# Between Information and Communication Process, the Territorial Intelligence, as a Network Concept & a Framework to Shape Local Development

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#### **Abstract**

With the benefit of 20 years' hindsight of error-test process associated with our research: territorial intelligence; we shall try, by this contribution, to suggest a theoretical frame of "territorial intelligence" as a faculty of collective intelligence on a territory or as a result of a common representation. In order to illustrate and explain the theoretical framework that we are suggesting in this paper, we will conceptualize from our experience in company and also in research, in France and abroad. This specific integration of theoretical and experimental components is a promising model to overcome the obsolete subdivision between "theory" and "practice". Today, European and French laws dealing with national and regional development are increasing: intercommunity projects, the question of agreements between State and Regions, etc. What does have to do with technical and administrative laws? We don't say that we have the fully answer to this question, however, we can give some requirements and characteristics of body's socio-territorial progress. These political bodies are seems to be in line with politics and economics, under a council or a government's member leadership. In fact, these units have organized themselves around both, the same experience and the same culture; based on an historical continuation. This work is intended to get a new network organization. In this paper we would like to contribute not only to a better knowledge of local actor's links but also to give appropriate answers to these questions. That is why we named this paper "Territorial intelligence: a network concept & an info-communication framework process"

**Keywords:** Communication, Interaction, Links, Network, Territorial.

#### Introduction: The territorial intelligence, a horizontal approach and a network concept

« The reality is clear: each civilization, more energy efficient complex, which appears in history, intensifies the space, flow and density of human exchanges, and creates more links between humans<sup>2</sup>. » (Rifkin, 2011, p.29)

#### And, following,

«Milestones in the economic history convergence spring from convergence between a new energy regime and a changing communications<sup>3</sup>. » (Rifkin, 2011, p.40)

The development of citizenship, democracy, social equity, as well as social and economic progress, is the main objectives of territorial development and territorial governance. The systems of territorial intelligence need using traditional transmission processes of information through Tics as, Intranet, Extranet or internet Web sites, library, systems of geographical information and method analysis of data. But, in our opinion, all local levels do not originally have the same capacity of access to development because exchanges and transfers of expertise available between local actors do not occur spontaneously. This harmonious matching between shapes of development, meaning the endogenous and the exogenous ones, is gained through mutual recognition of members of the territorial network towards the information exchanged.

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<sup>&</sup>lt;sup>2</sup> Personal translation adapted from Rifkin (2011)

 $<sup>^3</sup>$  ibidem

# 1. The territorial valorisation: a horizontal approach.

Whenever a territorial district is thinking about the next orientations of its own future, indeed it implies an act of development. In other words, it initiates a process of global competitiveness and in our opinion, this process aims at making several categories of very different actors to adopt and share the same aim or approach. Planning to develop is also and mainly a state of mind: one foot in business, the other in duties of general interest. Declining a local development policy means to gather all kinds of businesses and companies in order to come along with these actors throughout their development and their mutations.

Still, this movement, relies on a horizontal approach, has based on three essential mainstays.

- 1. As for the economic concern, the local decision makers have to face with companies needs: offering in an unique place, either physical or immaterial, both expertise and expected services as well as proven experiences, known or to be known.
- 2. These resources can be assimilated to a current assets or current products portfolio owned by the territorial authorities.
- 3. The interfacing section that favours local development by gathering energies through common projects between the environment (universities, politics, research) and the economic world.

Only men of good will, well-informed local actors with a rigorous diagnosis and an ambitious project, can realize such a horizontal approach. This stage is putting in relation three categories of local actors: companies, education authorities and institutions. Moreover, it favors proximity relations while creating development dynamics to create new jobs for youngsters. In our opinion, the potential of development mainly relies on these capacities to exchange, that is what we are calling the transferability capacities (Lévy, 1997).

# 1.1. New environment, territorial history, local custom memory and concealed factors of local development

According to different points of view, territorial history and local custom may appear like either the reflection of one territory identity, or the components of its formal resources. This is to say the rules and procedures to formulate local habits for development purposes.

For its own development, a territory can choose either one or the other, if not the all two both, of the following strategies.

\*Favour the setting up of companies: this will deal with an exogenous development mode. Although this option is in favour with most of the elected representatives, it remains out of reach very often.

\*Optimize the required conditions to allow local activities to generate more activity and more jobs.

#### 1.2. Relations deeply linked to a territorial history

The history of these relationships linked to the very past of actors is structuring their present and, may be, future relationships. The content of their relationship history allows them or forbids them to invest in their future and conditions the development of organizing structures in favor of a development of cooperation relationships.

We, therefore, will express the following hypothesis: "The existence or non-existence of a relationship network between local actors could prove to be an obstacle or a catalyst of local development to creation and setting up of activities outside and inside the territory." (Bertacchini, Lebreton, 2002).

# 1.2. The local development based on shared practices

According to us, the best way to learn at a local level consists in creating new relationships between already existing competences (Bertacchini & Alii, 2000) and then transferring these competences and skills between the actors themselves. But the ability of the territory to gather these competences depends on the network richness of co operations existing or to be created. Even if most of the effective relationship inside the territory reveals to be informal. Indeed, it would be more profitable to organize the meeting of local actors used to mobilize their competences independently.

#### 1.3. Towards the transferability of located skills

The local learning can be achieved through the transfer of competences from one local structure to another. Still, such a process is long and difficult to achieve. There is a risk not to be adopted.

This learning can result from the juxtaposition of different experiences or experimentations; combining of the two has the favor to promote the territory. The implementation of a monitoring system through a info-communication socio technical device could help the appearance of a federating process, and the promotion of competences transfer.

Still, this requires a positive attitude towards local development. This predisposal is not as frequent as the intending declarations: it avoids then every possibility to learn and cooperate locally. While implementing a spatial valorisation policy, new knowledge are developing in their turn which contributes to enhance the local development policy. These observations underline K.R.Popper's thesis: "Any learning result leading towards the emerging of new knowledge can't be anticipated." (Popper, 1984).

# 2. A federating project of local customs: reinforcing the capacity to mobilize local skills.

As mentioned before and in consideration within our present proposal, every territory differs by its own organization and formal resources. The local identity may be the keystone of development at the local level.

#### 2.1. The maintaining of an open and dynamic-balanced system

As we mentioned above, our approach is finally based on a cognitive analysis. The local organization relies on the interaction of direct or non-direct actors, and on their relationships regarding the environment. The theories underline the multitude of aspects to observe, as well as the influence of environment on the local organization and on the other way, on the attempt to achieve a dynamic balance of the system within its environment. Such a disposal develops to allow a structure to organize itself in order to keep, to maintain its identity. (Bertalanffy, 1972)

#### 2.2. Typology of actions to be held by a monitoring system

This so indispensable richness call to the territory needs to be protected on the same level that the richness of the organization (Bertacchini, 2004). It represents what we called *territorial intelligence* that monitoring can include two different types of actions:

- Systematic acquisition of information transmitted to the involved local actors.
- Protection of the territorial patrimony.

# 3. The info-communication framework process

We are going to return over the period covered by our researches, works, and studies for more than twenty years and we shall try to encircle the sliding operated towards the territorial intelligence such as we defined it (Bertacchini, 2004) and proposed as info-communication paradigmatic frame. First of all consideration, and for whatever purpose it may serve, we must point out the analyze suggested by Rifkin<sup>4</sup>.

"The convergence of the energy revolutions and communications do not only reconfigure the company, the roles and the social exchanges, but also the human conscience. Revolutions of communications change the space-time orientation of human and, by doing this, the way in which their brain apprehends reality." (Rifkin, 2011, p.42) With for consequences, "Civilizations consuming moreover of energy and more complexes make it possible human to compress time and space." (Rifkin, 2011, p.44)

# 3.1. Three assumptions to shape the formal capital of a territory

We will define the territorial intelligence as "an informational and anthropological process, regular and continuous, initiated by local actors physically present and/or distant who adapt the resources of a space while mobilizing then by transforming the energy of the territorial system into capacity of project. So, the territorial intelligence can be comparable with territoriality which results from the phenomenon of appropriation of resources of a territory then to the transfers of competences between categories of local actors of different culture. The target of this step aims to equip the territorial level to develop of what we named the "territorial formal capital.

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<sup>&</sup>lt;sup>4</sup> Personal translation and adapted from Rifkin

The Territorial Intelligence can be compared with the territoriality which results from the phenomenon of appropriation of resources of a territory; it consists in know-how transmissions between categories of local actors of different cultures." (Bertacchini, 2004).

The territorial intelligence, this collective ability of the territory to anticipate breakdowns which will reach it, requires the implementation of an evolution of its info communication culture (Herbaux, 2007). We here will specify the main features of this info-communicational paradigmatic framework. This informational process, as much as anthropological, supposes the conjunction of three assumptions (Bertacchini, 2000):

- The actors exchange information (energy rule);
- They grant credit to received information (information data);
- The process of communication thus established, the actors establish the suitable networks and transfers their skills (*project dimension*).

# 3.2. Local territorial energy based on internal signals and external flows of information

This transformation of relations and exchanges, logic of project, must then lean with another treatment of signals and information. To communicate differently, while taking part in a joint project, acts on the individual bonds and modifies relations with the others (Rifkin, 2011); thus relation of exchange leaves the daily life to reach an alterity of the shared project then there are individual capitalization and valorization of their missions; this put in common (pooling) and setting in prospect for conjectures, are as many opinions based on the analyses of assumptions which ensure a continuous and interactive flow, formal and semi logical of a relation to the group. The culture of the organizations, in all aspects of governorship, takes then, by its recursive aspect, a durable character.

All is business of meaning on level of action of the object and in the identity acquired by territorial actors; it thus constitutes a paradigm of meaning and identity. The territorial identity seems like capacity of actors to formulate then to formalize their development project (Lakoff & Johnson *in* Rifkin, 2011)<sup>5</sup>. Thus, territorial dynamics draws its existence from making more complex its networks acting in the social debate and energy implemented makes it possible to evolve a new territorial object. The endogenous territorial innovation has to be fed from internal signals and external flows of information. It is a question of collecting data flows to be treated uninterrupted to detect in time threat and to possibly seize opportunity (Herbaux, 2007). The collected answers offer a beam of new tracks to be explored in concept of mutual system of knowledge. Capitalization of signs and information put in prospects, offers to the local possible futures ready to thwart threats where uncertainty (Bouchet & Alii, 2008). The creation of this anticipation posture carries in germ attributes a democratic tool divided by the actors of the local, more closely associating them with a territorial strategic vision. The actor term, by this shared resource, takes all its meaning then. The Researcher, in our design, even becomes actor of the territory, or may be the expert (Bertacchini, 2006).

Territorial information takes meaning and utility only through a communication context between local skills. And communication can be done only in a specific cognitive context, because information itself, component of communication, is function of the cognitive structures, their operating process and their levels of abstraction (adapted from Damasio, 2006). Lastly, communication also depends on our relationship with time and our capacity to align us over exogenous time, time of the others, and our interactions with the environment. One can thus write that communication is registered in a space time dimension where information takes its meaning in an interaction context. This observation shows how high is the interest to identify cognitive maps of territorial actors to be able to treat communication in a dialogue context and to promote territorial interactions basis of the concept of territorial intelligence.

# 3.3. Mutual modeling of "a common world" because acting to communicate

Territory becomes a place of resources where local actors, in a set of capacities built around stakes of appropriation, of legitimacy, of identity and which, inevitably, requires the resolution of emergent conflicts in a context of territorial dialogue. We had advanced the assumption that definition of a territorial and information system (Bertacchini, 2007) and practice of this one by territorial actors could support the territorial dialogue.

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<sup>&</sup>lt;sup>5</sup> adapted from Rifkin (2011)

To reach a conceivable resolution of these conflicts, the considered solution must take into account problems of setting into a network the couple "individual - society", because it is trough resolution of these problems, basis of social regulation of interactions, which reside on the territory.

We can draw three reports from them:

- -Territorial dialogue has to be supported on the principle of a "mutual modeling of a common world" because acting to communicate is a play of search for interest community and identity assertion.
- The territorial objects, physical, abstract or symbolic system, plays a central (crucial) role and makes it possible materializing the potential social link and its stakes between local actors on the territory.
- Defining a system of territorial observation is desirable if it can help (and only in this condition) the local actors with reciprocal comprehension by training via the introduction of a physical and/or virtual network of local skills.

In this approach, we stressed the development of territorial elements. First of all the territorial objects are being human constructions that it is in their representation, physics or virtual or in their effective realization. They, for us, are thus always associated with a meaning, logic, a history (Bertacchini, Dou, 2001) but they are also objects of resources available for the local actors. To give an account of this phenomenon appropriation-construction-territorial, we chose to refer to us to a metamodel (Schwarz, 1997). Indeed, the territory is before a whole system-space composed of resources for the actors, therefore is prone to appropriation. The dialogue caused and learned by a development policy adapted to the local context can support this appropriation. Multiplicity ad variety of information data liked the objective of knowledge transfers between the local actors, lead us to imagine a territorial system. Definition and then later design of a territorial system could help with bringing together categories or groups of local actors and mobilize around such a project by offering in number occasions of exchanges and interactions.

#### Discussion

With our direction about development of this system of observation, territorial information, a network of this nature can support the meeting, coordination and transfer of skills locally available. Because without this transfer, potential of the territory *i.e.* its past and memory will disappear at the rhythm from fragmentation of its pieces and speed of extreme mobility of its citizens. While reinforcing exclusions which we previously named: cultural, economic and technological. We will be able, in addition, to note that this choice of presentation makes it possible to better define the concept of territoriality, its dimensions and the social practices which are associated for him. Because, if we think that territoriality, true info communication phenomenon, which makes it possible to transform space in territory this last, can be built only using the transfer of identified local skills. However, the constitution of layers of skills and their transferability rests on cross by engagement and the accompaniment of local actors.

The design and diffusion of tools, methodologies and accessible research protocols, on the one hand, with researchers engaged in Social Sciences and, on the other hand, with the actors of the sustainable development of territories will not be able to replace the "lived solidarity" as described by Morin (1990 and followings), will accompany it with, in parallel, the applicable overall constitution of data for multi-field research and territorial actions. To reach obtaining these operational results, we located two categories of specialized actors intervening into the field of territorial intelligence. We will indicate the first category as being the 'geographers of Tic', those, which raise fields of application of territorial intelligence, its spaces then limit them. The second category of actors, we will name it the 'geologists of Tic' i.e. those which measure some, and depths of uses reliable within Tics in the territory (Bertacchini, 2010).

But in a world redesigned by mobilities, flux and world competition, a challenge, unceasingly renewed, awaits us since a new territorial project has to be decided.

#### References

- Bertacchini, Y., (2010). « Onto the way of territorial intelligence: from a retro reading to a forward looking », Revue internationale d'intelligence économique, pp 65-97, 2010/1 (Vol 2), Lavoisier, Paris.
- Bertacchini, Y., Rodriguez, M., Souhari, W., (2007). "From territorial intelligence to competitive & sustainable system. Case studies in Mexico & in Gafsa university", *Second International Annual Conference of Territorial Intelligence*, Huelva (Spain).
- Bertalanffy, (Von) L., (1972). *The history and Status of general systems Theory*, in G.Klir, Trends in general systems Theory, New York, John Wiley, Interscience.
- Bertacchini, Y., Maurel, P., Deprez., P., «The territorial intelligence: a network concept & an infocommunication process framework», International Symposium on Language and Communication: Research trends and challenges, Proceedings book, pp.979-978 Institute of Language and communication Studies Faculty of Communication Atatürk University, Turkey, Izmir, june 2012.
- Bertacchini, Y., (2007). « Du gisement des compétences locales & de leur transfert : quelles modalités ? », Revue *Questions de Communication*, série Actes 3.2006, *Formes de l'engagement & espace public*, pp.437-447.
- Bertacchini, Y., *in* Pennalva, J-M., (2006) «L'intelligence territoriale: posture théorique, hypothèses, définition. », in *Intelligence collective*, pp.9-17, Presse de l'Ecole des Mines de Paris, Paris.
- Bertacchini, Y., (2004). « Le territoire, une entreprise d'intelligence collective à organiser vers la formation du capital formel », p.35, Revue *Communication & Organisation* n°25, Les vallées : sens, territoires & signes, GREC/O, ISIC, Université de Bordeaux 3.
- Bertacchini Y., (2004). « Entre information & processus de communication: l'intelligence territoriale », Les Cahiers du Centre d'études et de Recherche, Revue *Humanisme et Entreprise* n°267, La Sorbonne Nouvelle, Paris.
- Bertacchini, Y., Lebreton M., (2002). « Acteurs locaux, Réseaux et Territoire: représentation du potentiel d'action local », 70<sup>e</sup> Congrès de l'Acfas, Montréal, Canada.
- Bertacchini, Y., Dou H., (2001). «The Territorial competitive intelligence: a network concept», *Colloque VSST* '2001, Ecole Polytechnique de Catalogne, Barcelone.
- Bertacchini.Y., Boutin.E., Dumas, Ph., (2000) « L'analyse des relations entre les acteurs locaux. », 5<sup>ème</sup> Journées Internationales de l'analyse des données textuelles, Ecole Polytechnique Fédérale de Lausanne, Lausanne.
- Bouchet, Y., Bertacchini, Y., Herbaux, Ph., (2008). « Intelligence Territoriale et cindyniques, ou le danger réduit par un phénomène informationnel et anthropologique », 16<sup>e</sup> Congrès de la Sfsic, « Les sciences de l'information et de la communication : affirmation et pluralité », 11-12-13 juin, Compiègne.
- Damasio, A., (2006). L'Erreur de Descartes : la raison des émotions, trad. Fr, de Marcel Blanc, Paris, Odile Jacob, p.315.
- Herbaux, P., (2007). Intelligence territoriale. Repères théoriques, Questions contemporaines, L'Harmattan, Paris.
- Lakoff, G., Johnson, M., (1999). The embodied mind and its challenge to Western thought, New York, Basics Books.
- Lévy, P., (1997). Collective Intelligence: Mankind's Emerging World in Cyberspace Plenum, New York.
- Morin, E., (1990). *Introduction à la pensée complexe*, ESF, Le Seuil.
- Popper, K.R., (1984). La logique de la découverte scientifique, Paris, Payot.
- Rifkin, J., (2011). Une nouvelle conscience pour un monde en crise, LLL Les Liens qui Libèrent, 648 p.
- Schwarz, E., (1997). *Toward a Holistic Cybernetics. From Science Through Epistemology to Being*, Cybernetics and Human Knowing, Vol. 4 n° 1, Alborg.