

# RESILIENCE, A NECESSARY PROPERTY FOR THE HOUSING PROBLEM OF USHUAIA: THE INHERENT FACTOR FOR THE GOVERNANCE

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## ABSTRACT

The city of Ushuaia, located in Tierra del Fuego (Argentina), and other urban conglomerates in Latin America, are undergoing into a crisis in urban areas, where the housing problem is shown as the witness and most obvious symptom of the crisis. The explosive population growth that has experienced Ushuaia from the '70s to these days has triggered various crises of urban and social type. Among the housing problems that have been generated we can stress the strong friction between different sectors of the people, neighbours with unsolvable housing problem that intrude state land. On the other hand there are neighbours who are opposed to these intrusions, but there are government sectors that sympathize with the intruders, so there are no government actions to prevent such activities and a significant number of laws are violated. All these factors generate the frame of a strained social situation in the city.

The native forest deforestation, pollution of freshwater rivers, the precarious living conditions of some people, the lack of systemic and coordinated politics driving by government agencies, the intransigence of some neighbours and the culture of citizens in general, result in a social crisis from which no one knows the outcome

The resilience of this society involved as a voluntary emergent property of it, can be one of the references approaches to begin a path in order to search of sustainable solutions that contribute to governance for a young State with a whole future ahead.

There are several management tools to address complex problems such as the one we have just described. These management tools and its applications will be discussed on this paper, hoping that can contribute to create the foundations for a possible settlement of the conflict. We believe that this analysis can drive to a sustainable self-organizing social system of the city of Ushuaia, in an almost immediate future.

**KEY WORDS:** Housing problem, resilience, governance, integrity, self-organization

## INTRODUCTION

In order to develop the present work we part from the idea to consider urbanization as a process of social self-organization in which emerge various relationships and where are involved different kinds of properties: social, economic, political and, of course, environmental ones. The object of study will then be the spontaneous processes and disorderly urbanization taking place in the city of Ushuaia, located at the southern tip

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of the Americas. In it, the population has almost doubled in the last 20 years, growth rates that far exceed those experienced by other cities in Argentina and Patagonian region.

We consider that there are many factors that affect the population concentration in major urban centers, particularly in the city of Ushuaia. Since its founding in 1884, no government policy took place until the 1970s, when the Argentine government applied policies promoting settlements and generating strong expectations to strengthen strategic and commercial presence in southern Patagonia.

The main tools that allowed government creates conditions for a massive settlement in southern Argentina were specific laws that had establish lower taxes and better labor advantages. Due these laws a strong industrial center materialized and, consequently, the attraction of labor that was compensated for the sacrifice living in such inhospitable land in exchange for pay comparatively higher than in the rest of the country. In this context, companies began to enjoy tax breaks that favored a relatively quick concentration of manufacturing industries in Ushuaia.

A retrospective analysis of this internal migration phenomenon indicates that the policies promoted by the Argentine national government were not accompanied in equal measure by policies of infrastructure develop and planning housing, so that urban growth in the city of Ushuaia was disordered and unplanned, and in many cases, with great environmental impacts, which have led towards today, into a social system in crisis.

In this vein, and given the relevant characteristics of the problem, we think that an orderly manner to address this complex web of interrelationships is to use the analytical tool of Soft Systems Methodology (SSM). With it, we hope to identify relationships that are key to strengthening the search of a solution that would help to create a sustainable develop of the urbanization process.

### **THE PROBLEM SITUATION UNSTRUCTURED: HOUSING CRISIS AND ITS IMPACT ON USHUAIA**

Near 1970s the National Territory of Tierra del Fuego<sup>1</sup> (TNTDF) was a site populated mostly by foreign immigrants, situation that made authorities shown a great concern about national sovereignty over that territory.

Thus, the city of Ushuaia located at the south of the Territory, was founded with the creation of a prison and a military base, thereby achieving the stable settlement of Argentinean people, but nevertheless have remained a minority in comparison with the foreigners by many decades.

In 1976, the national government voted the National Law No. 19,640, that offered great tax advantages for the establishment of industries at the TNTDF, and so the immigrant Argentinean population began to experience an explosive growth.

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<sup>11</sup> Was called in that way until the creation of the Province of Tierra del Fuego, Antarctica and South Atlantic Islands, on 26/04/1990 by National Law No. 23.775. So the Territory, until that law had been declared, was under the administration of the National Government.

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Nevertheless, even considering that wages were much higher than those paid for similar work elsewhere in the country, weather conditions and rootlessness among other reasons, people felt that they were newcomers who had the plan of stay temporarily at the TNTDF for the sole purpose of saving money and return to live again to their original places.

On the other hand, the urban planning of the two major cities of the Territory (Ushuaia and Rio Grande), always appeared as a secondary policy behind others needs strongly expressed by the people.

One of the factors to note is the lack of self-compliance of the laws and standards that characterize an entire cultural paradigm of the Argentinean people who lived in TNTDF (Province of Tierra del Fuego at present). This probably because much of the people that was far from their birthplaces felt free from have certain behaviours that may involve moral restraints to a known person in its own city but not in Ushuaia; or because the needs that need to be met urgently where the weather is extremely hostile, is the access to housing and the solution is not provided from the Government. Or even because government authorities were always flexible to compliance with the rules of occupation of public land, and of course the combination of these and other factors, turns onto a lack of self control in the population about the use of land.

In this context, the irregular occupation of land owned by the state became a common practice for an important group of people. The occupation was done with quickly erected houses, very precarious ones and in many cases these houses could be transferred to other places, because its occupants did not wanted to stay long at the southern cities.

In the case of the city of Ushuaia, which is where we study the disordered develop of urban sprawl processes, the ground was largely covered by native forests, whose regenerative capacity exceeds a hundred of years. These forests were decimated by the housing settlements before mentioned, either due ignorance, indifference or necessity.

Subsequently, over several years of application of the Industrial Promotion Law (Law No. 19.640), the conversion of the National Territory into Province and unfavourable conditions in the economy of the rest of the country since the 90s, made the transient immigrants begins to think long-term projects and plan their future as citizens of the world's southernmost city.

Against this background and bearing in mind that many of those national immigrants began to occupy charges at high government levels, after decades of lack of investment and long-term planning, these people began working on a process of reorganization and urban planning at 90s. They tried also to forecast and include the needs of the constant immigration that has been characterized the city of Ushuaia.

Currently, illegal occupation of public land is mainly due to high cost of real assets (immovable), both for purchase or renting; the lack of specific housing solutions by the State, generating a very important unmet demand of housing; also the illegal occupation responds to the substantial reduction of income from wages paid to workers that force them to choose precarious houses installed without basic services, settle at places of difficult access, which generates a strong government authorities policy of social protection, so that the prohibition of occupy those state property lands has not been protected as should be.

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There is also a group of people who despite sharing the same environmental conditions and needs that the group involved in illegal occupations, has decided to tackle the problem of procuring themselves a house but by compliance the regulations and laws. These two group of people are in conflict, because the ones who wants to comply the law, are having a major upset when they see the uncontrolled development and disaster over the forest in the upper area of the city done it by the other group.

The most important impacts of the irregular occupation of the land outlined above are: the deforestation of large areas in the mountains surrounding the city of Ushuaia, the pollution of freshwater rivers because of the lack of basic services, the living conditions of extreme emergency of the people living at areas of irregular occupation and a general malaise in the population. Because in this context the neighbours begin to be polarized into two well-defined positions: the ones who are against illegal occupation of land and the others who support intruders groups and sympathize with them.

The consequence of existence with these two positions strongly found is that induce a delay in the time when the problem will be face. No one wants to face the discussion, not even the Province or Municipal State, not even the ones who are directly or indirectly involved. As long as the time goes by, living conditions decrease for all the people and the consequences are paid by the natural environment in a nearly hopeless process.

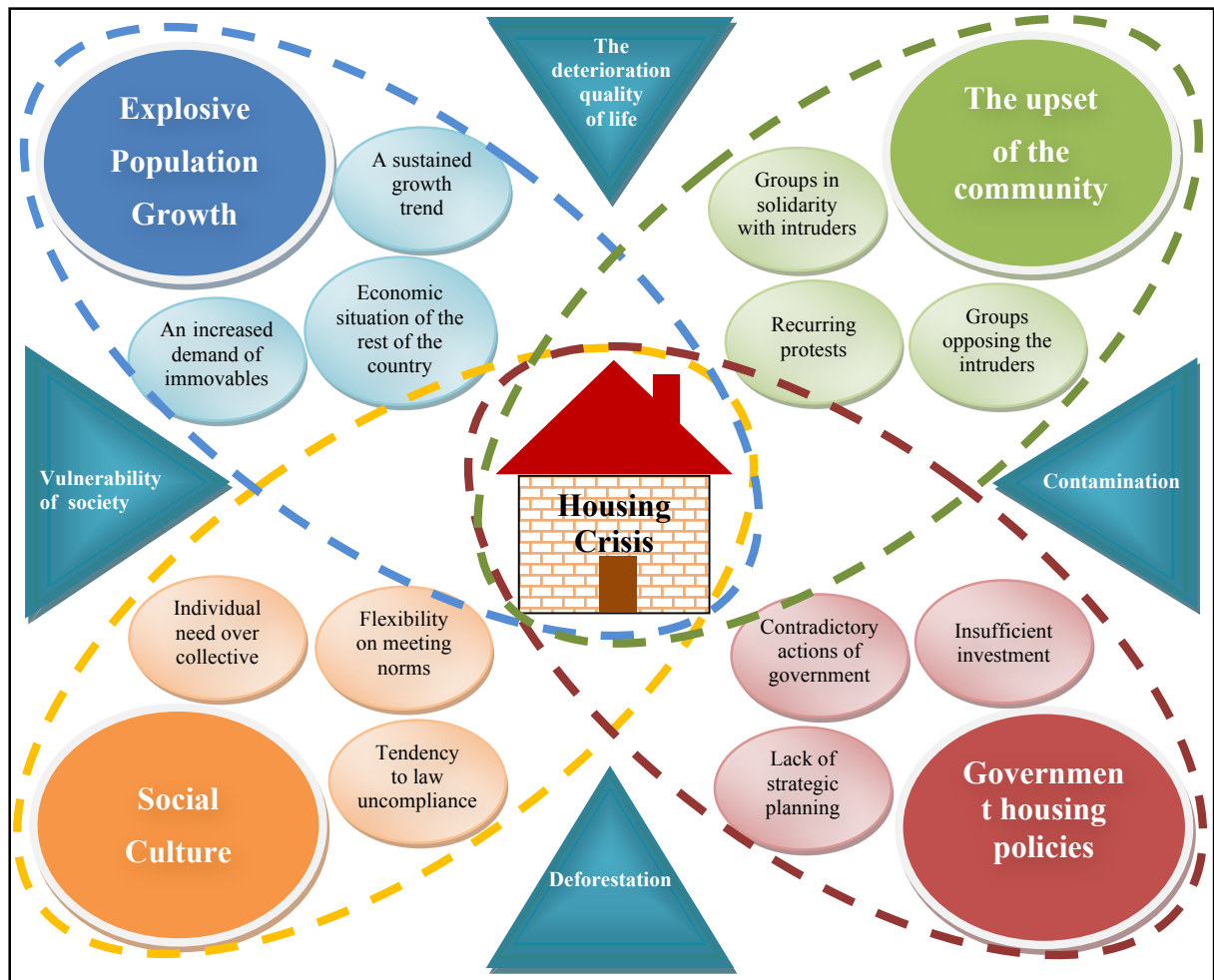
In the upshot of all this, only remains to mention the lack of vision and long-term planning that characterizes emerging countries such as Argentina's case, which leads to address these issues of strategic decisions as if they where *non-transcendental* issues, using short term tools.

### **THE PROBLEM SITUATION STRUCTURED: THE MODEL OF THE HOUSING CRISIS AS PART OF AN URBAN CRISIS**

We are aware that when we model complex problems it is necessary to focus attention on certain aspects that allow seeing more fully the whole problem. Considering that accord to the aims pursued by the model, we are trying to facilitate discussion of the housing crisis in the city of Ushuaia, we are also trying to generate as much information as possible but simultaneously simplified information over a multiplicity of interrelated factors within a complex web, whose implications require urgent attention.

Then are exposed as a simplification of the problem, four dimensions of analysis interacting each other, and which in turn give rise to the principal phenomenon in which we are focus in this work: the housing crisis in the city of Ushuaia.

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### The Explosive Population Growth:

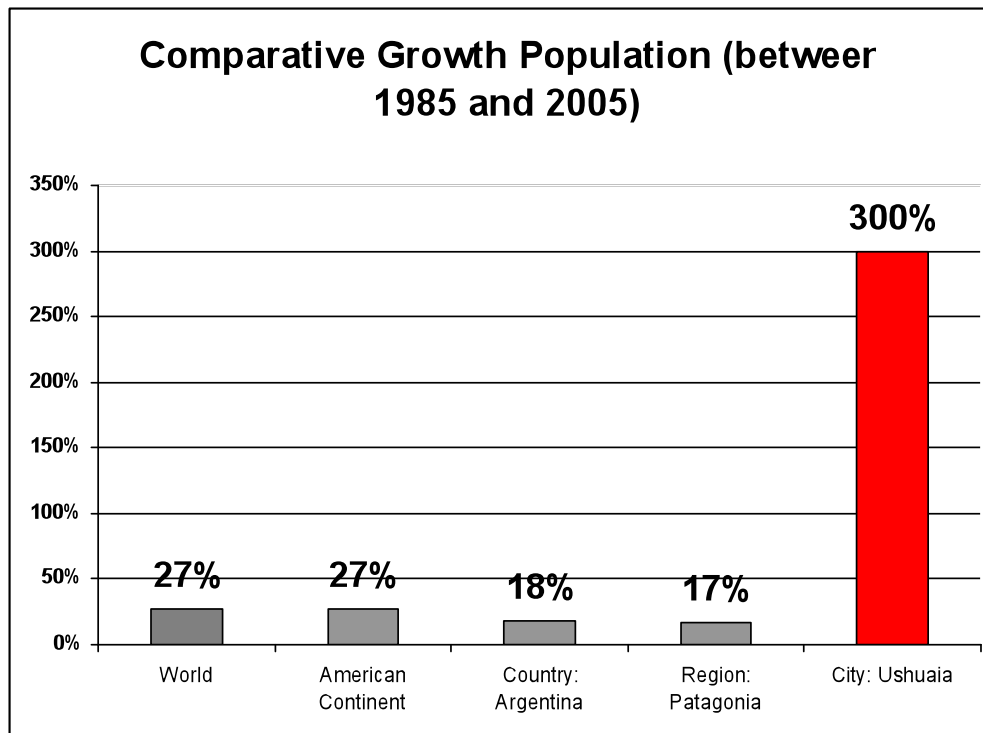
The population growth currently appears to be a determinant of the magnitude of the demands that a country or region should satisfy due the evolution of the basic needs of its population. Housing is one of these, in addition to other infrastructure-related (roads, schools, hospitals), resources (water, electricity, food), and employment.

In the past twenty years the world population has increased by about 27%, reaching a total of 6,706,993,152 inhabitants in 2008. In American Continent, where are concentrated 13% of that total, the correlation of growth has been in the same order in the same period of time. For its part, South America currently has more than 300 million people, representing just under 6% of world population.

However, overall, the population has been increasing considerably, and there has been a high growth rate mainly in the urban population. Since 1930 immigration to South America has been reduced to a minimum. However, internal migration has been very strong, which has resulted in the concentration of major human groups in cities and their peripheries. Argentina, which will not escape this reality, has shown that in the last twenty years its population increased 18%, where Patagonia region has followed a similar relationship -17% -.

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The city of Ushuaia, located south of America, has experienced between 1980-2001 an increase from 11 443 to 45 785 inhabitants, ie 300%, according to figures provided by the National Institute of Statistics and Census -INDEC/Argentina. Today the city has 105,000 inhabitants, roughly 50% in less than ten years up to present.



**Graphic No. 1 – Comparative Growth Population between 1985 and 2005**  
(Source: Own Elaboration)

The main cause of this dramatic growth, due to internal migration, there has been, as we mention previously by the conditions comparatively higher that make a better quality of life in Ushuaia rather the rest of the country. Among them may be mentioned wages, and therefore, retirements, higher than the averages of other provinces, a system of easily accessible public health, public welfare programs, such as personal pensions and grants. However, should not forget that the cost of living in Ushuaia is also higher than the rest of the country.

The population growth has an immediate correspondence with the infrastructure that is necessary to satisfy people needs. In the city of Ushuaia demand of residential properties is highly unsatisfied by multiple factors. On the one hand, public investment (that has characterized the province of Tierra del Fuego because of the lack of strategic planning) is diversified in different objectives such as schools, health centres, construction of electricity and water networks, paving streets and roads, just to name a few. In this order, the housing construction has been relegated considering that all objectives must be satisfied with a single budget, and this public budget often is restricted due swings in the economy.

For their part, private investment in infrastructure has been shifting mostly to the tourist sector, while the city of Ushuaia has great natural attractions and has a strategic position almost unique, being the most direct access port to Antarctica, which position

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this city as a major national tourist destination and a growing influx of foreign tourists that every year is enhanced.

Thus, the development of housing infrastructure has limitations not only because of the government budget but also due the so-called "opportunity cost" experienced by private owners who prefer to lease property to the tourist rather than local people. This preference can be explained due to high profitability in the relationship temporal use, taking into consideration the rentals are perceived in foreign currency and availability of the property can be allocated for short periods of time (days, weeks) to transitory guests, decreasing the risk of paid default to the minimum and thus reducing the potential risk of an eviction trial for non-payment.

### **The government housing policies:**

State housing policies are based on a legal order given by the Constitution of the Nation, of the Province and of the Municipality; the Argentine legislation protects the right of all people to enjoy *"a healthy and balanced environment fit for human development and for productive activities meet present needs without compromising those of future generations"* (Article 41 °-CHAPTER II-New Rights and Guarantees-National Constitution of Argentina). Also the Constitution said, with respect to that environment, that citizens *"have the duty to preserve it"*.

For its part, the Constitution of the Province of Tierra del Fuego, expresses in its Article No. 23: *"Every inhabitant should have access to decent housing that meets their minimum needs and their family. To this objective the Provincial Government must guarantee access to land and should enact laws that implement special housing schemes"*.

The Charter (Constitution) of the Municipality of the City of Ushuaia express in its Article 51°: *"The City recognizes the right of residents to adequate and decent housing."* In this sense, the article states that a Plan of Owning and Cadastre Regularization should be implemented based on four principles and criteria: Subsidiarity, Owning Regularity, Quality of Life (Environmental Protection) and prelation of Allocation. When we analyze all this it looks that Township-owned land are affected in preference to housing, welfare conditions respecting the community in relation to the environment.

These three legal orders (national, provincial and municipal) show important aspects of housing as a right guaranteed to the people being a declaration of principles, standards to be fulfilled by all citizens themselves. In addition, within these rules is highlighted environmental protection status to human intervention. But, as discussed in the next section, these laws have a high degree of failure both by the incompliance by its own citizens and also by the lack of control by public officials.

This latter phenomenon is closely related to the contradictory actions of the State, either on its face municipal, provincial or national level. While the process of intruding of state land has set historically a way of acquire the owning (in the city of Ushuaia), and has been developed slowly and gradually, it was dramatically accelerated in recent years. In this last period high mountain areas has experienced an absolute degradation, the native forests were decimated, with very low chance of

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recovery, an unprecedented situation. Because the first constructions on state land were made with a minor environmental impact.

Perhaps because of the immediacy of the zone of influence and because that were lands within the urban area, the municipality was the first actor to intervene in the situation, albeit belatedly. The main action taken was implement a control process and prohibit the entry of building materials to specific areas identified as vulnerable to illegal occupation. This policy did not long last due to the lack of systematic monitoring and started to loose effectiveness. Further on, the municipal policy was to disarm the light constructions and the precarious houses. But this was done under hard and conflict conditions with much of the cohabitants who had adamantly defended the right to occupy the land. But on the other hand, the precarious houses that still stood could enjoy electricity, bottled gas vouchers and free water provided by the provincial government.

Thus, sporadic actions of disarmament have not been not effective considering that families were willing to face these difficult conditions, knowing about the almost immediate access to electricity, gas and water (provided by Provincial Government) and trying to meet its urgent need for housing. The number of families was gradually increased, turning into an unstoppable intrusion difficult to control.

### **Social Culture:**

An influence variable on the problem of the housing crisis is the behavior of individuals within the social system in which this phenomenon arises. It should be noted and highlight the apparent complicity between those individuals who break the rule and those who should enforce it. Even though they know the sanction should be applied, in regard to illegal occupation of land, actions have not been correlated with sanctions.

It is very complex to discern the reason why individuals violate the rules that prohibit the occupation of green lands. Facts realize that they prefer satisfy the individual need of a house, whatever the consequences, and no matter the collective need of the rest of the community to enjoy a healthy environment.

As immediate consequences of the occupation of land we should outline the initial logging of native forests. Only to dimension the effect of such indiscriminate logging, native forests of the island of Tierra del Fuego requires over one hundred years regenerating and returning to its initial state.

After forest clearing, individuals use it to prop up a precarious wooden structure covered with light construction materials such as expanded polypropylene plates and nylon plastic, usually waste from manufacturing industries in the area. On the other hand, these precarious constructions have no toilet facilities so waste is dumped directly to the rivers of fresh water coming down by the effect of melting snow along the mountainside.

In cases where bottled gas that Province Government delivered to all these settled families is not enough, they proceed to the permanent forest logging that is situated next to the inhabited area. In short, the quality of life of these individuals is extremely precarious, being a highly vulnerable social group, who are assisted by the provincial government who deliver personal or family subsidies (usually food or cash).



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But not only the quality of life of these people is poor indeed also simultaneously, by their actions, the quality of life of the inhabitants of the city is precarized due to contamination of rivers, deforestation of native forests and modification natural landscape, all of which degrade the environment in a nearly hopeless process.

The relationships described above result into a social unrest, which will be addressed in the following section.

### **Social Unrest:**

Given the relationships that are manifested in the system under study have been organized at least two identifiable subgroup of individuals who are active on the issue of the housing crisis.

One of the group is in favour of illegal occupations, while thought about housing need is over other needs, even foreseeing the risk of decrease their own quality of life. Some of them are intruders themselves and others are city residents who sympathize with them.

The other subgroup that is against the irresponsible use of land is not only composed of city residents who are owners houses but also by those who are renting their houses, even at very high values, but no one of them decided to resort to illegal occupation of government lands. On the other hand, it is clear that this subgroup pay their taxes regularly because they are inhabiting urban areas. But occupants of green spaces are not reached by the municipal fee regime due the settlements are not recognized as official neighbourhood, creating a mismatch between all people of the same city.

Thus, while the first subgroup of people claim and demand to authorities the regularization of land ownership status, provision of basic services to their precarious homes, new streets and installation of health and education, the other subgroup claims for a solution to the problem of deforestation, water pollution, the generation of housing infrastructure to enable equal conditions of access to housing and the equalization of tax obligations as citizens of the same city.

### **ROOT DEFINITION**

Considering what we have already expressed above, the root definition would be given by the following expression:

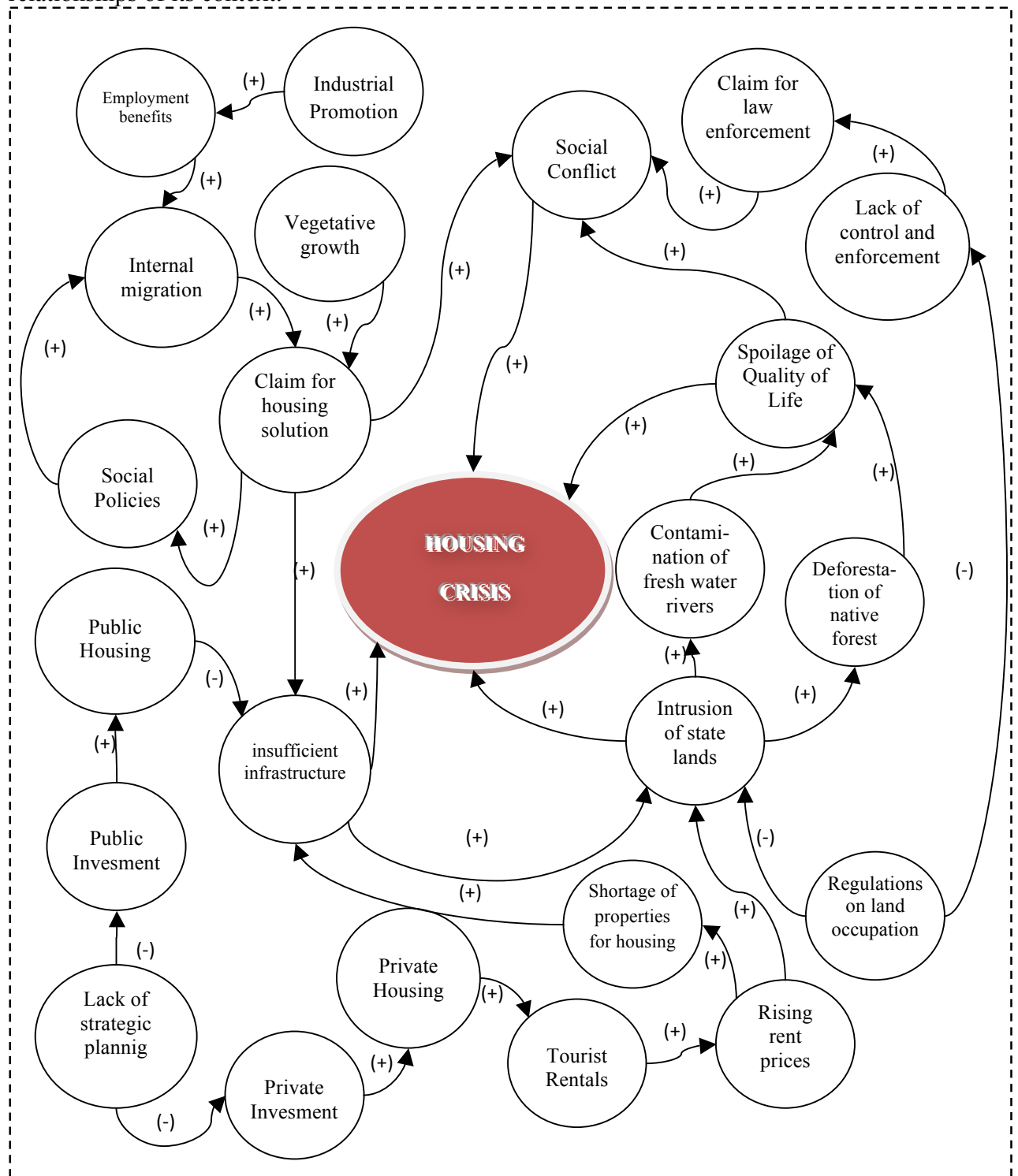
***"Interest groups and representatives of the inhabitants of the city of Ushuaia will seek to arrive at a consensus on solving the housing crisis in the framework of social solidarity, respect for rules and environmental awareness through Syntegrity process."***

### **CONCEPTUAL MODEL**

We used a dynamic feedback model to be able to visualize the relationships that link the component factors of the problem, seeking to emphasize the organizational patterns that appear, which will help to understand the emerging phenomena that

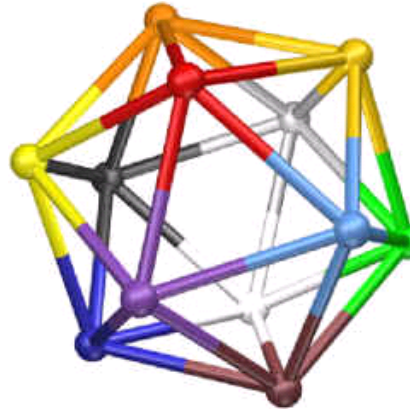
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occur in the plot of actions and reactions, the relationships and dependencies over underlying relationships. Also we can appreciate the interrelationships among the factors that are involved in the problem that we previously discussed, and some relationships of its context:



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### ACTION TO IMPROVE THE SITUATION PROBLEM: TOWARD A SOLUTION WAY



*"It was Paul Watzlawick, but someone before him, noting that asking someone to be spontaneous is impossible. Stafford Beer, the father of Management Cybernetics, got it without any kind of motivational techniques, animation, or surgery. The Team Syntegrity simply develops a framework for self-organization, to generate creative spontaneity values and purposes and for creating an intelligent order. The method ensures that there is nothing that participants can do wrong, and that in a completely natural, what you do is correct."*

*Cwavel Isaf Institute*

If we recognize and highlight the complexity that shows the problem addressed in this work, we should seek for solutions to the housing crisis in the city of Ushuaia using tools that allow us to manage this complexity.

While there are numerous techniques, methodologies and tools for strategic shift of human organizations listed by Ricardo Rodríguez Ulloa in his seminar "Crisis of Paradigms" Root Cause" (Trelew, Argentina, 2009), some relevant characteristics determined in studies developed by Stafford Beer make Syntegraty the best and appropriate proposal to search the solution of the studied problem.

Syntegrity is a methodology proposed by Beer to make decisions that involve a multiplicity of relationships as a result of the multiple aspects of a given problem, is developed over three or four days of group work and used in solving complex problems, particularly those where there are multiple points of view, as is the case with the housing crisis in the city of Ushuaia.

The proposed procedure facilitates the parallel analysis of different aspects of a problem. It should be noted as an advantage over other conventional models of complex problem solving that Syntegration operates in a non-linear way, interconnected through threads that acquire the characteristic of "reverberation" about the decision system.

In order to get a whole analysis over the housing crisis and to guarantee an assessed properly solution of comprehensiveness through the Syntegrity process is necessary to gather a large number of people who are key and / or representative of various interest groups, although their points of views are not precisely known or understood at the outset, must be people who will recognize because theirs contribution is necessary. Without their expertise, experience or personal perspectives are lacking a whole look.

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Beer choose the icosahedron as synergistic communication structure and "tensegrity" (English, tensile Integrity). The icosahedron has 12 vertices, each of which represents the various issues discussed by the participants of a Syntegration and representing the various aspects of the problem to be addressed. Each topic should be identified with a different color. The icosahedron also has 30 axes. Each represents a team member. Each participant then has a personal position in this structure, from which together with other influences on the twelve themes. Thanks to this system of participants will get that information is distributed to all subjects self-regulated. The symmetry of the structure leads to an optimal democracy and not marginalize any participants. The method and its basic mathematical structure ensures that there is no possibility to order thirty people more effectively from the point of view of the interconnection and exchange of information (the mathematical calculations are in the book Beer: "Beyond Dispute"). Each participant has the same possibilities to influence the outcome and is uniquely positioned to maximize their strengths.

The process proposed by Beer Syntegrity develops in stages that are presented below, and expected, can be implemented by stakeholders involved in seeking solutions to the housing crisis in the city of Ushuaia.

**1. Opening:** The Syntegrity begins with the definition of an initial question about a particular topic. Then he proceeds to decide which participants will form the team, following criteria of knowledge, experience and function of each.

**2 Generation of the Agenda:** At this point you will decide which issues to address 12, ie each of the themes for each vertex of the icosahedron (judgments of importance). Will the participants who made this process through their individual contributions (relevance judgments) and after successive processes of synthesis and prioritizations will end deciding the 12 subjects. (Consolidation of Judgments of Importance). This ensures that the work schedule is not a foregone conclusion, since a Syntegrity aims to reach conclusions after a methodical process of continuous learning, also achieved the involvement of each participant as they end up studying those subjects that they consider important.

This process consists in:

**Generation 2.1.- Judgments of Importance:** A meeting to discern the background of the initial question and its possible variations.

**2.2.- Jostled Problem:** A forum in which they discuss and negotiate their possible topics.

Hex

**2.3.- Reduction:** Reducing all items proposed initially to reach number 12.

**3.- Auction Items:** Each team member would prefer to decide on which issues to address. A list of individual preferences forms the basis of allocation to multiple computers, with the help of an optimization algorithm. Alternatively, random assignment to groups. Each participant assumes three different roles: team member on two issues, Critical issues in two, four issues Observer.

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### 4.- Resolution Conclusion: They begin the meetings.

At each meeting, sit around one table the five components of a computer in a subject (symbolized by a color) to explore and discuss. Each team member also belongs to the team a second theme (compare the icosahedron: each edge has two colors), with which he is the direct link to information about this topic.

In the second row of the same meeting, the back of the room, sit the five critics of the red group. Its role is to give the group feedback twice about five minutes, with reference to the contents or the development of the discussion. Each of the five critics also critical of a second subject and himself, as any other participant in the Syntegrity, a member of the team in both issues and observer in four subjects, thus ensuring re-connection information with other issues. Experience has shown that criticism is very positive, unlike other forms of action, and that is institutionalized in the role of the critic. A critic is expected to give the group feedback. Each participant works as a critic, also alternating in the same person the roles of critic and criticized by others as a team member. In the third row are seated observers. They come and go during the meeting as they please. They should not get involved, but provide interesting things to own equipment or components which are critical.

The group has at its disposal a moderator, who keeps a poster which members discussed and feedback from critics. It is he who, after the meeting, gives the conclusion of the team in one or two pages in the form of judgments. The moderators do not have any influence on the content of the issues, but allow participants to have maximum space for reflection. Each of the sentences of the 12 teams were distributed among 30 participants.

At the same time meets the red team, sits in a second room the white team, also with five components, five critics and observers. After the red and white groups have completed both their first meeting, begin the next two teams (black and light blue) its first meeting simultaneously. This goes on until late every issue has been worked the first time by the appropriate team. This means that the order of the twelve meetings on topics given simultaneously held two meetings on topics that are situated opposite each other in the icosahedron.

As is always the same people working on different issues in different roles, they carry with them the ideas, arguments or procedures of an item to the next. This makes another fruitful discussions, but without getting out of control, because increasingly discussed only five people and each group is subject to the pressure of having to write a statement after the meeting, which of course also may reflect existence of a dissent.

The major effect of the Syntegrity begins to be felt clearly to participants from the following day. Each team met again with the same composition as the previous day and continues to work from the point to be reached in the first meeting. In English this is called a reverb effect. It could also be called echo or reverb effect. The ideas and arguments, for example, a component has been planned in the gold issue, hear the other four components, five critics and an observer. And while an argument on this issue does not come later in the post, is being recorded in recent memory of others. This is the reason why a person is suddenly evoked own argument by someone else

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(echo). When each team meets the second or third time, thanks to the structure of the icosahedron has at its disposal all the information of the other computers automatically. The information starts to flow from the icosahedron and seems to look for herself the place where it can be useful. The exchange of information and coordination of thematic development occur in a self-regulatory. With the icosahedron, participants are offered a structure that allows them to organize themselves, which is a true learning organization. It demonstrates that information is shared among all participants as the number of iterations of team meetings. After the third iteration has managed to distribute about 90% of the relevant information about the initial question to all participants, or put another way, 90% of the information of the interconnected system has become homogeneous, and allows participants to find their best possible solution. In other words, it is enough to hold three meetings per subject in a Syntegrity according to the diagram, until the additional investment in an iteration longer justify the increased utility accessory. The afternoon of the third day the final sentence is presented by topic, the result of the Syntegrity documented that each participant can take home. The final judgments of all teams fit together like puzzle pieces by coordinating self-regulatory issues. Together they result in a complete response to the initial question posed at the outset. The judgments documented in response to the initial question, which were collected all the best knowledge of participants, but are the result of a Syntegrity. In most cases these are concrete plans of action to take. A second result is what has changed in the minds of participants. In a Syntegrity there has been a learning and mutual understanding among all participants, who have had the opportunity to abandon habitual patterns of thought and to learn the views of their peers beyond their own barriers. A third result is the joint vision and commitment of the whole group to make final judgments documented. A quarter of all Syntegrity result is the formation of an interconnection or team among the participants. In the process of monitoring a Syntegrity usually return to reflect the findings written in a general, complete and detailed where necessary, to be submitted as a proposal for decision and to support the budget measures wherever necessary and implement them properly. Experience has shown that a large part of the measures, however, requires no budget or isolated control of the project, since it is covered by the commitment of the participants, those with a vested interest in its implementation so do. However, it performs a check on the implementation of measures to what is used often another peculiarity of the structure of the icosahedron. Always six of the thirty people together constitute octagonal September 1 covers all of the twelve subjects. Therefore, the octagonal structure there are five sets of this type. With one of these five sets you can keep working after the Syntegrity to be more specific and detail the measures, as well as a control group that ensures that the measures are implemented as determined in the Syntegrity. Finally, turning to the idea of the metaphor of the ant community from complexity theory, being urbanization a self-organization process we considered that further action of these thirty members, upon completion of the process Syntegrity in their respective interest groups, will help to shape new patterns of organization whose objective is the sustainable development of the housing system of the city of Ushuaia.

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### **FINAL CONSIDERATIONS**

The reality of the city of Ushuaia has changed significantly and rapidly, while its citizens are confused, insecure, abused, aggressive and with the right to demand prompt solutions, efficient and as they want to the governmental authorities.

It is imperative to recognize these changes in order to adjust the relationships of the community to the current context. Process must take into account the responsible use of natural resources like land, water, forest and landscape among others.

It will require a change organized, methodical, within a framework of law compliance and reducing the ambiguities over their interpretations.

All changes and adaptation will get best result if the community involved adopts a positive way, boosting the chances that the situations past, present and future will teach something.

The future poses an uncertain future, so it is important that community focus on achieving goals, and that individual or sectorized interest should be behind the interest of the community as a whole.

If we go on expecting a solution from government authorities only, may occurred the worst the situation described here. As a proactive member of the community this will help to address these risks and others, even before they occur.

The first step starts with a planning process to formulate appropriate strategies to meet as many interests in a complex social system that it is in constant change.

Considering all these aspects, it is believed that the actions of the state is legitimized by the efficiency and quality of their actions, with the accompaniment of the people may have adequate guidance to the public interest.

### **CONCLUSIONS**

The present study addressed from the perspective of complexity and using a soft systems methodology (SSM), the processes of spontaneous and disorderly urbanization taking place in the city of Ushuaia, located at the southern end of the American continent, whereas their processes of social self-organization emerge various properties and relations are involved social, economic, political and environmental.

The historically unprecedented population growth in the city, lack of housing solutions, the housing boom, among other factors has created a new housing crisis in the city of Ushuaia and irregular occupation of public lands at rates much faster than in previous periods.

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The lack of policy coordination between the three authorities, municipal, provincial and national levels, aggravates the problem paying the consequences of this

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situation the natural environment. The environment offers no resistance to the advancement of many desperate families who seeks to procure a roof and the environmental cost is the least important of their current situation.

We have highlighted some sporadic policies of the municipal government to solve the problem because the discomfort that felt a part of society make them alert over environmental problem that is worse with no limits.

On the other hand, there are serious violations of laws and ordinances governing the occupation of green spaces. The authorities responsible for enforcing these regulations do not exercise their authority, in complicity with those who breach them. In short, there is a social crisis triggered by heavy uncompromising positions of social groups that support and do not support the irresponsible use of land.

It is necessary to start work on those positions whose primary objective is to achieve consensus and protect the environment, for which we propose the implementation of Syntegrity process, developed by S. Beer, developed with seriousness and responsibility so that they can arrive to a state of development of sustainable nature.

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