incompleteness of incompleteness has no meaning itself becoming a completeness, as the self-reference of self-reference, indeterminacy of indeterminacy which then becomes the determination.

This is what allows us to say that incompleteness, self-reference and indeterminacy have an invariance property.

At this stage of the paper, we are well advanced in finding that based on the limit and thus the unknowability we do not sink into chaos and skepticism because we have three “solid” constants. It remains now to express why they have an interest in the result and give meaning to the process that will result in a methodological tool proposal.

Limit and unknowability

If we agree with the invariant character of the three versions of the limit of perception in the sense the impossibility of applying the same concept to a concept without inverting we are addressing the theme of the limit.

With incompleteness, self-reference and indeterminacy, we are facing a fundamental deficit. Far from being a failure and be regretted, the limit is also what enables existence. Confrontation to the limit also means the existence of the observer at a given point.

Basically, we move to a fundamental paradigm shift. If the analogy is often made that a paradigm shift as a Copernican revolution, we propose to compare to a hubblean revolution. If Copernicus moved the center of the universe from Earth to the Sun, Hubble has shown the non-existence of a center of an expanding universe yet.

What does this mean?

Hubble's discovery was one of the great moments in the history of astronomy. The law of proportionality between distance and speed showed that the recession of the galaxies do not correspond to a movement against a static space, but an expansion of the Universe itself. The red shift was related to the expansion of space, not a movement of galaxies in a fixed space. A simple elastic can provide a simple analogy to a dimension. To represent galaxies, mark four equidistant points A, B, C and D on the elastic. The expansion of the Universe is simply simulated by stretching the elastic. Points are moved away from each other without moving relative to the elastic. Similarly, galaxies do not move relative to space, but are driven by the movement of expansion of the Universe.

The situation is exactly the same regardless of our position. The fact that each point sees all the others away does not mean it is the center of the expansion. The expansion of the universe has no center.

This makes us say that our approach leads us not be at the center of a universe to explore, but at the heart of a world to understand and where to act.

Practically, in the exercise we will be presented below, we do not put human at the center but well the observer conscious of being conscious and unknowability observation process illustrated by the limit and its variation according to the three constants. This choice, far from being anecdotal, can contextualize the problems observed making it valid for any entity endowed with consciousness of consciousness, reflexivity.

Singularity and coextensivity of constants

If incompleteness, self-reference and indeterminacy have an invariant character and are clearly identifiable as three concepts with different and therefore unique properties, they are not what one might call strangers to each other.

Just like in perception capacity: the partial in deficit, partial biased and partial fragmented perception feed each other. This is commonly used in many optical illusions or in the art of magicians who amaze us.

The incompleteness of a system refers to the inevitable self-reference related to the fact that the observer is in a position, as incompleteness fails to embrace the whole and indeterminacy requires the selection and / or focusing. The same goes for self-reference towards the incompleteness and indeterminacy towards incompleteness as well the incompleteness and indeterminacy.

A ternary encompassing three binary relations

It is fashionable to decry the binary approach. We have chosen another way that is also borrow by Einstein compared to the Newtonian theory encompassing in his own theory as a special case valid at a certain level scale. The binary approach is often attributed to Descartes and The Method, he has often been criticized in recent decades. Although most authors take a step aside recognizing the validity of Cartesian approach in simple situations, they do not boast less global thinking and ternary approach. To do this, we must have an ergonomic thought process, a method and tools for integrating the ternary while encompassing the binary in a rigorous approach.

Critics of this effort will rightly point out that knowledge is developed on the basis of distinction, the presence or non-presence, of validity or invalidity.

On the other hand, advocates for a holistic thinking say that binary thinking is typically boast Western and Eastern thought that seems beyond the binary barbarism. As an aside, we would argue that this is truncated vision of Eastern thought. We want to recurring argument by Buddhist masters to think paradoxical dual formulation as a response to their followers use. The use of paradox highlights the intellect on difficulty and push the learning people to other levels of interpretation.

If these masters require this effort with their disciples, then we can also accept it as a necessary effort. The original intention to go beyond the binary approach is often give up in the hurry of the action because for lack of tools that can validate a new proposal rigorously.

The simultaneous character of singularity and coextensivity tell us that on the one hand they can be found in a range of validity and the other they are no strangers in pairs, they are not similar and therefore there is a gap between them. We will see later that we are often dealing with a non-symmetrical antagonism.

Indeed antagonism is frequently illustrated by the contrast between words or concepts that are designed to cancel out each other. If all antagonisms were that simple there would be little to

discussion.

It is within these antagonistic relationships that are our binary relations. They are three in number: one being at the meeting between incompleteness and self-reference, self-reference and indeterminacy, finally between indeterminacy and incompleteness.

Before proceeding further in development, it is interesting to have a look that the ternary approach is relevant. Rely on many well know ternaries found in different cultures does not justify the choice. If there is an agreement on exceeding a binary vision, why the three is enough? Why do we not consider a formal quaternary relation, or more?

We argue that the key is to move from binary to ternary. Beyond the ternary any phenomenon bringing together more than three elements can be represented by a ternary combination of relationships.

Take an example of a quaternary we can decomposed into a combination of ternary. In this example, A sells C to B for a price D. It is composed of two facts: the first fact means that A is with B in a transaction we call E. The second says that this transaction called E is the sale of C for the price of D. Each of these two facts is ternary and they made up a quaternary.

For cons, we cannot make sense of this fact by decomposition in a vain attempt combinations of binary relations.

Back to our ground observations: we usually faced with non-symmetrical antagonisms. Examples: in an hospital to manage the tension between hope (perspective) necessarily conveyed by the doctor and hope (solace) provided by the support staff? In the management of a country, how to reconcile freedom and equality? In human relationships, how to manage the profit-sharing and disinterested relationships? In the modern company, how to balance innovation and internal regulations? These examples show differences and tensions that cannot be compared to simple oppositions.

Such relationships are highlighted in practice trialectic tool on which we will talk quickly. Although decontextualized by the method we can only note that these dilemmas arise in our observations. Here raises the question of how to manage these antagonisms.

Antagonisms and included third

Our purpose is not to find a compromise in which each terms lose their identity. The goal is not to bring to the annihilation of the opposition but to maintain the relationship that makes them fully live together.

To avoid confusion, antagonism must be understood as an energy relationship. By analogy in the field of anatomy, we illustrate by the relationship between the arm muscles that are the biceps and triceps. When one contracts, the other relaxes and vice versa. Stéphane Lupasco, Romanian philosopher, originally formalized this relationship. He speaks about actualization - potentialization. Returning to the anatomical analogy, updating in the contraction of a muscle is related to the potentialization of the other - the other muscle relaxation.

As stated above, we do not seek to establish a compromise mutilating but looking for a concept encompassing each of antagonistic relationships. This approach is based on the principle of the included third. For this, we refer to the work of Stéphane Lupasco and Basarab Nicolescu, the latter having introduced the notion of levels of reality.

S.Lupasco introduced the concept of included third term encompassing as the antagonist system. The included third upsets Aristotelian logic. The latter three axioms are:

- Axiom of identity: A is A
- Axiom of non-contradiction: A is not non-A
- Axiom of excluded-third: There are no term T which is both A and not-A

The axiomatic Lupasco redefined the logic by this way:

- Axiom of identity: A is A
- Axiom of non-contradiction: A is not non-A
- Axiom of included third: There is a third term T which includes A and non-A

Elaborating on this, Basarab Nicolescu introduced clearly the concept of level of reality which postulates that the third is included in a higher level of reality. There are two levels of reality through a break (discontinuity) in concepts and laws between the two levels. In physics, the break has been highlighted between the microphysical world and the physical macro world. Indeed the world of microphysics, element can be both observed as a particle and as a wave. In the macro-level physical reality, this is inconsistent.

B.Nicolescu adds that at each level of reality is a different level of perception. Indeed, we do not use the same observation instruments for microscopic and macroscopic events.

In everyday life, this reflex is often meant by the expression "elevating to a higher level". In the system approach of organizations and coaching practices, we find similarities with the theory of logic levels although we should remain cautious in comparison.

A modeling tool proposal

At this stage of our development, we submitted the difficulty of contextualization. We proposed to dare contextual flexibility. And to do this, we proposed to go to the limit. We made the difference between boundaries and limit. We then defined three constants of the observation process: incompleteness (partial in deficit) self-reference (partial biased) and indeterminacy (partial fragmented).

Then we developed the fact that these three versions of the limit, although singular and overlap, ie they are coextensive. In this area of overlap, gaps occur which are all antagonistic relationships. Finally, the unity of these antagonistic relationships can be encompassed by a concept called included third.

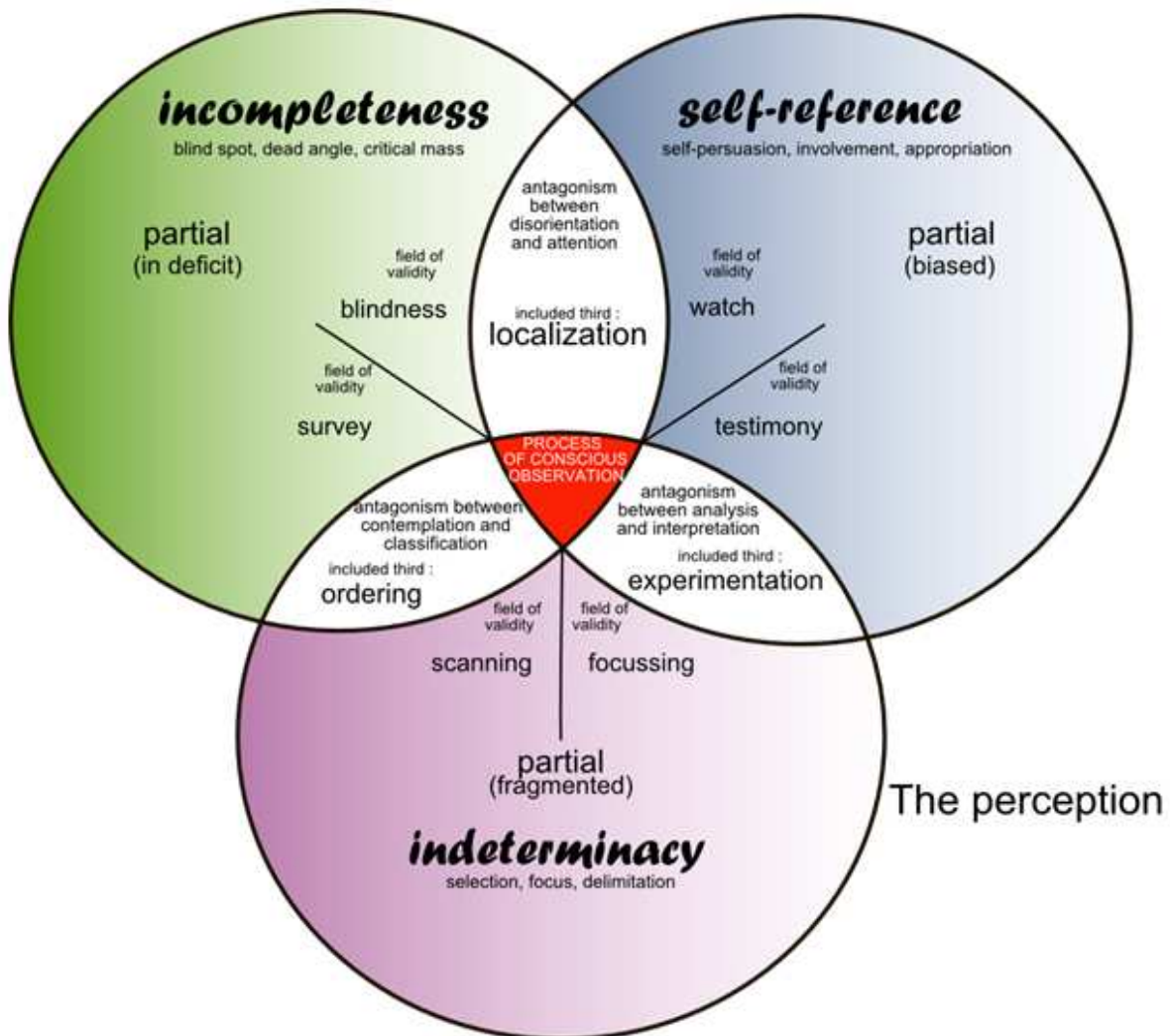
After these theoretical developments, we must present a modeling tool that can be appropriated by practitioners ensuring their autonomy and the emergence of their own genius.

To reach this goal, the most effective representation we have developed is that of three circles, each representing one of the variations of the limit. These three circles overlap so as to symbolize coextensivity constants.

The heart of the scheme is not trivial and is symbolized by conscious of being conscious seen as unknowability observation process. This subject deserves a fuller development that does not allow this article.

The study of perception at the foundation of knowledge processes

Below, we present a trialectic development on a central theme: the perception. In addition of being a practical example of trialectic tool, perception is at the center of the knowledge process.



At first, this scheme shows circles appointed by the three concepts in bold: incompleteness, self-reference and indeterminacy.

First step, we confront the central theme of our study (perception) to the limit expressed in the three invariants. We call them "attractors". These phenomena are surprisingly both limiters and triggers to the capacity of perception.

Limit caused by the incompleteness of the perception will always be partial in deficit, partial biased by self-reference and partial fragmented by indeterminacy.

Now we continue in the implementation of the exercise. We have identified the constants then from this repository limits we isolated attractors.

Now begins the cross that will give us 18 conceptual tracks. All these concepts are interconnected although some relationships can surprise us. We proceed according to the following questions:

How to name the effect of the incompleteness of the partial (biased)? Blindness.

How to name the effect of incompleteness on the partial (fragmented)? Survey

How to name the effect of self-reference on the partial (in deficit)? Watch.

How to name the effect of self-reference on the partial (fragmented)? Testimony.

How to name the effect of indeterminacy on the partial (in deficit)? Scanning.

How to name the effect of indeterminacy on the partial (biased)? Definition.

This is actually a repetition of the first operation not playing between the theme and constants but between constants and "attractors". The terms will be found and called "agents" because they carry the influence of a constant of the two attractors of the other two circles. Gradually we go down level since the goal is to reach the ground after illuminated by a series of concepts.

The experience is then seen in a circle influenced by a constant, naturally found two "agents" that are complementary, that is to say, they belong to the same "domain of validity". By cons on both sides of the spindle, they will be antagonistic.

In the cultural habit of binary we mean antagonism as a symmetrical self annihilating opposition. This "gap" is a non-symmetrical antagonism calling to collect a gradation. However, the pattern will give us sometime concepts that will seem very difficult to oppose or to make them match. It will ensure that the concepts found the rules of exercise and a way of "rename" the words supposed opposites in order to find the common denominator and thus perceive the antagonist character.

We rename "blindness" and "monitoring": disorientation and care.

Then, we rename "definition" and "testimony": analysis and interpretation.

And finally, rename "survey" and "scanning": differentiation and classification.

It is important to note here, the choice of words is not absolute or foolproof. Our aim at this stage is to explain the process. It is scrupulously following the process that the practitioner will be full freedom of performing the exercise according to his unique perspective. The strictness of observing the rules is provided to customize the schema and its ability to reveal new information.

After finding the antagonism, we have to look for "included third." The "included third" is not a mediator but is the concept under the umbrella of the antagonism which finds its unity. It's hard mental work but it is the heart of the exercise because the included third allows the visibility of internal unity at any antagonism. Thus we propose:

The included third for antagonism between disorientation and attention: localization.

The included third for antagonism between analysis and interpretation: experimentation.

The included third for antagonism between differentiation and classification: ordering.

Here we are off eighteen conceptual tracks outside the three constants: three attractors, six agents, six antagonistic terms and three included third.

From there, in the last step, we return to the operational level that, to identify what we call "operational indicators". Indeed, the objective is to inform practice and everyday life. It appears that human activities, whether intellectual, spiritual or manual are generated by this trilogy limit. Among these operational clues we find many of which are added to those in the diagram:

Included third LOCATION: navigation, surveying, cartography, ballistics identification, forecasting ...

Included third EXPERIMENT: science, philosophy, childhood, reform, research, doubt, validation ...

Included third ORDERING including archiving, structuring, mechanical, serialization, mathematics, religion, law ...

At the end of this development:

- We redefined a problem with its central concept.
- We passed the central concept in front to the three limits of the phenomenon of observation.
- We have demonstrated that in which each of these limitations affect systemically each concept.
According to their relative position, some concepts have proved complementary, others contradictory.
- We exceeded the infertile opposition to find an antagonistic dynamic.
- This antagonistic relationship was found consistency by changing the level of reality and a term encompassing discovery (included third).
- Finally, we returned to the operational ground by identifying human activities permitted by these included third

Conclusion

This approach is not intended to be a solution to the whole nor one solution "all inclusive" but an understanding of the complexity that is difficult to deal with. The fact of moving to the limits allows appropriate contextual adaptation.

The trialectic tool proposes to build on the incompleteness when we "spontaneously" seek to build on the completeness and it is here that operates a paradigm shift.

Finally back to the question at the foundation of this article: what is the right level of contextualization of a problem? The trialectic tool does not answer in itself, but it offers the possibility to the practitioner being confronted with a problem for which a complex approach is relevant. This allows him to dare the necessary contextual flexibility by evolving through the methodological rigor of a tool. Paradoxically, the "relevance" of development is not supported on the "strength" of foundations, but on the fundamental deficit or limit. Solid foundations always desired in moments of instability are here substituted by the gyroscopic stability driven by the movement between the constants.

The tool provides a train of thought but nothing predicted the results of this journey: the same development will be different from one practitioner to another, each bringing his own genius while respecting the rules of it. These rules allow on the contrary everyone's freedom.

The trialectic analysis reveals a heuristic tool when managing by exception is no longer relevant or when the observer believes the presence of antagonism seen as correlated to the operationality of the system, making their reduction or the use of compromise as mutilating.

Far from being at the service of outstanding issues, these observations are daily and are at the heart of most 'simple' organizations : a project of building bring in the presence of customer dream, customer financial capacity, and the technical means available at this historic moment. On another note; resistance to change can be understood as a combination of endurance, strength and conservation? etc ...

Finally and more generally, a generalized repository for the development of knowledge can be defined by the combination of a "range of validity", a "field of intelligibility" and "degree of resolution". The relevance of the trialectic approach is at this level. It allows us to ask how my approach is relevant in the area where it is given me to act, with any degree of resolution I will address the problem and how it is coherent and gives meaning to the phenomenon observed.

We show in this paper a study (the perception) to give an example. Hundreds of studies have already been developed based on needs and questions submitted by research. It has much more teaching about

the use of this tool it is not possible to cover in a short article. This is particularly significant when we discuss socially sensitive topics such as: the crisis, the project, the evaluation, the management ... Each theme explored through the tool offers new perspectives and understanding enriched beyond ideologies and dominant paradigms.

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