How to analyse conflicts better: a new theoretical approach*

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Abstract

Our starting point is the importance of conflict analysis as a current need. The causal analysis of conflicts is considered insufficient. The difficulties of analyzing conflicts are objectives. We calls for a new paradigm based on the examination of similarities and differences between conflicts. There are elementary conflicts that shape a true morphology of conflicts. The morphology is based on the recognition of patterns in a usable way using tools based on Artificial intelligence. An outline of the General Theory of Conflict Morphology is formulated and the need to enhance of External Expert Neutral Evaluation as a professional resource to fit for future conflict analysts.

keywords: Conflict Analysis, Morfology, Pattern Recognition, Artificial Intelligence, Neutral Evaluation, Methodology

Cómo analizar mejor los conflictos: Un nuevo enfoque teórico

Resumen

Nuestro punto de partida es la importancia del análisis de los conflictos como una necesidad actual. El análisis causal de los conflictos se considera insuficiente. Las dificultades para analizar los conflictos son objetivos. Reclamamos un nuevo paradigma basado en el examen de las similitudes y diferencias entre los conflictos. Existen conflictos elementales que conforman una verdadera morfología de los conflictos. La morfología se basa en el reconocimiento de patrones de forma utilizable mediante herramientas basadas en la inteligencia artificial. Se formula un esbozo de la Teoría General de la Morfología de los Conflictos y se plantea la necesidad de potenciar la Evaluación Neutral Externa de

Expertos como recurso profesional a la medida de los futuros analistas de conflictos.

Palabras clave: Análisis de conflictos; morfología; Reconocimiento de Patrones; Inteligencia artificial; Evaluación neutral; Metodología

Importance of conflict analysis

The widespread perception that our world works badly has spread through society in a few decades. Economic and financial crises, wars, terrorism, development of weapons with capacities never imagined, etc., are accompanied by more subtle, but effective social mechanisms. Think in research not oriented to peaceful purposes, conflicts of interest with multinational corporations, privatization of basic services, pollution of the environment, robots versus jobs, conflicts with water and so many more.

The growing medium is global and affects us all, insidiously. Many of these large themes had been dealt with in the Peace Studies and had been defined by Galtung, J. (1995) as "structural violence" (p. 314).

Where does the world go?, he wondered ten years ago the renowned french thinker Morin, E. (2009) Are we going into the abyss? (P. 11 and 85). The blindness to the present makes us Ipso facto blind to the future, he responded (p.18).

And all this, what are telling us? That the whole scope of the big and small conflicts - What to do and what not to do- It has in this historical moment an ill-considered relevance. Ury W. L. creator of a negotiation model for universal use with Fisher, R. (2004) spoke thus already in the year 2000: " Danger does not come from the outside world, comes from the inside: from the habit of falling into destructive, often deadly conflicts, every time that a serious difference appears between two people, two groups or two nations. " (p.17).

So we see that Ury, W. L. puts in the way of settling the differences, the axis of their concern. His point of view is resounding: "Today there is no challenge more important than to manage our differences" (p.23). It Was said at the beginning of the millennium. We are afraid that things have gotten a lot worse since then.

Our first responsibility has to do with understanding what is happening. If our analyses are correct, if the problems are well raised, the solutions will seem easier and more affordable.

The sequence analysis-prognosis-intervention in relation to a situation of conflict, it seems to us that-against all logic-has been inverted. If we examine the literature in conflictology (field also called Peace and Conflict Studies) We will discover with wonder, that there is more material on how to resolve a conflict than on how to sufficiently understand its roots. Conflict analysis is a field that's starting to get out of line right now.

As far as prognosis is concerned, we can say that it is a territory practically uninvestigated, which is logical if we are aware of the inadequacy of our analytical methodologies. It is now when, from the paradigm of complexity, neurobiology and intelligence artificial, the first signs that the panorama is going to change, are appearing.

That is precisely why we have to take greater advantage of the medium-range theories that explain important parts of conflict situations. The same ones, even partially, help us to focus the intervention to resolve conflicts.

There are many difficulties in analyzing conflicts properly. Suffice it to examine the work of Yarn, D. (1999) Dictionary of Conflict Resolution, and see that he dedicates to the term "conflict analysis" (p. 117 and 118) five lines in its more than 500 pages.

To give us a broader initial idea, we explore via Google through the keywords "conflict analysis" which produced 453.000 references. But, when the same consultation was done

in the most specialized Google Scholar, the result was reduced to 16.900 references. We tune more by adding the acronym ADR (Alternative Dispute Resolution); the final result was 1.580 references. We search by adding the word "methodology", with a result of 2150 references (see 11.12.18). And we must bear in mind, that here we show all the results of all kinds of human conflicts and anothers types as in engineering.

We can say, from this first approximation, that the work that has been done until now is clearly insufficient and very discreete, especially if we consider that every human being has personal conflicts and with others people throughout the life. Also, that reality "conflict", is at the center of our lives. So we all have a personal opinion and experience about it.

In 1986 Moore's work appeared in California with the book The mediation process. At that time, a movement of rediscovery of mediation began in the United States, the beginning

of which is usually about 10 years earlier, in the so-called "Pound Conference" held in St Paul, Minnesota in April 1976.

Moore's work, C. puts the analysis process in the internal framework of mediation. We believe that this is a clear contradiction, because it assumes that it has already been chosen to make use of mediation when, in reality, the analysis should be prior to the choice of the various systems of resolution of a conflict. Obviously, without prejudice to that later analysis need to be done, in the optics and professionalism of the mediator, when this figure of conflict resolution has already been chosen.

If we check in depth the state of the art, most likely we would agree with Druckman, D. (2005), which is in all probability, one of those who more has deepened in the state of the research referred to methods of analysis of conflicts. His work "Doing Research: methods of inquiry for Conflict Analysis" it's particularly relevant to the Academy. One of his most forceful statements regarding the state of the question is this: "Conflict analysis is a field in search of an identity"(p. 349).

We can check with empirical examples the success of this definition of the situation: a University well- known in the sector, the George Mason of the United States, it titles its faculty like this: "The School of Conflict Analysis & Resolution", Conceptually separating the analysis of the resolution of a conflict. Or, to put another example, Sandole, J. D. and collaborators, in 2009 published their book of resolution of conflicts under the title of "Handbook of Conflict Analysis and Resolution." We insist on that, it

is not at all neutral the separation between the analysis of the conflict and its resolution, at least conceptually.

In recent years this trend is being consolidated in both Spanish and Anglo-Saxon literature. Like this, we see that some authors, already throughout this last century, are increasing importance to the analysis of conflicts. It was Pruitt, D. (1998) who found that the study of the conflict must be inextricably linked with the means to resolve it.

The difficulties of the analysis of conflicts are many. In general, people tends to contemplate two aspects:

a) Some certain clarification with respect to the interacting persons or parties in the

conflict and to the interests at stake, as well as to the relations of power.

b)   A study, as close as possible, of the sources or causes of the conflict that are perceived as such.

But let's hear Mitchell, C. s opinion, C. (2014), a reputed specialist, on the formation of conflicts, its birth, its causes:

"´When examines the bibliography on the "sources" of conflicts, the list of suggested sources, in many different social and analytical levels, is enormous: from bad communication and extreme feelings, going through the basic necessities unsatisfied, cultural and social differences, the resistance of the elite and the imbalance of resources, to the lack of skills to solve problems, despair and asymmetry "(p. 76).

This view expressed very recently in 2014, leads us to a field to which we will refer later: "Formation of conflicts." and this expression "formation", in its most direct sense, means precisely "shaping something". Let us realize that we are already talking about the possibility of the form of a conflict from the language.

Let us now note that conflicts have two levels of analysis: one that we might call "static" and which would represent a kind of fixed photo at a given time of the evolution of a conflict; And another "dynamic," that would come to refer to the probable evolutions in the time of that same conflict, according to the intervention or not in the same one and the means of executing it. Both aspects have been treated in a very scattered way in science.

The difficulties to analyse conflicts

There are many difficulties in analyzing conflicts properly. The truth is that from classical philosophy, we have always wondered why we happen what happens to us and that, worries us.

The reasons why science has advanced little in this field are diverse, among the most important, we can look for these four:

1. Absence of multidisciplinarity in research

    It is true that all the different disciplines, even those of the purest sciences, have a point of view on the conflict. But, this topic is so multidisciplinary in its essence, that the approaches have been scarce and little fruitful.

2. Approches from perhaps inadequate paradigms.

   Although the major conflicts -mostly armed- have been quite studied, the link between the level of the macro and the micro level has been very insufficient studied. A battle between rival gangs and a war between states have many elements in common, though it may not seem so, but the scale is different. The link between the two levels of interaction is found little in depth, although the trend is to consider this issue. The reference framework for the studies carried out is still very timid in new aspects such as the complex vision of conflicts and other, where we hope that-in the next few years-the phenomenon can be examined from new viewpoints.

3. Insufficient investment in the research effort.

   Certainly, it´s unjustifiable the lack of sufficient resources to be devoted to such transcendent issues as the scope of understanding the conflict and the effective means of its resolution.

   Note that when we talking to executives of companies, they simply say that they can devote up to 50% of their time to resolve conflicts. And this we can sense that happens in almost all the areas of life, to a greater or lesser degree.

   If we compare research budgets for pacification with the budgets in defense or security, seems obviously there's a serious dysfunction. We can imagine that we are in a kind of vicious circle, where it is not invested because there are no clear results and that, in turn, these results do not invite to invest more.

4. Methodological deficiencies in research.

   Science has been demanding precision from a very empirical paradigm and certainly the precision is the hardest thing to obtain in conflictology. Since a topic can be problematic for one person and not for another, until the conflict when it arises is a living reality, with its own processes that-in a metaphor-let's say it lends more to the video than to photography, we would find many aspects that make difficult to observe and rationally understand conflicts. Approaching them requires more approximation than precision. More compass, than GPS.

   An Study of the University of Seville (Infante, E., 1998) showed the existence of

78 different definitions about the reality "conflict". Hence, it is almost impossible-
-today-- in science, to find that empirically sought precision. Of course, it is very
useful to find effective approximations when there are.

Problematic of causality and form

In 2000 year in The Handbook of Conflict Resolution, Deustch M. (2000), stated :"None
of the theories are suitable for dealing on their own, with the complexities involved in any
specific conflict or in any type of conflict", (p.16).

At the same time and in the same work, Coleman, P.T. after stating that there are many
questions of basic knowledge not answered in the field of conflict resolution, he formulated
some of them. The following: "What are the important similarities and differences in conflict
processes at the interpersonal, intergroup and international level? (p.572)

It means that Coleman, P.T. already understood this, three decades ago.In the different
levels where a conflict appears, the similarities and differences of that conflict with respect
to others, should be considered. We believe that this can only be done effectively if we
accept the notion of "Morphology of Conflicts", as we'll see later.

The principle of causality is a classical principle of philosophy and science. He claims
that every event has a cause. So things do not happen in isolation, but they are linked to
one another in a process of interaction. Some things happen to others and often in the same
order. The first ones we call "causes" and the second "effects". The idea already introduced
by Aristotle allows us to better understand nature and life, in the broader sense, preventing
so the consequences of the facts that are happening.

The conflict as the effect of a particular cause has been studied with some depth. However,
we do not find excessive concordance between the different authors on the general causes
of the conflicts. In broad terms, one or more causes produce one or more effects which in
turn are cause of other effects.

This chain leads to unsatisfactory results as they know very well the criminologists who
count multiple examples. Let us see one: He struck him, for he had provoked him; but,
the victim came from a family unstructured which made him always keep provocative

attitudes. In turn, the aggressor was very angry for reasons other than the quarrel and, in some way, they both found themselves without wishing.

In many cases of various actors, with different motivations and with cross and opposite interests, to establish the causes of a conflict can be a matter of high complexity and risk, as it seldom happens that there is a common vision of the facts.

In a way, we are saying that establishing the causes of a conflict often it tends to be very unsatisfactory and unsafe. And that, in any case, should not be the only way of examining the situation raised.

The question is: in addition to the causal analysis, can we think that conflicts in themselves are shaped? And if so, would it be useful a morphology a conflict?

We should to think that in opinion of Khun, T (1997) in The Structure of the Scientific Revolutions the interest in any research lies in its ability to reveal an underlying structure that makes phenomena intelligible. That's our modest intent.

The study of form has occupied many other areas of the physical sciences, for example, the geology in which geomorphology is studied, a branch of geography that studies the relief and the natural environment, or chemistry, where induced crystallization phenomena occur. What to say about the phenomena of natural crystallization that marvel at all those who contemplate them and who lead to wonder how nature makes such miracles.

If we go into the field of human phenomena, anthropology has studied in depth the myths, rituals and social practices in many aspects. A myth and a rite can be seen as an "attractor of forms" in the sense of creator of these forms. Sociology from its most classical authors, such as Durkheim, E. (1987) already studied the shapes, for example, the totem system in Australia. Or also, Simmel, G. (1908) that in the principles of the discipline published his work, not by chance, titled "Studies on forms of socialization".

What to say about psychology and psychiatry where processes are given ranging from archetypes, stereotypes, behavioral patterns, repetitive disorders, phobias, etc., a multitude of assumptions with involvement in conflict situations. And, on all, we must consider the Gestalt Theory, that interests us in a particular way to better explain the morphology of conflicts. It is understood very well seen the above that, the study of the morphology is

already being called "morphological sciences" given the increasing breadth of its areas of development.

From Antiquity up past Middle Age, the morphology had called attention studying aspects like the development of the human body, the hen egg, dissections of animals, etc. The fifteenth to eighteenth centuries brought great novelties: the discovery of blood circulation, the microscope, anatomy as science, embryology, etc. and very significant steps were taken which would unite the law of the transformation of energy, the Theory Cell, the Theory of Evolution, etc. But, it will be already in the nineteenth and twentieth century when it gives full content and important importance to form in all fields of science. The last century will bring new concepts like morphogenesis, that is, the study of how form is generated.

The concept of fractality coined by Mandelbrot, B. (2009) will provide a new vision of geometry to understand irregular shapes. It will be raised: what is the shape of a cloud? Or how much does the coast of England measure? And that change of questions, will produce entirely new answers.

The accomplished french scientist Thom, R. (1997) known for his major work "Structural Stability and Morphogenesis" states that "all morphology is the result of a conflict" (p. 145) In "Parables and Catastrophes" De Giorello G y Morini, S (1993), for our interest, the approach would be just the inverse: every conflict must have a morphology that must be discovered and examine its usefulness. This connection between concrete morphological form and conflict seems to have fundamental relevance in a broad sense.

The necessity of a new paradigm of analysis

The current meaning of the word "paradigm" we owe to Khun, T.S., Already quoted, who in 1962 published your reference book that has given a huge meaning to the changes that occur in science, explaining them in a clear and informed way. So, "The structure of the Scientific Revolutions " it raises how scientific progress is produced when it is examined without preconceived ideas.

Khun's first statement, T.S. (1997), that we estimate of relevance to our object, is the following:"The meaning of crises is the indication that they provide the occasion has come

to redesign the tools (p. 127). This affirmation of Khun corresponds exactly to what is happening today in the field of conflict resolution. Is there any doubt that the desired results are not being obtained?

The current crisis is a call to review our conceptualizations and the tools available to us. It is a call to the updating of instruments, probably from other areas of science, in order to achieve the adaptation of the sector to social needs. The current paradigm concerning knowledge of the conflict we believe that it's based, maybe in excess, in causality. But causality is a highly complex phenomenon in human nature.

In the history of ideas, form and background have been very rich debates. Many of these debates are still alive. What has not been intended is the form of conflicts. It is true that the psychology of form (gestalt) gave with important keys of how we perceive the objects. And this-after expanded by neuroscience-has served us to understand better how a little information can help us to have a more general idea of a phenomenon, even if it's approximate.

The emergence of the "morphological sciences" focused on a multitude of fields (geology, linguistics, etc.) as we have seen, reinforced from the ideas of Mandelbrot, B. about the irregularity of the forms, including the appearance of Fuzzy Logic[1] and the views linked to the Complexity Theories (attractors, dissipative structures, etc.),[2] In addition to Intelligence Artificial, have prepared the ground to make a qualitative leap in the field of conflictology.

We are prepared, with all insecurities, to propose a new way of examining the conflict from its irregular and psychological form. The morphology of conflicts may be a new field that opens up to our eyes, if we are able to look up.

So, can conflicts have form? The answer has to do with what we understand by form. One way to do things, a geometric figure, a methodology are some examples of forms.

No one discusses the disparate forms of physical objects, including the richness of

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1   Fuzzy Logic has changed the way we think about allowing us to explore what is between 0 and 1. Between the white and the black, that is the whole range of greys. Consequently, it allows us to think about terms with more approximation than precision and this is perfectly applicable to psychological phenomena, in our view. For broaden this viewpoint see Kosko's work, B. titled Fuzzy Thinking.
2   Some of these theories are already beginning to be studied in Conflictology. The International Association of Conflict Management dedicated a whole Congress to this topic in 2016.

physical phenomena. However, the realm of the human and what happens in the mind is much more intricate. If it also affects more than one person, as in the case of conflicting interactions, then this is really complicated.

However, advances in cognitive psychology have shown us that the brain is able to find quick solutions to complex situations by way of simplifying their processes. Evolution has led us to be able to take quick decisions, even if they can be approximated in many situations of life.

Conflict situations follow recognizable patterns if we are able to identify them, classify them, and fit them into our mental schemes. But you have to start by defining these patterns of conflict and naming them. The classics said "noun is numen."[3]

This phenomenon we have all experienced. Repeating situations, conflicts that are alike, whether it's a divorce, a trade claim, or a traffic ticket. However, the way we find these conflicts or others will always be irregular. They're similar, but not the same. Other actors, other circumstances, another context, etc. The only way to classify the conflicts that Will help us to be operative, is one that allows us to see both the parts that do not vary with respect to others, as those that are variable.

From this idea, we should see what may be the most fixed or unchanging parts of a conflict or, in other words, what patterns it follows. In the same way, we have to be able to identify a way that makes it possible to distinguish that particular case from other conflicts. This brings us to the idea of elemental conflicts that are model or prototypical. Finding these elementary conflicts will allow us to ponder, classify and fit any other conflict by comparison to the model. It is obvious that this will not be accurate and exactly. Conflicts are a lively and dynamic phenomenon, they move in vagueness, with important margins of uncertainty.

The morphology of conflicts, that is, the form that a particular conflict adopts is a fixed photo at a given time. The dynamics of the same, must be studied separately and by other complementary keys. In spite of this, the conflicts classified in an operational way and whose fixed and variable aspects are known, allow to make important decisions on how to manage them in an appropriate manner.

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3   "To name is to know" translation of the Latin saying.

This is because each elemental conflict is supported by some underlying psychosociological processes on which one can act and estimate its resolution with probabilities of success. Although there is offline methodology,[4] technological tools based on Intelligence Artificial are needed for the full effectiveness of the proposal.

Elementary Conflicts

In the world there is a huge diversity of everything. However, science has shown that all diversity comes from very few elements. If you look at the physical world, the periodic table of the elements shows and reminds us that everything comes from very little and its multiple combinations.

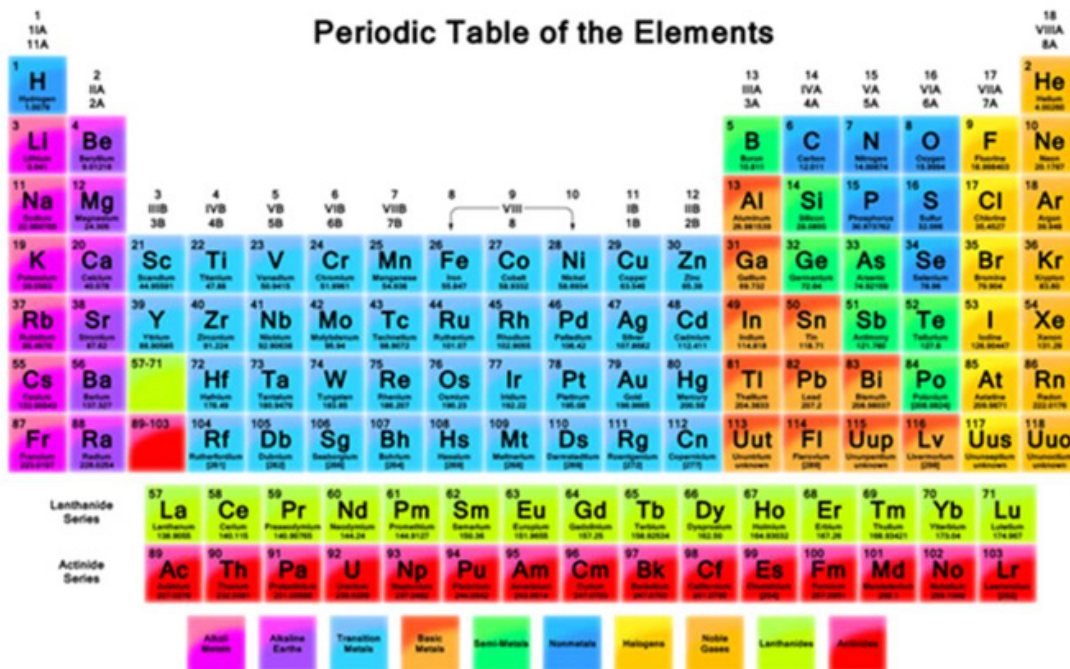THE ELEMENTARY OF DIVERSITY

Figure No. 1 Source: Google free images in Internet

In biology, in the world of the living, the emergence of the genetic code, historically very recent, put us on notice that the same phenomenon happens: note that the Genetic Code is

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4   A tool based on these ideas that we created in 2004 and named Conflict Analysis Typology has allowed us to go through trials in real cases with satisfactory results. We have now improved that version.

universal and limited. Differences come from different combinations of genes. A single gene can change everything, but the important thing is that it can be identified.

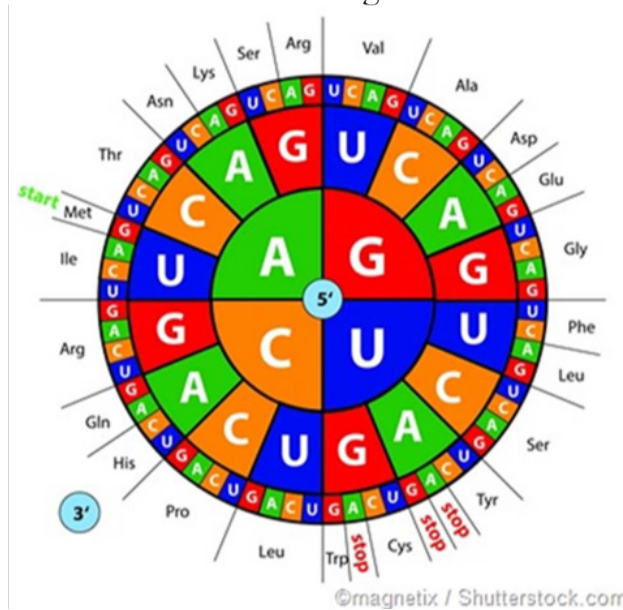Illustration of the genetic code

Figure No. 2 Source: Google free images on the Internet

This is Chomsky's Universal grammar. Any grammar in any language responds to the following schema:
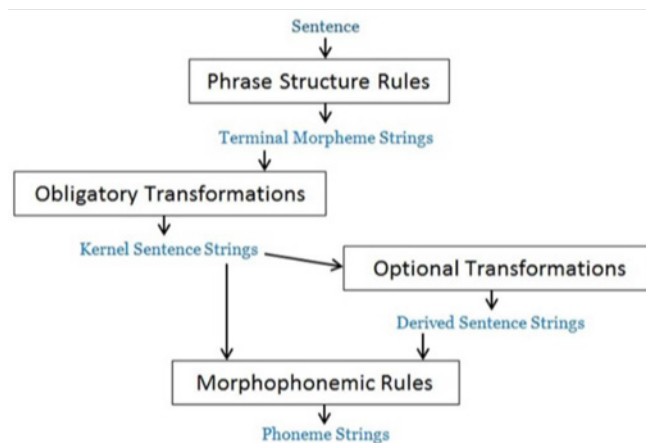
CHOMSKY's UNIVERSAL GRAMMAS

Figure No. 3 Source: Google free images on Internet

Social sciences have revealed the same phenomenon in repeated fields such as anthropology, sociology or linguistics. This let us to simplify complex things. Any language to formulate complex words and sentences has to start from a necessarily reduced alphabet, for example.

Following this line of reasoning, why should not there be some elemental conflicts? What prevents us from seeing the unity from the widest of the enormous diversity of conflict situations? It does not stop being that we are in the human and in the culture. Is it so risky to think that we should be able to reduce conflict in numbers to its very essence? And if that's the case, a new question arises why don't we do?

One of the possible answers is provided by the quantum physicist Bhom, D. (1980) who in his famous work "Wholeness and the implicate order" develops the idea of the fragmentation of the human consciousness coming to affirm: "Fragmentation is widespread everywhere, not only for the whole of society, but also for every individual, producing a kind of generalized mental confusion that creates an endless series of problems and that interferes with the clarity of our perception so earnestly, that it impede us from solving most of them. " (p. 19).

From this reasoning, it would seem that it is so logical that conflicts, in their enormous diversity, in their multiple versions, in their rich nuances and in their various manifestations, can respond to a few elementary conflicts.

In biology and more specifically in genetics, a gene can change everything in one person. Thus for example chromosome 21 affected, produces Down Syndrome, with the result of disability and mental retardation of all us know. We do not have that degree of knowledge in the field of conflict studies.

The Conflict Theory has not advanced enough and is relatively far from finding causes specific and fundamentals of conflict, beyond some. Although it is true that progress has been made in recent decades, there is no strong enough multidisciplinary body to situate the conflict as an absolutely central axis in science. The idea of "conflictology" as a fundamental theoretical framework, elementary and linked to understanding and better comprenhension of people is still in progression, and has problems in the same denomination, remember that the name more used is: Peace and Conflict Studies more than Conflictology.

Thus, it remains true that the idea of cause in the conflicts often helps us to know aspects relevant to them, it is insufficient – again in our view-in the current state of science. In this sense, we are in need of other ways of access to the conflicting reality, so that we can handle in more efficient way what is an imperative need: how to understand and better manage our disputes.

From the works of (Redorta, J. 2004, 2007 and 2011) we address the problematic issue of seeking conflicts which, by their elemental basis, could follow a pattern by itself recognizable in social life. This research led to the establishment of the following table:

Elemental Conflicts

Morphology of the conflict	Basic conflict
1.-Scarce resources	Need/Resources
2.-Power	Power/Freedom
3.-Self-esteem	Social valuation/Self-assessment
4.-Values	Disbelief/ beliefs
5.-Structural	ressources/Solutions
6.-Identity	In being/being
7.-Normative	Conduct/norm
8.-Expectation	Hope/Reality
9.-Nonadaptation	Stability/change
10.-Information	Know/Ignore
11.-Interests	Desires/Opposition
12.- Atributive	Assume/Displace
13.-Incompatibility persistent staff	Acceptance/Non-acceptance
14.- Inhibition	Action/Blocking
15.- Legitimation	Strength/Right
16.-Inequity	Justice/Injustice

Figure no. 4 Source: Extracted from the book Entender el conflicto Redorta, J. (2007).
Barcelona, Editorial Paidós, with the author's permission.

The central idea of the picture is to develop the view that there are elementary conflicts (called here basic) which, on their own, follow a recognizable pattern. Thus, an elemental conflict of information revolving on the axis of "knowing" versus "ignoring" something, can never be mistaken for a pure normative conflict, where the relevant is the adjustment of behavior to the social norm.

If we realize, we are ignoring the causes of an elemental conflict because what we understand as relevant is its pattern, that is, the binary form in which that conflict is presented and can be identified in a prototypical way.

The analogy, the search for likeness of one thing with another, has always helped us to solve problems from mathematics to law. The way we rehearse is to approach a particular conflict by trying to see what they look like, and that is precisely what allows the pattern of conflict.

Pattern recognition based on morphology and the role of Intelligence Artificial.

Now, we reach to the two elements that provide us with more critical information, and therefore more useful, to focus the intervention from understanding the conflict: the examination of the patterns that follows. The analysis of the patterns of the conflict makes it possible to clarify what is the general orientation and to establish guidelines for the intervention to be effective.

Patterns can be considered means through which we interpret the world. Our brain is adapted to recognize patterns. We look for the similar between the different and this gives us intelligence and understanding of the environment in which we live.

We act with patterns of behavior without realizing it. Wash our hands before eating, mechanically stop the alarm in the morning or always wear Jeans, they are patterns of behavior that we also tend to call "customs."

In our interaction with others, we also tend to follow similar guidelines learned: to greet, to participate in a meeting, to scold, to advise, etc.; These guidelines are also patterns and are studied by science with due detail.

What is relevant to our effects is that when we come into conflict with others, we also do so according to patterns learned based on our experience. In other words, we have a typical way of approaching the conflict situation. And that is, a conflict follows a repetitive pattern, which can be identified as similar to other similar conflicts and fits one or more prototypes of elemental conflict, which are recognizable.

Conflicts almost never follow pure patterns of elementary conflicts, but rather they can be recognized by the dominance of conflict patterns over others.

Conflict patterns are scarce variables depending on the scale in which they appear. Thus, a conflict of interest can occur between members of a family and among several states. Conflicts, therefore, in following their patterns, are recognizable both at the interpersonal, as well as group, intergroup or social level.

To cope with any conflict, the most basic pertinent questions are always what patterns fixed follows this conflict? How is it different from other conflicts? And this will imply classifying, weighting in degrees the intensity of the detected patterns and examining the differences (context, power relations, number of parts, etc.) with respect to other similar conflicts.

The theory we propose to develop and which we have called "Conflict Analysis by Patterns Recognition", suggests that the approach that now we have to manage conflict is clearly insufficient. We argue that from the field of Intelligence Artificial can be developed an instrument capable of diagnosing situations of conflict, establish at a certain level, experience-based forecasts and define action guidelines for agents involved. This is tantamount to drawing up the equivalent of the jurisprudence of "non-legal" conflicts. Today this is not attempted and may be we can open important possibilities in our field.

This approach would force an intense way to think about the classification of conflicts based on the form of the same. The algorithms on which the software was based, could relate case by case from the analogy by its proximity and differentiation with respect to other cases. Such a system is designed to be able to learn and requires a multitude of cases to deal with. It responds to the concern of Coleman, P. T. that we have addressed at the beginning of this work.

If this system is added with the sociopsicológicos processes, that are linked to each particular conflict, the system is capable of producing online guidelines to manage the conflict situation in tentative mode. This is not useless as we seek more approximation and guidance than precision in an area where it cannot be given.

We must meet the rules governing these processes underlying any pattern of conflict in a wide manner, in a formulation that is useful and quick for the person who should perform an analysis. Unfortunately, little has been tried and the literature is too scattered or too broad. But if precision is not required, adequacy is necessary, as we believe. A clear compilation of the most useful resources in each process and the help of appropriate software would allow for a very quick orientation.

The experience accumulated by thousands of cases should get a adequate purification, in such a way that for the most repetitive conflicts, could be obtained guidelines of action to the future and a strong basis of research of them.

In the field of Intelligence Artificial, Minsky, M .(2010) a true reference, has a scheme that, essentially, It comes to say that it is advisable to recognize the problems and to act in a very adapted way to each one of them in its different typology.

Minsky Scheme adapted

Source: Elaboration on ideas of Minsky, M. (2010) in The emotion machine.
Ed. Random House Mondadori. Spanish version

We should remember that heuristics[5] provides us practical utility rules of the following type: "Good if short, twice good". Or else, "In case of doubt, the general path". And also,

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5   A Heurismo is a mental shortcut, a general rule of application to solve problems in the absence of specific rules. For more extensive information see the work of Kahneman, D. (2008) Think Fast, Think slowly.

"Problem well studied, problem solved medium". It is clear that the human brain is very skillful looking for shortcuts that allow it to direct the action.

Intelligence Artificial, in its effort to try to imitate human mental processes, has made an important effort to simplify that we can get a lot of information. López de Mántaras, R (2017), a true current and international reference in Intelligence Artificial and Director of the Institute of Research in Intelligence Artificial (IIIA-CSIC) of the Spanish National Research Council thinks: "It is especially interesting to study the role that can be played in this approach by the techniques that provide various areas of knowledge and, in particular, Intelligence Artificial. Indeed, one of IA's strengths is its ability to automate the conflict classification process through pattern recognition based on the analysis of data. Also, other techniques as the Reasoning for Analogy based on similar calculations as help tools once classified. " (p. 15).

The appearance in 2011 of IBM WATSON Program was the beginning of what has been called in the field of Intelligence Artificial the "Cognitive Era." This involves the meeting of the social sciences and the pure sciences. So far the so-called "big data" allows to quantitatively process millions of data. In the cognitive age, in addition to these quantitative data we will have "dark data", this is the qualitative analysis of the information.

The integration of speech recognition, image and linguistic analysis programs, among others, makes technology more secure to draw conclusions about the emotions, interests and needs of the parties to the conflict. In this scenario, the call Online Dispute Resolution (ODR), even today timidly emerging, will suffer an important turnaround to be based not only on negotiation between the parties, but with techniques found on Case-based Reasoning (CBR) and Machine Learning. It will be achieved to establish analogies between very diverse cases and feedback on the applied solutions.

In the scenario we pose, it is very clear that case comparison processes can be understood, and we believe that the field of recognition of patterns of behavior and patterns of conflict will require strong development.

The necessity of a general theory of the morphology of conflicts

We have already stated that there is no general theory capable of covering the whole

area of conflict. What we intend with this approximation, in some way, is situate the scope of the morphological sciences at the intersection of the conflict. This implies admitting the idea of form and morphology for psychological and interaction processes. We believe that it can and should be done in order to submit ideas later to the process of empirical review always necessary.

From a postulate it can be said that it is a proposition not evident by itself or demonstrated, but that is accepted because there is no other principle to which it can be referred. Was Kelly, G.A. (1955) who developed the Theory of Personal Constructs and for it he used the formula to define a principal postulate and deduce several corollarys. A corollary complements the main postulate. Since then, this theory has come a long way and although it has become popular (not sufficiently to our judgement), it has made a fundamental contribution to the extraction of personal meaning and the personality theory. The emergence of the constructivists, already at the end of the last century, has rather confirmed the success of its author.

Kelly, G.A. he did not simply formulate a theory, but he built a tool called "grid technique" to put his model into application. Psychotherapy has been enriched by its contribution, in a research environment that Botella, Y. and Freixas, G. (1998) of the University of Barcelona affirm: "More than one hundred years of scientific psychology have led to the evidence that neither the most elaborate theories a priori nor the huge collection of hypercontroled microexperiments, satisfied the need to account for the complexity of human psychological phenomena; to achieve, in short, to adequately describe the object and the method of human psychology "(p.13).

Those who have worked in the field of conflict analysis have been given a perfect account of the need for effective tools, even if they are perfectible and approximative, in order to meet the needs of understanding of a phenomenon as complex as the conflict.

The experiences based on the methodology we have called Conflict Analysis Tipology (CAT)[6] and CATDOS based on the analysis of pattern conflicts and sustained contacts with

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6   For more information see the work Redorta, J.: "Conflict analysis by by patterns: The new Tool" and "analysis of conflicts by patterns: Intelligence Artificial and Conflict Management", available on Academia.eduinSpanishorEnglishversion .

specialists in the Intelligence Artificial field, they allow us to ensure that once the practical usefulness of the use of patterns is discovered, a recommendation system will simplify the work of conflict managers and generate cumulative experience.

Today, experience in conflict resolution is quite dispersed. The information existing that there is transforms little in knowledge and the knowledge that is achieved is either too specific, or too general, or too individual. We think that we'll see Conflict Management Database. They could develop the same role as occupies jurisprudence in the field of law, but handling other parameters much broader and more subtle than legislation.

Again, the analysis of conflicts help -now with technological tools-will be in the not too distant future a fertile field for initiatives of all kinds. Remember as Karl Popper said: "most ideas´s creators susceptible to development emerged by intuition; and those that are not, are the result of the critical refutation of intuitive ideas" (p. 82)

We estimate that we should we dare to formulate an outline of the General Theory of the Morphology of Conflicts. The content of which should be subject to revision. But, we try it tentatively:

FUNDAMENTAL POSTULATE

All conflict has a morphology that is its own and that remains outside the causes of it.

1. Corollarys of classification

   Morphology of any conflict is formed by a differentiable mixture of 16 elemental conflicts that conform to one pattern each.

2. Corollarys of analogy

   Every Elemental conflict and his pattern have a single prototypical mental representation that allows analogue reasoning in a particular case.

3. Corollarys of dominance

   Any conflict can be analyzed according to their degree of belonging to an elementary conflict ruled by their pattern. There are dominant patterns and other subsidiary patterns.

4. Corollary of vagueness

   Any conflict can be analyzed to a certain level of approximation to it; Vagueness is a characteristic of conflicts and all its elements.

5. Corollarys of underlying processes

   Every pattern of conflict is in turn governed by psicosociological underlying processes that explain it and on which it depends on a great extent the effectiveness of any intervention.

6. Corollary of fractality

   Whatever scale is analyzed or the scope in which they occur, elemental conflicts, essentially, follow their own pattern and their character is fractal.

7. Corollarys of variability

   Variability of any conflict does not depend only on the pattern or the combination of patterns that may follow, but also on relevant conditioning factors that should be considered.

8. Corollarys of inference

   Everyone recognition of underlying processes allows one or more conflict patterns to be inferred and the same ones target the identification of the corresponding elemental conflict.

9. Corollarys of intervention

   Everyone intervention in a conflict should be carried out considering the processes underlying the patterns that follow the same and its relevant determinants expressed in a profile.

10. Corollarys of consensus

    Although the analysis of conflicts by patterns recognition is apparently subjective, it is shown that the experts achieve a high degree of confluence in their estimations.

The fit of conflict analysis in the professional field

The searched identity in the field of conflict analysis claimed by Druckman, D. (2005)

it is beginning to emerge by little to review the literature. In The publications In Spanish, albeit timidly, titles devoted to the subject are appearing. So the work from Entelman,

R.F. (2002) "Teoría del conflicto" it was already an early contribution to the development of the field, followed by "Cómo analizar los conflictos" Redorta, J. (2004) and "Entender el conflicto" Redorta, J., (2007), or the spanish translation of Mitchell's work, (2014) "la naturaleza de los conflictos intratables" of 2014 and even "conflict Management" of Redorta, J. (2016) and "mapeo de conflictos" by Calvo, R. (2014).

All this sample of Spanish literature-not exhaustive-devoted already entirely to the analysis of conflicts, should be put in relation to the literature that is occurring in other countries and languages, particularly in English, He's already telling us something: it looks urgent and emergent delve into the field of better understanding analytical of the conflict.

That identity pursued in this field it can hatch, at any time, and create new figures of professionals in the field of conflict management through of known tools. We believe that it will not take many years to know the figure of the conflict analyst as a professional with rank and identity.

The EXTERNAL EXPERT NEUTRAL EVALUATION would be the appropriate figure to fit into the broad field of conflict management the intervention of a conflict analyst. Initially this figure has a possible antecedent in the field of law and refers to a case study concrete by independent legal experts at initial stages of the conflict in order to facilitate subsequent negotiated agreements.

Subsequently, both the figure of the "fact-finding" like the"Neutral fact evaluation" which are already quoted in the Dictionary of Conflict Resolution , already extend the field of evaluation of the conflict to all the relevant facts that configure their emergence, evolution and-usually-recommendations of management and intervention of the same ones.

Typically, a written report based on this figure contains the background of the assignment, the research methodology of the facts, highlights those that are relevant in the conflict, determines that psychological or other processes are relevant in the conflict concrete and makes action recommendations.

The training of professionals in this technique requires a strong advance at two levels:

- a) The elaboration of tools to improve the understanding of conflicts and to be tested in all kinds of practices.
- b) Deepening the understanding of the processes underlying each type of conflict.

Both aspects are clearly interrelated. They supposed both a strong empowerment of how much we know today of the conflict reality in the areas of basic and applied research, such as the training of professionals, that respond to the needs of the new times.

The design of the training should be done by modules that contemplate competencies such as group dynamics, social movements, mental frameworks, beliefs analysis, defense mechanisms, discourse analysis, synthesis capacity, recognition of patterns of conflict, power relations, emotion management, motivation analysis, expectations review, identification of actors, etc., in a sufficiently broad and concrete program to determine.

The design of the area of knowledge described must allow people using this knowledge, to produce reports that can configure that EXTERNAL EXPERT NEUTRAL EVALUATION, a tool virtually unused despite its enormous potential. Obviously, this can be done online at the specific case level. However, we argue that the use of these new resources should be leveraged through a database that would accumulate experience based on Intelligence Artificial software, so that feedbacks produced would serve to learn the machine by techniques already known and used. Of course, with the privacy conditions guaranteed to the users.

This ideal situation would allow developing a system that would start from a new paradigm such as the morphology of conflicts what linked to a model causal and integral, useful for all types of conflicts. An advanced tool and the training of professionals in conflict analysis, would constitute a genuine change in our area of knowledge.

The sequence: diagnosis of a conflict, evaluation of its probabilities of development and selection of the ways of resolution we believe that it is a critical sequence. It should not be forgotten by the theorists, nor by the practical ones. In this way, Society will rely more and better on people trained to cope with sensitive situations with much better knowledge and resources.

Conclusion

In our opinion it is clear that a significant advance in the area of "conflict analysis" is desirable. It is a specific field, in which the further decisions that guide an intervention to resolution of conflict, should be taken.

Difficulties in analyzing conflicts are objective. We estimate like insufficient the analysis of causes, so it is suggested that we can go to the "form" that may have a specific conflict. This involves developing a theory and practice of the morphology that we uphold has all conflict. That morphology is represented by a determined composition, for each specific case, of elemental conflicts. These elementary conflicts can be recognized by the pattern, following in a prototypical way.

From this idea emerges a new paradigm of analysis, that can be developed in a theory that we outline and that we call General Theory of the Morphology of Conflicts. That would require a development and concretion with important studies. Its basis is the recognition of conflict patterns and its application can be offline, although the important results would be obtained with the use of Intelligence Artificial, a question that is viable at the level of the available techniques.

The empowerment of this route of study would lead to an important use of the figure of the EXTERNAL EXPERT NEUTRAL EVALUATION, as a professional specialization That would require the development of specific training programs for conflict analysts in all fields and at all levels.

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