Territorial Innovation in the Alps. Heterodox Reterritorialization Processes in Trentino, Italy
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ABSTRACT

Recurrent attention has been paid to regional disparities, and specific European, national and regional policies have been activated to reduce differences. In this framework, mountainous regions are usually considered ‘peripheral areas’ per se, but in the Alps a variety of conditions coexist because of the presence of many urban centres and innovative activities. Large parts of the Alpine regions can be termed ‘inner areas’ and some parts are ‘fragile areas’ in that they are not only set apart but are characterized by complex morphological conditions and by social weaknesses.
reflected in deterritorialization processes. In this context, there are interesting examples of innovation based on the activation of new links between local communities and the involved space.

The article sets out the results of an inquiry into three cases of locally-based development in Trentino, in the Italian Alps, which are not centred on the role of firms and are not dependent on public policies. The presence of some leaders made it possible to start innovation processes making new use of generic resources and leveraging on the ability of the community to learn and adapt, to construct new coalitions, and to establish new institutions.

The paper proposes a theoretical framework within which to analyse innovation processes in inner areas and in fragile mountain areas, and it illustrates the main results of the research, showing that territorial innovation processes can take place also in heterodox ways.

ALPINE AREAS: SET APART, BUT ON THE MOVE

Recurrent attention has been paid to regional disparities, and specific European, national and regional policies have been activated to reduce differences in terms of economic development, social services and urban opportunities. A variety of definitions express the spatial dimension of the issues at stake: ‘peripheral areas’, ‘inner areas’, ‘remote regions’, ‘less favoured regions’. In Italy, a “National Strategy for Inner Areas” has recently been activated (Barca et al., 2014) to foster the development of territories covering more than 60% of the national surface area and comprising around 23% of the total population, but which are often

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forgotten by public policies. The strategy, which is part of the 2014-2020 programme for European structural funds, was drawn up under the direction of Fabrizio Barca. It embodied the place-based approach advocated by the report which he compiled to innovate the EU’s cohesion policies (Barca, 2009; Servillo et al., 2016). The strategy testifies to a renewed territorial approach in issues often addressed only by sectorial public policies. In fact, the concept of ‘inner area’ (area interna) was propounded some decades ago within development policies for the Mezzogiorno – the mostly rural and mountainous southern regions of Italy – characterized by persistent weakness (Dematteis, 2013), and it is now re-proposed within a renovated methodological framework.

The problem of regional and local development is not a new one, in fact. Spatial-organisational aspects, together with social and institutional ones, are considered when analysing conditions and advancing proposals: geographical and environmental features, demographic density and trends, distance from urban centres, quality of the infrastructure, public services provision. In recent times, the presence of human capital, the level of social capital, and the efficiency of the public administration have been considered assets crucial for driving change and innovation.

Most of the less favoured regions are mountainous areas. The perception of them is often influenced by a notion of ‘geographic causality’ whereby mountain places are considered to be ‘naturally’ weak and can only engage in old-fashioned ways of life and production because local resources (agricultural land, forestland, settlement networks) can no longer be used profitably. But mountains deserve a different consideration, because their geographical and morphological characters are endogenous resources which can be opportunities for incepting new activities (Dematteis, 2013). In fact, not only are many mountain sites characterized by up-to-date equipment and activities, but there are
also cases of innovative initiatives and firms that are competitive in the larger market.

As concerns the Alpine regions, here many areas have been invested by development processes, and some places have become centres of economic growth. However, a caveat is required in regard to the Alps, because in many EU documents and strategies (among others, the recent EUSALP), the metropolitan areas at the borders of the Alpine arc are included in the definition. On the contrary, large parts of the Alps are “inner areas” in the sense given to the term by the National Strategy, considering their distance from major urban centres, and the low level of services provision. Moreover, some parts of the Alps can be considered “fragile areas” (Governa, 2008; Corrado, 2010) due to their morphological features and social weaknesses reflected in the deterritorialization processes (Raffestin, 2012) that have taken place in recent decades. Such conditions require territorial innovation. By this is meant a change in how resources are used, places are organised, and networks are operated. Potentials in this regard consist only partly in material factors, while a new role can be played by immaterial values (emotional landscapes, beauty of nature, sense of belonging, local knowledge) or by relational conditions (social capital, in particular). In fact, in the territories considered, not only is it not possible to use local resources in the traditional ways but also in many cases they can no longer be considered resources. At the same time, new activities (not only tourism) can begin, and new products can be offered, in particular ‘niche’ goods incorporating local values and taking advantage of the positive image of the landscape (wine from a terraced valley, organic fruits, hand-made products, etc.). Innovation is therefore necessary to preserve the values of territories for long inhabited but at risk of depopulation. This entails spatial reorganisation. Ski resorts (built on northward places, at high altitude) provide a good example of the
reterritorialization processes (not always positive) generated by a new use of resources, such as snow and steep slopes, which were once insignificant because settlements were at lower altitudes and on the sunny sides of mountains.

Most development theories consider innovation to be closely bound up with the role and presence of firms. But in mountain areas there is no space (physical, but also socio-economic) for large enterprises, since their plants are ‘footloose’ and sited according to advantages which cannot be offered by areas located outside the major infrastructure and urban networks. What can ‘innovation’ mean for inner and for fragile areas? In such territories, public policies seek to improve the infrastructure, to provide urban facilities, and to support sectors like tourism, forestry and agro-food, in many cases taking advantage of EU funds (Servillo et al., 2016). But results are not automatic. Ash Amin (1999, p. 365) put it thus: “[u]ntil recently, regional policy has been firm-centred, standardized, incentive-based and state-driven”, but it failed to encourage a “self-sustaining growth based on the mobilization of local resources and interdependencies”. This statement well describes also outcomes in the less favoured regions of Italy.

The hypothesis formulated in this article is that innovation paths require not only the inception of new economic activities but also the activation (or re-activation) of strong links between the local communities and the space involved. Its theoretical bases consist in the TRD – territorialisation-deterritorialization-reterritorialization – model developed by Raffestin (2012), which stresses that human communities continuously transform space to satisfy their needs. This entails the emergence of an individual or a collective actor, the use of appropriate knowledge (tacit and technical), the ability to manage relationships with other actors, as well as the capacity to deal with power relationships concerning the control of space and resources. In this framework, representations are crucial, since they
concern both the interpretation of reality and the devising of a future prospect: “there is really no action without prior representation” (Raffestin, 2012, p. 133). Reterritorialization implies, in fact, both a social re-appropriation and an oriented physical transformation of the space (Zanon, 2014).

The article reports the results of an inquiry into three ‘success stories’ consisting in ‘heterodox processes’ of locally-based innovation in Trentino, in the Italian Alps. They well represent cases of innovation not centred on the role of large firms, or on networks of small enterprises operating in synergy within ‘Marshallian districts’, because innovation came about through activating processes based on a novel use of local resources, leveraging on the local knowledge, the ability to learn and adapt, the social networks and the availability of social capital. The experiences described regard only part of the change that has taken place over recent decades in the areas involved, but nevertheless represent distinctive innovation processes which mobilized the local societies.

The main question addressed is why some territories are able to develop successful innovation processes by making use of resources and potentialities which do not seem particularly different from those of other places. Other questions concern how innovation can start, what actors can play a central role, what social networks must be activated, and what role institutions can play. The intention is not to develop a policy approach, in search for innovation in political processes and public actions, but simply to look more closely at some intriguing experiences which followed new paths. On the basis of an interpretative framework, the analysis reported in the article was developed by reconstructing the cases and by conducting a series of semi-structured interviews - based on the interpretative framework elaborated - with key actors well representing those who took part in the elaboration of the novel
ideas, in the inception of the processes, in the management of procedures. They were chosen on the basis of a preliminary inquiry, and then involving additional interviewees on a step-by-step process, when the crucial role of other actors emerged. Also some critical observers were interviewed. All in all, fifteen interviews were conducted.

INNOVATION AND TERRITORY

‘Innovation’ has become a buzzword. It is a term frequently used to refer to a variety of actions in different fields, from science to economics, social sciences, and European Union policies. How can it be connected to the spatial dimension or, better, to the ‘territory’? Territory is the space produced and inhabited by the local societies mobilized by specific driving forces, in pursuit of peculiar objectives, and operating on the basis of their own culture, know-how and social organization. Governa and Salone (2004), citing Claude Raffestin, state that “territorialisation” means appropriating and transforming the space by means of material or immaterial actions. Another author to be quoted is Giuseppe Dematteis (1985), who affirmed that the territory is formed by a combination of “vertical” relationships (which are “ecological” in that they connect activities and local resources) and “horizontal” relationships (of an economic kind, supporting exchange among places and activities). What emerges is a dynamic concept of ‘territory’, which is not only a repository of natural values and historical facts, but the living space of the local communities, the basis for their collective action (Dissart, 2012). The above-cited TDR model well represents the ability of the actors (in particular local communities) to take advantage of local resources to construct their living space, or to re-construct territorial relationships after a loss of consolidated functions.
As regards resources, these are material (fertile soil, natural products), positional (crucial in a mountain landscape characterized by strong differences across short distances), spatial-relational (enforced by ‘spatial fixes’ such as the infrastructure and collective equipment), and immaterial. In recent years, close attention has been paid to the latter resources, which are difficult to quantify, but are nevertheless of pivotal importance. In short, some aspects are related to the socio-economic sphere (human and social capitals), others to the socio-political ability to mobilize the local society (“institutional capacity”, “institutional thickness”: Amin and Thrift, 1995; Healey, 1998), and yet others to the assignment of values to the environment (rarity, beauty, bio-diversity) or to the historical and anthropological heritage. Recognition of such values can support some economic activities (tourism, in particular) and is the ‘glue’ connecting the local societies to space (sense of belonging and environmental responsibility), as stated by the European Landscape Convention.

A second, connected, consideration concerns the concepts of “generic resources” and “specific resources”. While the former, even when locally generated (raw materials, labour force), are not spatially bounded, “specific resources” are generated by the interactions among the local actors (Dissart, 2012). Moreover, many territorial resources are “latent” and can be detected and used only when a group of actors, operating within the local society, takes action in a development perspective (Corrado, 2004). Considering the mountain environment, it should be borne in mind that many traditional resources are now obsolete: fields, pasturelands, even large parts of woodlands cannot be used profitably by activities competing in the larger market. As a consequence, while many traditional spaces and structures characterizing the landscape are now useless – testifying to the deterritorialization process - different spaces and conditions acquire new values and can support new activities.
As regards innovation, to be stressed is the distinction between growth and development drawn by Schumpeter, on which a vast literature - which cannot be recalled here - has been produced. While growth is a continuous phenomenon of progressive adjustments, development implies discontinuity (Trigilia, 2007), which means innovation. This is usually considered a condition which provides the firms involved with “a competitive advantage determined by a (temporary) monopolistic situation thanks to a ‘more advanced product’ (product innovation) or a ‘more efficient production system’ (process innovation)”. In other words, it is a “positive capacity to do something ‘new’, ‘useful’ and ‘exploitable’ that competitors are not able to do” (Dotti, 2014, p. 4).

Put otherwise, innovation requires motivation to change in order to gain advantages by creating new conditions in terms of better products to be offered, more efficient production processes or more effective marketing methods, or by contributing to a more appropriate socio-economic environment. It therefore means that an actor (a single person or a collective actor) must be motivated to modify the usual way of operating, changing the consolidated frames of reference by subverting the rational thinking connected to the usual processes and routines. Therefore, innovation needs leadership, intuition, vision, capacity and determination (Trigilia, 2007).

A connected issue regards the critical balance between individual agency and collective action. In fact, motivations to change usually rely on a single actor’s interest in improving its own benefits, but require an appropriate environment characterized by a basic endowment of equipment and services, the presence of diffuse knowledge, conditions of trust and safety. A mix of competition and cooperation usually boosts innovative actions because actors are stimulated to change and to improve their condition (“local rivalry is highly motivating”: Porter, 1998, p. 83), but at the same time they can rely on appropriate support when taking risks. In short, innovation is
interactive in nature, in particular as concerns learning processes, and it requires appropriate institutional routines and social conventions able to reduce uncertainty and to provide trust. This is the expected benefit of the common good termed “social capital” (Morgan, 2007). Such considerations are particularly relevant to ‘inner areas’ and particularly to ‘fragile mountain areas’, which are characterized by a dearth of such key resources as financial capital, agglomeration effects, and infrastructural nodes. Potentials can therefore consist in the presence of networks of actors operating in a climate of trust and reciprocity. The concept of “social capital” (Coleman, 1988; Putnam, 1992, 2000; Trigilia, 2001) and the connected one of “territorial capital” - stressing the cognitive processes - (Camagni, 2007; Espon, 2007) highlight the collective good locally produced and maintained by the presence of social networks. Social capital must be interpreted not as a generic human attitude or as the effect of accumulation processes, but as the result of the (collective) ability to continuously weave social relationships on the bases of common goals and interests. This requires a shared perspective in the form of an operational project of change (physical, organisational), leveraging on the consolidated experiences and the operating social networks, but becoming an occasion for the development of new knowledge and know-how, the activation of new social relationships, the selection of leaders (Zanon, 2014).

The processes of knowledge production and diffusion are particularly important. They are characterized by an unstable balance between continuity and change, because knowledge is cumulative, but innovation requires jumps and breaks in the accumulation process; and this entails intuition, openness, and links to the wider world.

SPACES, ACTORS AND NETWORKS
What are the conditions and the factors hindering or supporting local development? Innovation relies on a number of spatial conditions and local assets, which have been differently considered by regional development theories and, more generally, by spatial economy scholars. In short, place-based development processes are explained by considering on the one hand geographical factors (localization, elevation, climate, specific features of places, etc.), the endowment of natural resources (raw materials, fertile soil, etc.), and the spatial-organisational conditions - such as the presence of equipment and infrastructure (defining accessibility), and the connections with the urban networks. On the other hand, the socio-economic system is considered, in particular as concerns the presence of agglomeration processes (interaction among firms, in the Marshallian tradition), and of urbanization effects, meaning the presence of urban opportunities, availability of information, proximity to educational and research institutions, supporting interaction among diverse sectors and innovation.

Some authors have described the role of the localized factors differentiating between geographical proximity (spatial dimension) and organized proximity (ability of an organization to make its members interact) (Torre and Rallet, 2005, p. 49). The term proximity is extensively used by Boschma (2005), who summarizes the different factors intervening in spatial economy by listing five types of proximity (cognitive, informational, institutional, social, geographical). They will be recalled later on, when formulating the interpretative framework.

Over time, diverse interpretative and policy models for regional and local development, centred in general on the role of the firm, have been developed. To be recalled in particular are: Industrial Districts, Innovative Milieus (Aydalot, 1986, Becattini, 1990), and Clusters (Porter, 1996). Other models proposed have stressed the role of knowledge and learning processes within a region (Cooke, 1996), or
the potential of close university-industry-government cooperation, allowing formation of a “Triple Helix” (Etzkowitz and Leydesdorff, 2000). Such models cannot be really applied to territories characterized by a lack of firms, research and educational centres, and by a weak institutional system.

A different approach is represented by the Integrated Area Model (Moulaert and Sekia, 2003), aimed not only at enabling a local or a regional market economy, but also at giving space to non-market economic activities and, more generally, at empowering community life. This “community approach” introduces “more agency principles, in addition to economic efficiency and competitiveness” (Moulaert and Nussbaumer, 2005, p. 52). Similarly, the EU’s proposed “Community-led local development” approach requires that “people who were previously the passive ‘beneficiaries’ of a policy become active partners and drivers of its development” (Soto and Ramsden, 2014, p. 9).

A community-based perspective, intervening in a low-density environment and oriented to making use of local (and often weak) resources, requires subverting the consolidated frames of reference. According to the New Institutional Economy approach (Amin, 1999), what is required is a collective attitude to “learn and adapt”. This is the application of the concept of “adaptive efficiency” (North, 1990), i.e. “the willingness of a society to acquire knowledge and learning, to induce innovation, to undertake risks and creative activity of all sorts…” (Rodríguez-Pose and Di Cataldo, n.d., p. 5). The problems to be addressed, in fact, are not only technical, but social at large (Dotti, 2014). A good use of local knowledge together with openness to external stimuli – in order to “access supra-territorial flows of knowledge” (Dotti, 201, p. 22) – is needed.

The consideration of human and social phenomena and factors is crucial, but it must be borne in mind that they define an unstable balance between conservation and innovation, lock-in conditions and
change, path dependency and rupture of the consolidated frames of reference. In this regard, social networks emerge as the collective actors oriented to defending consolidated positions or to change. Morgan (2007, p. S148) claimed that “‘markets’ and ‘hierarchies’ do not exhaust the menu of organizational forms for mobilizing resources for innovation and economic development”. In fact, other social relationships can play an important role by combining expert and tacit knowledge, overcoming individual rationality and personal interest. More generally, formal and informal networks and institutions must be established. In particular, when public authorities are weak, informal institutions can help to boost place-based economic activities by providing knowledge and cooperation networks, which reduce transaction costs. Conversely, formal institutions must support the informal networks, thus establishing a cooperation environment which fosters the development of ‘institutional thickness’ (Amin and Thrift, 1995).

AN INTERPRETATIVE FRAMEWORK

An interpretative framework of the potentials of inner areas and of fragile areas requires assuming a point of view strongly linked to the place, considering that firms can play a secondary role. The issue addressed regards how a mountain community can take advantage of the opportunities of a post-industrial society to continue to inhabit the place chosen by the ancestors. The attention paid to the local level and the ‘community’ is not intended to emphasise the role of shared values or of familial bonds, but rather to stress that market mechanisms operate within a variety of human relationships, and that the sense of belonging can be very important (Moulaert and Nussbaumer, 2005).

The framework proposed is built on the bases of the approaches, theories and experiences above summarized and critically analysed. It
is certainly not intended to be a new theory, but simply to define a frame of reference helping to better analyse the cases described. As concerns ‘territorial innovation’, this occurs when a deep change, or a ‘sharp turn’, takes place in a specific environment in relation to:

- the use of local resources (taking advantage of the ‘specific resources’, in particular);
- the activation of new economic processes;
- the construction of social networks connected to new activities;
- the creation of ‘institutional thickness’.

The framework can be further explained by focusing on three interrelated aspects of local development: the geographical-territorial conditions (the place), the interaction mechanisms (proximity), the process.

**The place**

Geographical conditions must be read not as determinants but as pre-requisites, which obviously can hinder or support uses and activities, considering that the local scale is connected to the wider spatial dimension and the socio-economic environment by the infrastructure, as well as by institutional, social and economic networks. Contradictory conditions characterize inner areas and fragile mountain areas: many places, which provided living opportunities until few years ago are now very difficult to inhabit. At the same time, a new use of generic resources and the ability to enhance specific resources have emerged.

**Interaction mechanisms: proximity**

The different conditions and factors intervening in the localisation of activities have been recently re-analysed in light of the concept of
“proximity” (Torre and Gilly, 2000; Torre and Rallet, 2005; Boschma, 2005; Lagendijk and Lorentzen, 2007). In particular, this term considers that interactions have a spatial and an organisational nature, and they involve both the economic and the social dimensions. Boschma (2005) articulated the concept into different kinds of proximity: cognitive, organisational, social, institutional, and geographical, highlighting the opportunities generated by sharing, on the one side, a space; on the other a social, economic or institutional network. This articulation, at the same time, makes it possible to consider the drawbacks caused by socio-economic environments characterized by lock-in phenomena and lack of openness.

Starting with the last notion, ‘geographical proximity’ means first of all physical closeness, and therefore easy (but not automatic or positive) connections because of the short distances. It does not produce agglomeration effects, however, although many economic relationships are locally embedded because they are based on inter-individual relations (Torre and Rallet, 2005). Geographical proximity refers also to accessibility, in particular easy connection to a ‘central place’ from the rest of a territory that is the ‘periphery’. This is a consolidated centre-periphery view of spatial organisation (Pezzi and Urso, 2016), but a relational interpretation highlights that a network of bilateral connections structures the inhabited space, central places included. The issue to be addressed concerns the extent to which physical proximity is required when a distance interaction, supported by current technologies and practices, is operating. In other words, is an urban environment (characterized by a dense web of material and immaterial interconnections) needed, or can a more dispersed, low-density settlement system provide ‘proximity’ factors? Can peripheral areas become ‘extended cities’, reversing the usual (uneven) centre-periphery balance?

As regards ‘cognitive proximity’, the concept refers to the (social) conditions which support intense interactions, sharing and
accumulating tacit knowledge within a local community, as well as exchanging knowledge and developing competencies within communities of practice. A caveat has been advanced, however, on the risk of uncritically considering (tacit) knowledge flows as closely correlated with physical proximity (Torre and Gilly, 2000; Torre and Rallet, 2005; Lagendijk and Lorentzen, 2007). Spatial and social conditions do not automatically overlap.

‘Organisational proximity’ refers to the organisation of production, to the presence of networks of firms, and to a system of formal relationships characterizing a developed society and economy. Obviously, it is a weak point of inner areas, although some sectors (tourism, niche agriculture) can rely on well-organised professional and economic networks.

‘Social proximity’ is defined as the “socially embedded relations between agents at the micro-level” (Boschma, 2005, p. 66), being based on the “logic of belonging” (Torre and Rallet, 2005). It is a collective good defined by rich informal relationships, presence of high levels of trust and confidence, a number of social networks and associations. It is strictly connected to what has been termed ‘social capital’, which can be an asset for mountain communities characterized by a long tradition of self-government, cooperation and rural autonomy. This is the case of many valleys of Trentino-Alto Adige, which has been accredited with the highest level of social capital among the Italian regions on the basis of the number of associations and social networks, as well as of co-operative companies (Sabatini, 2009). This is in part the heritage of the historical administrative organisation in this region, where local communities were assigned competence for many issues of local interest and were (and still are) responsible for management of the commons - in particular woodlands and pasturelands.

However, attention should be paid to the risk that the prevalence of ‘bonding’ links will activate lock-in phenomena, so that the ‘strong
ties’ within the community may endanger the “weak ties” (Granovetter, 1973) connecting the local communities with the wider context.

Last, ‘institutional proximity’, based on the “logic of similarity” (Torre and Rallet, 2005), refers to the ability to devise and apply appropriate rules and norms, and to manage change processes by means of complex instruments. It is “a sort of ‘glue’ for collective action because [it reduces] uncertainty and lower transaction costs” (Boschma, 2005, p. 68). This concept, in particular, raises the issue of power relationships because “The difference between ‘core’ and ‘periphery’ is basically a difference of power” (Lagendijk and Lorentzen, 2007, p. 462). And “processes of peripheralization are indeed directly linked to exclusion from networks and from political power in decision-making” (Pezzi and Urso, 2016, p. 9). Nonetheless, locally-based processes can create new power relationships, when change perspectives are devised and a new cohesion among local actors is constructed.

The process

The focus on the process stresses that different paths can be followed in place-based development, and that interaction among actors, ability to learn and cooperate, establishment of institutions are combined over a time period.

In short, a local development process can start because some ‘innovators’ propose or activate initiatives which can change the current conditions. What characterizes such innovators are, besides their personal motivations, openness, ability to learn, and a propensity to take risks. Such personal features become collective experience when innovators become leaders and the conditions of the social environment are positive. But nothing is automatic. A shared local history, an attitude towards social contacts, the presence of trust and
confidence are not sufficient as appropriate conditions for change. There must be a common vision, a shared perspective, and in many cases a concrete representation in the form of a project (physical, organisational). There are risks, however, because the distance between a feasible project – one able to change conditions – and a utopian one – which cannot be pursued – is very short.

Lastly, in local development processes, institutions (local authorities, in particular) can play a positive role by providing certainty concerning the rules of transactions, or they can have a conservative role by imposing traditional procedures and refraining from innovating rules and behaviours.

THREE CASES OF TERRITORIAL INNOVATION

The case studies regard territories in the Province of Trento (Trentino), in the Italian Alps, where the available resources were, apparently, not particularly different from those elsewhere in the Alpine arc. Although the territories considered are in general ‘inner areas’, they are not really distinct ‘fragile areas’ suffering from deprivation, because in the 1960s a variety of public policies started to modernize the infrastructure and to develop a diversified local economy. The changing role of local resources and the fragility of the socio-economic system foretold, at that time, an uncertain future. During recent decades, successful innovation experiences have profoundly changed the traditional ways to use resources and manage activities, supporting new socio-economic activities. The processes described in the case studies were part of the larger development processes on-going and were chosen because of their distinctiveness, being based on social networks constructed around niche or sectorial activities, and which supported territorial (i.e. spatial, social and economic) innovation.
The analysis, developed on the basis of the analytical framework described above, and synthesized in Table 1, enables interpretation of the different innovation processes and aids understanding of what have been the drivers of change, the resources used to start territorial innovation, and the processes initiated, by whom.

A first case is the ‘Marcialonga’, the famous cross-country skiing competition held in the valleys of Fiemme and Fassa. A second case concerns the change in the tourism supply and organization during recent decades in the area adjoining the northern shore of Lake Garda (locally named ‘Alto Garda’). A third case regards the development of the Arte Sella land-art event in the woods of Sella di Valsugana.

Marcialonga

The Marcialonga is a cross-country ski race, well known at the international level, taking place in the valleys of Fiemme and Fassa. It was started as a bet 45 years ago on the initiative of a small group of friends, but it rapidly became a successful event, and currently involves some 8000 participants every year. The race, while being an innovation factor for the territories involved, has rapidly become a component of the local tradition. The key question concerns how a sport event modelled on the Vasaloppet ski race in Sweden could be successfully developed in the Alps, and how it could boost networking processes between the local society and the economy.

The valleys of Fiemme and Fassa currently boast a good level of socio-economic development, but the small municipalities involved are classified by the National Strategy for Inner Areas, in terms of peripherality (which does not automatically mean weakness), partly as “intermediate” (4th degree on a scale of 6), but mostly as “peripheral” (5th degree), considering their distance from major urban areas and upper level services.
The inception of the event, in 1970, was due to the initiative of a group of amateur cross-country skiers in a valley where this practice had a long tradition, as testified by the local champion Franco Nones, who won the 30 km race at the Grenoble winter Olympics in 1968. However, this activity was not based on a specialised infrastructure and did not play an economic role.

The Marcialonga, whose name derives from the local dialect, was not started with the intention of creating a new sport or tourism product, but rather as a popular event, a ‘non competitive’ race, which in a matter of a few years has become an internationally recognised competition. In parallel, the organisation – based on voluntary participation – had to be stabilised and reinforced. The competition has been a sound basis for establishing cooperation between the event’s organisation and a number of associations, tourism operators, and local authorities. In particular, it has been able to benefit from the presence of two police schools active in winter sports, as well as from contact with experts possessing specialized knowledge on the various aspects of a complex international sport event. A continuous learning process has made it possible to take up other challenges, in particular the use of updated technologies, innovation of the race itself over the years, diversification of the event with cycling and running competitions, and the organisation of other international-level events, i.e. three editions of the Nordic World ski championship. The race has also required coordination with other events and activities, interaction (and cooperation) with the local downhill ski resorts, and resolution of conflicts over the use of land and infrastructure, considering that the provisional track interfered with many fields and roads and required progressive stabilization.

In conclusion, the Marcialonga is an established event which has generated extensive economic, social, and organisational effects. It is the locus of an aggregation of actors, of development of a new conception of the territory, of diffusion of the image of the valleys at
the international level, attracting skiers and tourists. It is also an instrument for the acquisition of know-how which is disseminated to other sectors and activities, reinforcing social and economic networks.

There are some problems, however. In particular, an international event requires continuous innovation, and this places a strain on the organization. In particular, the social networks on which the Marcialonga has been built are fragile because the number of volunteers is decreasing and it is not easy to keep their motivation alive; institutional relationships imply a heavy workload. Finally, the infrastructure of the ski track, although reinforced, needs to be completed and maintained, while meteorological uncertainty must be considered against the backdrop of climate change.

*Alto Garda tourism*

The second case concerns a tourism area long celebrated by travellers and visitors from northern countries: Lake Garda. Its northernmost part, flanked by perpendicular cliffs, lies in Trentino, and is locally called ‘Alto Garda’. It was the first Mediterranean landscape encountered by northern tourists on entering Italy, as testified by Goethe’s famous poem on the “land where lemon trees blossom”. The municipalities involved are classified by the cited National Strategy as “peripheral” (4th degree).

Until a few decades ago, tourism was a traditional activity oriented to German travellers, who appreciated the impressive scenery of the vertical walls of the mountains emerging from the lake. Unfortunately, soon after noon a strong breeze springs up on Lake Garda, impeding full enjoyment of the lake and making sailing dangerous. In the 1970s, the yachts and motorboats started to be disturbed by a new water sport: windsurfing. At the beginning there were some conflicts between the ferries and the motorboats, on the
one hand, and the windsurfers on the other; but there was increasing awareness that a change was necessary. In fact, a law prohibiting motorboats on the lakes of the Province was issued, thus re-orienting tourism towards sport activities and younger generations. Soon afterwards, other activities started, in particular free-climbing on the cliffs overlooking the lake and the valley, mountain biking, and even base-jumping.

The question concerns how the local tourism economy and, more generally, the territory, were able to convert a traditional tourism supply oriented to middle-aged Germans into a system of outdoor tourism based on wind-surfing, climbing, cycling, mountain biking, and the like. Such activities seemed to cover only niches of overall tourism, while they have demonstrated their potential by giving new value to insignificant resources such as the wind, the cliffs, steep mountain tracks, etc. The innovation was partly introduced by external users and pioneers, partly by local actors, and it required not only changing a consolidated economic activity but also converting places and parts of the infrastructure in an area where tourism is pivotal but must cohabit with a specialized agriculture and certain industrial activities.

The places involved are Riva del Garda and Torbole, which are on the shore of the lake, and are places dedicated to wind-surf, and Arco, some kilometres north, which was a place whose mild climate allowed the location of a number of TBC sanatoriums and, more recently, for other health care practices, and now has become a ‘mecca’ for free climbing.

The results of the change are impressive. They consist in an entirely new tourism system now based on sport and leisure activities, with new facilities, updated hotels and retail networks. A combination of local knowledge and expert knowledge related to new sport practices has been necessary, and this has meant openness to innovation, and giving space to new actors. In fact, the conversion to what is also
locally called ‘outdoor tourism’ has entailed re-organising the accommodation system and services, constructing new cycle paths and trails, landscaping the lake’s shores and many other areas, resolving conflicts among the various practices (cycling and hiking, sailing and surfing, etc.). The ‘tourism machine’ has required communication of a new image and new offers to potential tourists by interacting with international media. It has also required managing international events (Rockmaster, which needed a ‘climbing arena’; Bike Festival; sailing and wind-surfing races, etc.). Coordination of the various actors involved has implied intense networking, and the establishment of new institutions, in particular an Agency (Garda Trentino, comprising 400 actors-shareholders) responsible for the management of ‘Outdoor Park Garda’, and interaction with the local authorities.

As regards still unresolved problems, apart from the need to continuously innovate proposals and manage the introduction of new practices (kite surfing, foiling sailboats, e-bikes, even wingsuit base jumping), it must be considered that in the area there are urban functions connected to some 30,000 inhabitants. This implies competition, and sometimes conflicts, regarding the use of spaces and resources, urbanization processes, collective equipment provision, landscape preservation rules and actions, or simply people’s behaviours.

Arte Sella

The third case regards a location, Valle di Sella, with scant resources. It is, in fact, a hanging valley over Valsugana, where meadows, pasturelands and woods were frequented during the summer by the peasants of the neighbouring villages and, more recently, by middle-class families in some holiday periods. The municipalities involved are classified by the cited National Strategy as “peripheral” (4th
degree). Here, in 1986 a group of intellectuals and artists (namely, Enrico Ferrari, Emanuele Montibeller, Carlotta Strobele) with strong local, national and international relationships promoted a land art event, inviting artists to create temporary installations on the property of one of the promoters and in the neighbouring woods. The novelty of the proposal was evident, and the quality of the artworks impressive, furnishing new emotions as visitors walked in the woods. Both the direct experience of the visitors and the pictures of the installations started to spread knowledge about the initiative. After a slow start, the event consolidated with the support of the local administrations, and today it attracts nearly 100,000 visitors per year.

The progressive reinforcement of the initiative required formalisation of the association, which over time evolved around the key person of the director. The personnel acquired competencies in managing a cultural event of international level, which attracts a large number of visitors. A turning point came when the exhibition exited the small initial private place and started to display art works in the municipal woods. Another change happened when the artist Carlo Mauri was invited to create a “vegetal cathedral”, which soon had great resonance, also because a famous pop singer used it as the location for a video. This installation required changing the use of a public pastureland, in agreement with the municipality, meaning that a traditional place was given a new use, provoking discussion (and opposition) in the community.

In sum, the success factors reside in the quality of the proposal, in the ability to make innovative use of generic resources such as the woods, the natural materials, the silence of a hidden place, the changing lights and colours of the seasons. The economic impact is not great because, apart from a ticket for entry to the visit trail, and some restaurants, no important economic flows are generated. This is a critical point in the local community’s support for the initiative, but the territorial effects can nevertheless be appreciated because Arte
Sella has changed the image of the place, reverberating across the villages and towns of Valsugana. The environmental features make the event apparently replicable almost anywhere (and there are a number of places now promoting land art), but the key role of the promoters makes it very difficult to copy the initiative with the same level of quality.

Risks are connected with the fragility of a cultural event whose continuity depends on the quality of the proposal and, therefore, on the ability of the leading group. There are no large facilities and important financial flows to be managed, and the economic effects are small. The challenges therefore regard the ability to innovate proposals and the organization itself.
### Table 1. Comparison of three territorial innovation processes

<table>
<thead>
<tr>
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<th>Marcialonga</th>
<th>Arte Sella</th>
<th>Alto Garda</th>
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<tbody>
<tr>
<td><strong>The space</strong></td>
<td>A valley with a mix of traditional activities (Fiemme) and a winter sport-oriented valley (Fassa). Simple infrastructure required: provisional ski track. Initially weak infrastructure and difficult external connections. Marcialonga track progressively consolidated.</td>
<td>Mountain site without stable settlements. Weak infrastructure. High environmental quality (woods, pastures). Weak infrastructure and external connections. No urban and accommodation facilities.</td>
<td>Northern part of Lake Garda; impressive cliffs; two towns (12000 inhabitants each) and small villages. Lengthy external connections. Traditional tourism equipment &amp; abilities.</td>
</tr>
<tr>
<td><strong>Leadership</strong></td>
<td>Shared leadership by a group of people able to renovate itself. Olympic champion testimonial.</td>
<td>Small group of leaders. Lengthy innovation of the leadership.</td>
<td>No central leadership. Networked leadership.</td>
</tr>
<tr>
<td><strong>Learning and knowledge</strong></td>
<td>Continuous learning. Training of people involved. Support for new initiatives based on acquired know-how.</td>
<td>Knowledge focused on art products, artists’ environment, and event management and communication</td>
<td>Progressive adaptation. Imitation/competition/cooperation mechanisms.</td>
</tr>
<tr>
<td><strong>Proximity</strong></td>
<td>Easy local and lengthy</td>
<td>Area set apart, but cultural</td>
<td>Easy local and lengthy</td>
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</table>
external connections.  
Sport event connecting to the world. The valleys have been ‘put on the map’.  
pole at the international level.  
Cultural event connecting to the world.  
external connections, but place ‘on the map’.  
Sport events connecting to the world.

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<th>Cognitive</th>
<th>Organizational</th>
<th>Social</th>
<th>Institutional</th>
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| Mixed expert & local knowledge. Learnt from external experiences.  
Stimulation of a new vision of a local traditional activity (cross-country skiing). | Network of volunteers, formal organisations and local administrations. | Strong social relationships (trust).  
Involvement of local people in voluntary work.  
Reinforcement of local identity. | Progressive institutionalization of the initiative and connection with local authorities. |
| Ability to invent and develop a novel activity.  
Expert knowledge central (organisers & artists). | Crucial role of a small formal organisation. | Strong (evolving) links within the leading group.  
| Progressive adaptation to new activities coming from outside.  
Invention of some new initiatives (Rock Master).  
Different kinds of knowledge connected. | ‘Network of networks’ connecting organisations of specific activities. | Innovation of the image of the places involved.  
Involvement of local communities in new activities. | Informal rules for actors’ coordination.  
Plurality of institutions and administrations involved. |

DISCUSSION

The cases analysed can be defined ‘heterodox reterritorialization processes’ because they regard innovation of the relationships between the local communities and the inhabited territories, not based on public policies or a central role of the firms. The places involved are characterized, like many others in the Alps, by distinctive natural landscapes, a long history of human presence, the heritage of traditional settlements with a basic infrastructure, and vast tracts of abandoned fields and pasturelands. Connections with the external areas were – and in part still are – weak, but such conditions did not
impede the development of attractive activities and relationships at different scales. At the local level, the short distances and the consolidated traditions of interaction supported easy and intense relationships among the actors.

What happened in the cases analysed is not the result of ‘strategic plans’ or marketing actions undertaken to define ‘new products’, requiring consensus building by means of formalized participation processes, but rather the effect of a mix of spontaneous initiatives and coordinated actions. However, a number of ex post analyses and documents testify that the actors involved are fully aware of the features of the processes activated, as well as of the potentials and weaknesses of the experiences.

In general, resources which supported the lives of local communities for centuries are now used in a totally different way, but the real resources for the inception of the new paths have been the presence of innovators able to detect new opportunities, and the social capital – meaning both the consolidated social relationships and the new formal and informal networks required by the new proposals – which made it possible to meet the challenges by innovating collective practices. The leaders were only in part charismatic people; in most cases they were single operators or members of the communities able to devise and experiment with new proposals, to stimulate imitation, to construct new coalitions, and to activate new relationships. Networks were the main protagonists of change, allowing to coordinate actors operating in different fields and sectors. Their structuration required some ‘soft institutions’, which over time had to undergo renovation processes to guarantee continuity in their action.

As regards social proximity, the local communities showed internal cohesion but also openness, being able to make new uses of the local resources and spaces; this did not mean an absence of oppositions or conflicts, but the sharing of new visions and strategies conveyed by operational projects, as well as the ability to discuss and decide. It
was not simply a generic attitude towards cooperation that was involved, but the ability to leverage on the existing associations and economic networks to establish new forms of collaboration. Cognitive proximity meant activation of learning processes – individual and collective, formal and informal – able to combine local and specialised knowledge. Innovation required a profound change in the frames of reference, as well as the ability to learn and adapt. Innovators and leaders gave new stimuli, in many cases transferring external expertise, but knowledge was locally re-elaborated to produce effective know-how. And this ability enabled continuous innovation by proposing something new every year in order to update products and to improve processes.

As regards organisational aspects, in the cases of the Marcialonga and Arte Sella, the initial groups of volunteers had to establish formal and specialised organisations (larger in the former case, smaller in the latter) able to master administrative and economic matters and communicate appropriately with a wide audience. In the case of Alto Garda, a ‘network of networks’, involving professionals and operators’ associations, is the backbone of the system, because a central pole does not exist, and a more fluid system of relationships is operating. In all three cases, the involvement of the local society was a pre-requisite for sharing a new vision of the territories involved, and a means to overcome conflicts.

As regards the institutional aspects, in general no strategic planning documents were produced to devise perspectives and to construct shared visions, although formal decisions in terms of zoning have been taken in order to support some of the initiatives. Local administrations have anyhow played their part, following an adaptive approach, by which is meant a step-by-step decision-making process to update regulations and planning documents. The construction of the ‘institutional thickness’ has regarded in large part cooperation between local authorities and a variety of actors, the activation of
informal networks, and the establishment of associations and agencies, which took care of collective interest issues. Last, the success of the initiatives, the presence of new actors and leaders, the consolidation of new cooperation networks implied also the redefinition of the power relationships between peripheral areas and the centre, represented by the provincial government, the local institution controlling key competencies and financial resources.

CONCLUSIONS

The critical conditions of the ‘inner areas’, and the small dimensions of the ‘fragile mountain areas’, in geographical terms as well as in population, together with their history of decline and deprivation, make it difficult to start ‘endogenous development’ processes, which require innovation (Andreoli and Silvestri, 2016). Also many Alpine areas must face similar conditions, but the experiences analysed have demonstrated that it is possible to take action, and the result can be a profound change, in particular when goals extend beyond a ‘growth and development’ approach aimed only at GDP increase. In fact, the economic processes activated in the three areas considered (in some cases very modest) are not the main result, because social networking – reinforcing the local relationships or supporting specific activities – together with the learning processes activated, can be recognised as the sounder effects, for they make it possible to take advantage of some ‘generic resources’ of a mountain territory.

In fact, in the experiences analysed, traditional resources for mountain communities (meadows, woodlands, mountain tracks, etc.) have been used in new ways, while ‘latent resources’ (snow, wind, cliffs, but also emotional sceneries) have been valorised thanks to the ability of some ‘pioneers’ who elaborated new visions and promoted new actions. Proposals were appropriate to the territories involved, which were weak in economic terms but rich in social capital and exhibited a collective ability to learn and cooperate. Development
meant not only an increase in economic wealth, but the construction or reinforcement of social relationships, an innovated sense of belonging, and a higher quality of local communities’ life. These are the effects partly of the new economic activities supported by the new initiatives, but also by the networking processes required and by the new - external and internal - image of the territories.

To conclude, the following lessons have been learnt. The concept of ‘territory’ emerges as the appropriate definition of the outcome from the complex interaction among the local society, the physical features of places, and immaterial forms of capital. It has been affirmed that this is a “specific intermediary space”, a construction produced by the interactions between local and non-local actors (Torre and Gilly, 2000). The notion, in fact, includes socio-cultural values and historical legacies of a community whose members are linked by economic, cultural and historical values, and are interested in cooperating to give the community a future. In this framework, proximity, in physical terms, does not automatically yield advantages. Territorial innovation cannot simply be activated by the availability of material resources. It can start when these are included in new value chains, taking advantage of spatial and non-spatial proximity factors. Some key actors are needed, ones able to devise opportunities, connect the local dimension with the external one, activate knowledge interchange, develop strategies and projects, create coalitions, promote or innovate institutions.

Leaders can be single pioneers or a group of activators, but they need to operate in accordance with an informal/formal organisation. A local attitude to social networking, together with an ability to learn and adapt, to make tacit and expert knowledge interact, and to select and promote leaders, are needed.

What emerges is that social capital is not simply an inherited asset; rather, it is the effect of the ability to propose projects, which are appropriate for the specific territory, and to build consensus by
involving large parts of the local society. Institutions must play their part, overcoming usual bureaucratic procedures, and cooperating with the informal networks.

A crucial aspect regards the image of the territory produced by innovation. And this concerns both the local communities – which obtain a sounder basis for the construction of a future-oriented identity – and the external world, because some of the places considered have been ‘put on the map’ for the first time. For instance, ‘Marcialonga’ has not only given visibility to the mountain valleys involved, but the term has become popular, in Italy, to define long and fatiguing processes. As regards tourism in ‘Alto Garda’, the territory now has a strong sporty image, where young people can engage in a number of exciting activities. And this is important not only for the people really involved in such sports, but also for most tourists, who gain the impression of being in a place where ‘things happen’.

REFERENCES


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