

Area 2

Knowledge as a catalyst for the economy

The rediscovery of the individual in knowledge production

The engineering of regional development in Alpine areas

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Abstract

Various crucial *living building sites* of knowledge production, which have been active for over ten years, can be observed in a few Alpine valleys and in the analysis of similar experiences conducted in various rural areas of Europe. Such experiments have allowed studies to be carried out. Several events have been documented on and about the different mechanisms able to generate influential changes, especially concerning the interpretation of the *life-framework* of the people living in a specific region. The common aim of planning and researching in this field, is the inversion of an ensemble of devolutionary phenomena ordained to quickly deface the existence of entire cultural and linguistic entities.

The experimental projects, which are the core of the research mentioned above, have developed from the fact that, the mere economic interpretation of the transformation of social peripheral regions does not seem to provide the means necessary to induce significant changes in strategic aid policies.

This problem raises several questions, above all:

- to what extent are far-off areas destined to lose their cultural and linguistic identity, suffering from the unstoppable migratory flow of young generations towards large towns and cities?
- How can social communities, who hold a substantial cultural and historical heritage, protect their identity and purity through the creation of appropriate museum and conservation facilities?

Starting from a signal determined by certain type of cultural geography, which has brought “into discussion the purpose of reason in the understanding of social facts” (Matera, 2002)¹ in reference to the growing concern about “the comprehension (meaning description & explanation) of how human beings live inside their world, how they give significance to it, and also how they adjust it according to their desires” (Corna Pellegrini, 2004)², a new methodological approach is starting to take shape. This approach is related to the work done in specific geographical and social areas, that seems to forerun the development of a new conception of the idea of *learning region*.

The conclusions attained by the study related to the issues previously set, cause a profound revision of a whole variety of “naïve” perceptions. Through these perceptions it is possible to enumerate the

¹ Translation from the Italian: “in discussione il posto della ragione nella conoscenza dei fatti sociali”; Matera V. (2002), *Etnografia della comunicazione*, Carocci, Roma.

² Translation from the Italian: “comprendere (cioè descrivere e spiegare) come gli uomini vivono nel mondo, lo mettono in valore, ma anche lo modellano ad immagine dei loro sogni”; Corna Pellegrini G. (2004), *Geografia dei valori culturali*, Carocci, Roma, pp. 83-84. The author mentions a few specific passages of the writings of Claval (1997).

following: the poor impact of economic interpretation on the behaviour of regional actors, the useless allocation of communication technologies which does not take into account the meaning conferred to them by the users, the inadequacy of public and private organizations once confronted with situations that require an innovative approach, the deficiency of the concept of peripheral regions in relation to the unstoppable migratory flow of ideas and competences (Schürch 2006).

The distinctive approach, triggered by determinate human and geographical situations, has allowed to ascertain for over than ten years, the patterns and the effects produced by varied methodological behaviours and the intervention of support-initiatives.

The numerous projects, together with their developments and progressions, to which this contribution refers to, hold within themselves various forms of conceptual theories. Such notions underwent a modification process, due to multiple on-site experiences and consequently developed practical skills.

The data collected during the development projects to which the paper refers to, have confirmed that the central issue related to the sustainable development of remote areas, concerns the real possibility to *cognitively activate* people in professional and environmental contexts, which are characterized by a strong feeling of cultural belonging.

Key words: *learning region, cognitive activation, nomadic cognitivity, mental representations, regional development, project, innovation, contextual organization, economy of the individual, economic model, ethnographic approach, training engineering, educational and training communication.*

Introduction

Many studies have indicated that the sole monetary support measures given to marginalized communities do not strictly equate to their economic growth.

Even various forms of intervention in entrepreneurial environments have not shown improved fates; the tendency to evacuate entire regions, rich in traditions and history, from some points of view, seems to be an unstoppable phenomenon: the daily disappearance of local cultural values and customs is going on under all of our noses.

The peripheral specificity of certain “*territorial/regional islands*” is often characterized by phenomena of economic dependence on neighboring regions, and, above all, by migratory movements on the part of the native populations; migration based on contingencies of study and work offered in extremely diverse cultural and linguistic contexts.

In recent years, many projects have been based on the hypothesis that certain forms of communication, especially those related to information technology, would be able to significantly reduce the phenomenon of marginalization through the transmission of information and knowledge, therefore providing impetus for the rebalancing of social and economic contexts.

The actual nature of such projects has been little studied. The limit between what is research and what is innovation is not always clear. Innovation, does not hold any peculiar and/or pre-fixed characteristics that consent to determine what type of project is innovative in one or more fields of interests. Even less noted is the relationship that occurs between activities of projection and the knowledge that contributes to the substance and shape of the project.

Generally, the social question that intends to remedy the phenomenon of social marginalization of entire regions, relies on public institutions and private organizations, which have economic and financial competences, to plan, implement and evaluate projects; regional development projects.

In projects and experiences conducted in Europe and elsewhere over the last few years, methodological constants of intervention in the social sphere have been identified. These constants

clearly ignore the capital of concepts that come from sciences which, in the past, have never been considered useful in cultural and economic promotion.

The sole communication of economic data, the sole financing of project, the creation of companies that change statistical data regarding occupations, of the creation of performing technological infrastructures (see computerization of communication) are examples that repeatedly demonstrate how little success such measures have had. In some cases it has even been possible to certify how the above cited measures have induced regressive forms in the taking shape of entire communities.

The sole economic reading of entire communities that have lost their identity does not seem to provide sufficient elements for bringing about a change in mentality regarding policies of aide; in turn, other sciences - psychology, ethnography, those of education and training - do not appear to be able to discard the sectional conception inside of which these usually work, this is why they do not produce any significant form of contribution.

Projects of regional development conducted at the University of Italian speaking Switzerland over a period of more than ten years, have enabled the collection of data and observations that are at the center of this article.

The first part of this essay is centered on the nature of these projects. The second part is dedicated to presenting the series of questions that have inspired designers and researchers. Following, a description of the basis of research that have allowed these projects to be implemented. While, the third and fourth sections of this essay will attempt to redefine certain parameters, that have been overlooked and taken for granted. The final section will present some significant results of the work done in this area.

Nature of the projects

It is assumed that in peripheral regions³ exist certain conditions that make any form of development a challenge and, therefore, the tendency to centralize resources of any kind in an urban setting must be taken into consideration. In view of this tendency, a question of a possible reversal in social attention and attitudes regarding peripheral areas, becomes all the more acute and problematic. Many regional development projects focus on finding solutions to this dilemma by bringing urban centers closer to peripheral areas, therefore creating poles of attraction that can push people, who live in large city centers, to opt to live in areas further away.

By creating favorable conditions for a community to turn disadvantaged situations into advantaged ones, the projects related to the study are intended to confront the problems of the survival of identity within a short period of time. In this extremely utopian vision, the daily use of new technology would eliminate large physical distances by creating opportunities to socialize in a way that one feels psychologically close to the other, even though very far spatially.

In *lieu* of the cited projects, the advantage consists in combining distance and presence. Physical presence benefits from environmental conditions (both natural and cultural) that isolated regions are able to offer. The distance that technology eliminates, allows a person to work and study without having to physically move.

In the research that we conducted, the projects, to various degrees of intensity, touched entire populations that live and work in a given region.

Their condition, that of being a small entity, renders them insignificant on certain economic and political levels, therefore their possibility for public and/or private investment is little to none.

³ By peripheral regions we mean geographic and linguistic areas that are far and isolated by natural borders (mountains, seas, etc) as well as by political borders and that, by nature, find themselves having to depend on very different cultural and linguistic dynamics.

The Poschiavo, Bregaglia, Maggia, Monastero, and Anniviers Valleys⁴ - regions owning advantageous conditions – have witnessed the study, realization and evaluation of research and development projects that have made room for an ethnographic approach to development.

Questions

At a point of history in which the concept of *local*, i.e. characteristic of a particular place, is forced to redefine its vocation because of globally increasing economic, social and cultural fluxes, the need to safe guard linguistic and cultural identities renders the study of human conduct very important.

The approach, that has distinguished the projects at the center of our presentation, has profited from a fundamental change of paradigm. The most significant questions can be condensed into the following points:

- to what degree are institutional and institutionalized conditions a determining factor in the success of development projects?
- How big is the area of convergence between the economic and ethnographic approach? Can we presume that there exists an engineering that takes into account the integration of these two disciplines?
- How many unaccountable aspects, escaping from prearranged plans, can be detected in the engineering of sustainable development projects?
- What are the conditions that render technologically adapt communities to using such means to conserve, and at the same time further develop, their regions?
- To what degree is it possible to consider entire communities learning communities?
- What role do representations and subjective theorizations (Dann 1994) have in the social implementation process of technology in computer mediated communication?
- Is it possible to establish a cause and effect relationship between statistical data regarding the economic and demographic trends and the development of cultural values⁵ held by single individuals?

Basis for research

The intent of development projects was to promote initiatives capable of reducing economic and social marginalization through the establishing of a net of communicative systems, drawing on regional development engineering forms and methods that can be easily copied into other regions.

The research has based its studies on four fields of interest.

1. *The institutional dimension*

By reconstructing the trends in projects and pointing out the relationships with institutions and/or public and private organizations, the research allowed for the reconstruction of the “force field” which in time has distinguished the project trends by selecting places of power, describing the rules of intended and basic communication, and highlighting explicit and implicit pacts.

⁴ Valleys in the southern Alpine Arc of Switzerland.

⁵ Later defined as the *economy of the individual*.

2. *The economic model*

The collection of data, its mapping and its communication to local economic, political and cultural bodies, clearly showed the communication problems and lack of understanding between economic models drawn on scientific research basis and the “*economic conception of individuals*”⁶. In other words, a few studied and analyzed cases, have allowed to recognize the importance of the role of an approach that takes in consideration the existence of an economic model related to and implemented by the individuals who live and work in a determined regional context.

3. *Development engineering*

By practicing a particular sort of innovative engineering, it has been possible to describe and explain the nature of the connections existing between diverse disciplines. The result of such methodology, is the reduction of the economic and social fracture between urban centers and peripheral regions. The successfulness of this process is partly related to the implementation of advanced communicational technology.

4. *Subjective representations*

By studying the role and importance of subjective representations and theorizations, those of the individuals directly affected by such projects, it has been possible to compose territorial maps that reflect and embody the expressions of the people who live in the considered territories. The thesis behind this work was directly connected to giving importance and relevance to the single individuals using clinical and narrative techniques.

Before looking at the various questions posed, a few terms need to be defined.

The geographical ambiguity in “regional development”

The notion of regional development covers many diverse areas that are generally resumed in the concepts of growth, change and life-improvement conditions. Change is not always hoped for or desired and it is not always in concordance with what “development” is. Even the nature of transformation is left to chance, “to destiny”.

An indicator of success in regional development projects, is the increase of jobs and employment, the installation of new entrepreneurial ventures and population growth. Studies that focus on the attitude and mentality changes on the part of certain regional actors, are very scarce. In other words, to a specific economic data and information, there should be a corresponding mental state capable of producing a socially diffused wellness.

The conceptual reductionism at the origin of such synthetic and partial, if not all together wrong conclusions, is obvious.

Even the notion of “region” no longer covers a uniform and clearly defined dimension. Possibilities for physical and virtual movement, together with road, train and air infrastructures, modify, almost permanently, the relationship between urban areas, suburbs and peripheral areas. This leads to the assumption that “region” has both geographical and social connotations. The most important aspect of this concept, or at least the one we want to emphasize, is that the conceptual and physical representation of “region” does not have, anymore, clear borders which used to limit it, as well as housing, business, farming and agricultural structures that used to clearly characterize its vocation.

In the development projects we have conducted in the Poschiavo, Bregaglia, Maggia, Monastero, and Anniviers Valleys, the hypothesis about the existence of a regional unity was assumed with caution because it is evident that they, given various factors - historical, natural, economic and social-, are anything but components of homogeneity.

⁶ We are alluding to an economy of the affective and emotional forces.

Contextual particularities

The studies alluded to, make reference to a very particular institutional situation. It is in these contexts that the projects, over the course of ten years, have taken shape and left significant imprints on the communities in which they were carried out.

- The projects were started in an institutional environment that did not want them, thus creating conditions for a sort of hybrid of *pseudo-voluntary work* and institutional ambiguity.
- The territorial approach recovered and transferred some of the principles originally belonging to the field of pedagogy of training. In particular, works regarding subjective theories, psycho-social dimensions of learning, Piaget's and other cognitive theorist's notions on development, studies that examine *learning institutions* as well as ethnographical and anthropological studies.
- A culture which is placed halfway between voluntary work and entrepreneurship, and which has the following characteristics: the presence of an organizational structure which has been reduced to a small number of people, openness to any form of collaboration with other institutions, flexible organization regarding the roles of the players and adjustable forms of working hours.
- Practicing a strategy that includes the presence of "local witnesses", who have the role to refer and enable the full understanding of the language and needs of the local culture.
- Practicing a concept of permanent learning, diffusion and enhancement of the acquired knowledge; see the multiplication of the unpredicted contextual effects.
- Risky planning, the value and importance attributed to the expectations and sudden evolution of the will of local people, have permanently created a situation in which temporariness and risk prevail: projects could be terminated at any time.

Paradoxes of development

Long term analysis of the projects carried through in the previously cited Alpine valleys, have shown the role and importance of organizational and management systems (see previous paragraph) that have drawn upon forms of management and informal decisions (see also negative capacities, Lanzara 1993); such decisional forms are possible in contexts that, partly escape the traditional rules of engineering and control.

These assertions, reintroduce the importance of the role that single individuals can fulfill in given systems, systems that have often ignored their potential. In other words, the changes occurring in the daily lives of men and women, become the central topic. This "daily life" is increasingly invaded and mixed with new forms of mediation, of information and access to knowledge.

The institution and/or organization that wants to conduct development projects, applying a control system that intends to regulate the afore-mentioned changes, going above certain limits, depreciates the same development process and dynamics it claims to want to follow.

Numerous studies done in various European countries, show how rarely financial fluxes run by economic centers are able to accomplish what they promised. There are multiple reasons for such failures which, in some cases, have a chronic character.

The thesis asserting the existence of a problem regarding the nature of administrative systems, in relationship to what these same systems hope to do - see innovation, development -, is confirmed in a 2002 OCDE report. Basically, the study carried out by a group of experts evidences that in Switzerland, for example, there actually is an imbalance between investment in training and the observed results in the area of innovation.

Particularly, it has been observed that there actually are substantial investments in education and training, while innovative initiatives are placed at lower levels of importance.

The report attempts to define the causes of such an imbalance.

They can be traced to:

- a tendency towards centralism in administrative control;
- small margins for “free” regional initiatives;
- unilateral planning;
- a lack of a real concept of *learning region*;
- a lack of clarity in facing up to the advancement of technological innovation in communication.

The above cited report also notes, and confirms, that there is a lack of conceptual and operational tools, that could consent to lead effective policies which could enable the positive advancing and support of development projects.

In conclusion, it can be stated that two questions remain unanswered.

To which degree the success of development projects is a consequence of systems that make reference to forms of para-institutional spontaneity?

To what degree institutionalization forms, themselves, are negation forms of the development and change dynamics mentioned before?

Possibilities and limits of the communication of economic simulations

In this specific case the characteristic of the interventions related to the studied Alpine valleys, have implied forms of analysis of the economic state and negotiation strategies relative to Computer Mediated Communication, aiming to reduce or contain certain forms of marginalization.

In short, the goal is to create an economic vision based on an ethnographical approach. Such an arrangement makes apparent that

the sole presentation of the economic state of a region (valley) does not produce rebalancing effects on the activities of those to whom the presentation was directed. If the economic model that describes the possible dynamics of development is combined with the ethnographical approach of communication- in and out of an organizational system- an effect is produced on the behaviors and the consideration given to opportunities provided by communicational technology.

If, in models of economic development, the interdependence between sections (productive, educational/training, administrative, cultural) is correctly interpreted, added values dynamics can be produced. Such added value is the result of forms of collaboration and synergy within the economic sectors.

Example: the value given to a local product can attract a certain type of tourism, which, in turn, is interested in discovering rural zones far away from large agglomerations; these rural areas find their new *raison d'être* in the safeguarding of a sort of local architecture; this then transforms into the basis for inspirations for new architectural ideas and cultural initiatives which, by consequence, produce new social and economic drives, and so on and so forth.

In the application of this model, one can see a development logic; development meaning an increase in salary and job opportunities of those who live in a particular region. Economists who have put this model into practice regularly still encounter problems to which, as of yet, they can not provide adequate responses.

They say to have repeatedly found themselves confronted with situations characterized by a reluctance to accept any form of change. In other words, the “circular model” cannot begin and the social groups, who more than others should benefit from such studies (see youth), are increasingly

choosing the route of emigration. In summary, the sole presentation of an economic model, regardless of how sophisticated it may be, does not successfully impede the gradual dismantling of the cultural and economic heritage of peripheral communities.

By looking at the recurrent arguments more closely, or at least at first glimpse, three principle considerations may be drawn.

Firstly, the communication of open economic models seems to collide with representations and practices of communities that for generations have been used to living and producing in very closed markets.

Such a closure translates into sectorized languages that render any form of communication between professional environments difficult, if not impossible. For example, the respective communication between the hotel, agro-farming and administrative sectors. The problem of interdependence, therefore, does not only apply to the institutions that supply information, but it also applies to those taking part in the exchange.

In the second place, the habits and customs that are handed down from generation to generation make the comprehension of social and economic change quite difficult: “if we’ve done it like this until now then why should we change?”

In other words, a certain corporative identity seems to inhibit a positive assimilation towards change. Change is perceived as a threat to the sense of identity and belonging, which have deep historical roots. The lack of means for the construction of an adequate response to change, often takes depressing forms; these forms obscure a possible positive projection of a future in these regions; see also the concept of *space for thought* which is particularly important in the youth population (Perret-Clermont 2001).

Thirdly, for as much as an abstract analysis (see model) may be correct and strongly supported by an idealistic social remedy (see rebalancing), it is often lived and felt as an intrusion of experts speaking a highly theoretical and abstract language, far from the personal means of interpretation of the people who live and belong to a given region.

Through these stated ideas, it is possible to take into consideration other points that allow us to narrow the problem, which rotates around a particular form of communication and the contents that each exchange attempts to transmit.

One could believe that there exists an economic reading that makes reference to a scientific vision, an objective reading of local situations; for the most part, however, this reading still remains extraneous to the people to which it was directed, thus creating responses that lead to a diffused unhappiness.

Such unhappiness can be understood to be a sort of imbalance of the “life economy” of the individuals⁷.

From the comparison of the two concepts, emerges the hypothesis that the *economy of the individual* is a result of an emotional condensation, that accounts for the history and experience of the life of an individual. Such condensation plays a very significant role in the representation of the “self” within a given community.

In other words, in the *economy of the individual*, the financial economic model finds only a partial and, at times, distorted correspondence.

⁷ The concept of the economy of the individual refers to an energetic dimension described by Freudian psycho-analysis. This differs from the concept of economy as a descriptive and interpretive model of a determined dynamic between market fluxes.

Development engineering

The placing of engineering in between research and innovation does not seem to resolve its problems of role and specificity. The metaphor of engineering refers to the idea that it uses tools that are taken from other disciplines, but that is also includes the use of its own epistemological references. One can easily presume that engineering represents the place in which diverse forms of knowledge are condensed and found: those that are derived from research activities and those that come from either reflections of or direct practice of.

In reality, the distinction between what is research, innovation, engineering and theorization of some practices remains a controversial factor.

Many people have brought their own diverse experiences to these regional development projects.

The terrain was right for trying to understand the specificity of such personal interpretations and to specify the nature of the concept of engineering in relation to the idea of *learning region*. The conclusion confirmed by the research is stated below:

The existence of a regional development engineering which understands and, at the same time, transcends some disciplines (economy, social psychology, anthropology, education and training, etc). The epistemological nature of such engineering drives its roots into an area of theorizations of a disciplinary nature and into that of the individual experiences of the people directly involved in the projects. Perceived as such, the developmental engineering model does not respond to any of the principles of the foreseen phases in the development of traditional based engineering projects.

Keeping in line with the metaphor, it is actually difficult to imagine engineering without architects. Architecture drives its existence into areas close to the realms of art and to a vision of man as an individual situated in a region, in a determined historical period.

In the projects that have been at the center of our study, the instrumental and epistemological principles that define classical engineering (those that refer to the idea that a project can not take form without the initial definition of needs⁸) are brought once again into question. The concept of *navigation* coined by Le Boterf (2006) responds much better to the needs of a kind of engineering that, in the first place, emphasizes the importance of the creation of a change favorable climate. Such form of development project management can be defined by the term “contextual engineering”.

Subjective representations

Research conducted in the field of new information technology’s social diffusion, shows that there is a clear lack of models capable of taking the “culture of the individual” (Bruner 1997) into consideration.

Culture is translated as the attribution of meaning to things and events; a culture that consents individuals to practice unknown processes of interpretation.

Another conclusion, reached from the research carried through in the previously stated Alpine valleys, is:

The detection of the individual representations and of the relative forms of theorizations, consent to become aware of the true nature of the meaning attributions produced by the inhabitants of a region. To the degree that the state of the developmental project is successful - in recognizing and mirroring the meaning given to opportunities of technological communication, in presence and at distance - fluxes of communications that change the perception of a certain territorial geography, are created.

⁸ The literature regarding this topic has repeatedly defined the characteristics of the project. Some phases exist which can be considered canonical. From a phase of identification of needs, one passes to the shaping of prototypes that must account for different kinds of customers. The project would thus be a result of a consensus; a consensus that implies a process of negotiation on the part of those interested.

In the projects we have implemented, aiming to favor the economic and cultural development of those who live in a peripheral region, we have tried to keep the individual dimension in the foreground.

Individual dimension to be understood in all its forms: from personal opinion, to the representation, to individual theorization (Schürch 2000). In various ways and circumstances, the technological artifact provokes attributions of meaning that significantly transcend its nature.

In regional development projects, network communications and the possibility of a relationship between internal bodies and a given territory, raise numerous question regarding the possible overcoming of (especially mental) confines. The same question is posed when considering the overcoming of regional borders and the creation of social and economic relationships with confining territories, perhaps of another language or nation.

The concept of *learning region* coined by the OECD, is based on the supposition that a given territory can constitute a dynamic of connections and relationships between branches of education, training and businesses in order to create an added value that is able to go beyond the idea of a regional pole.

The dimension of individual representations produced in presence situations, can not be reproduced in virtual contexts. On the contrary, new forms of expressions and communication are generated, that enable to amplify the range of representations that interact, in various ways, with presence conducts.

The impact on territorial development takes very interesting and unexpected shapes, that are far from a model that wants to establish and diffuse a network through uniform processes.

One may believe that the ability to establish a reflective connection between action and the representation of such action, allows the individual to discover the resources which will enable him to enrich the schemes of its own performances, achievements, initiatives, works, etc. This process will allow the individual to find a path through which activate those cognitive and entrepreneurial resources that characterize him.

The conclusion the study comes to, is that the economic and social development of so called peripheral regions cannot, in any way, be abstracted from the constructivist conception of the individuals who live in geographical territories undergoing profound changes.

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