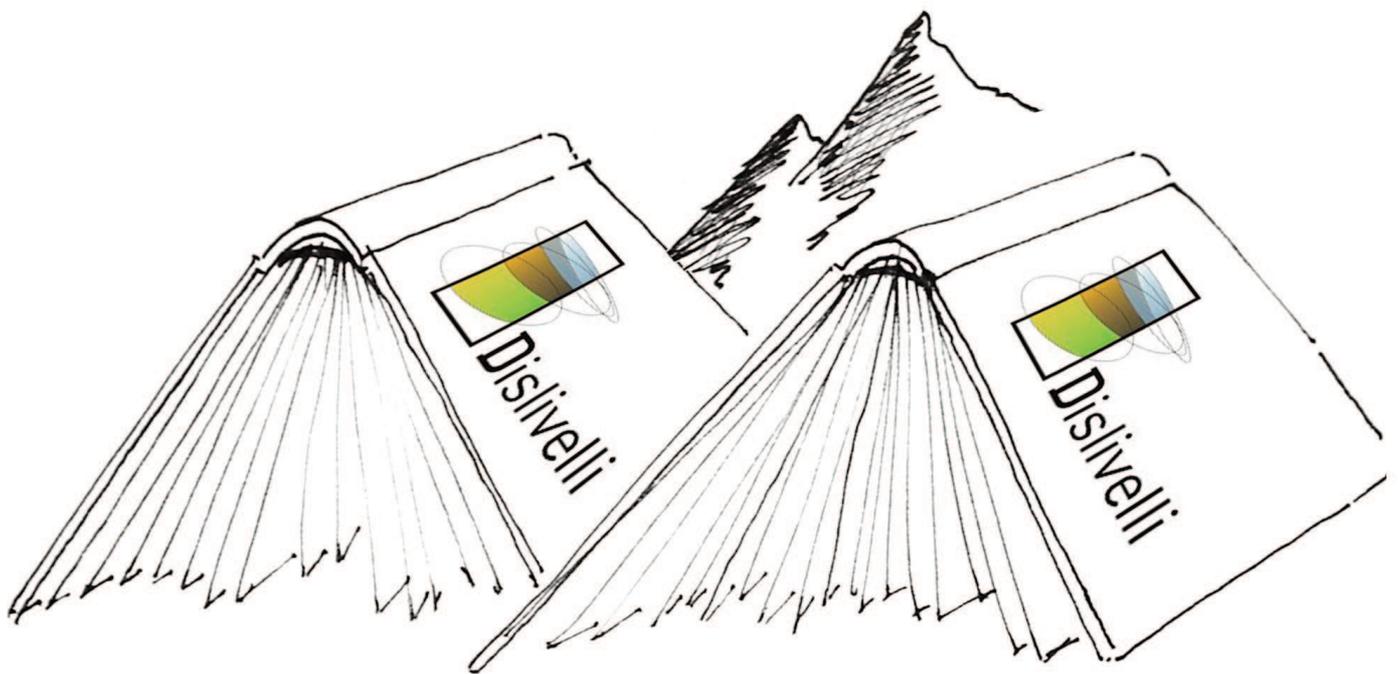


Mountain Dossier

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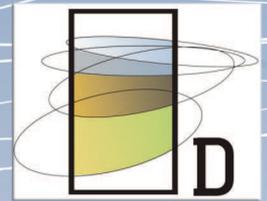
➔ New perspectives of Alpine research



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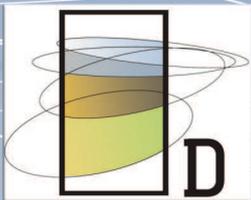
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Preface

Prefazione

Giuseppe Dematteis

One third of Italy's surface area is covered by mountains. Every year there are countless studies and articles published which deal with mountains not only from the point of view of the environment. Since the 19th century mountains everywhere have represented a fertile ground for research and studies for many disciplines such as human geography, history, anthropology, ethnography, political economy and architectural planning. In fact, from 1980 up to the current days, only in Piedmont 250 scientific publications on the topic of the mountain have been published.



Nevertheless, in Italy, contrarily to what happens in other countries, there is no specialised journal dedicated to this topic. Studies are fragmented and so are the publishing houses, thus hindering the spreading and sharing of information and therefore the cooperation amongst researchers.

Another negative consequence is that very little research carried out in Italy is known abroad.

This journal tries to tackle these issues. It provides Italian researchers with a single publishing house through which they can compare their work with one another and with international research. Furthermore, it gives foreign researchers the possibility to publish their work and most of all be aware of the work carried out in Italy. For this reason, all articles will be published in English, and contain an additional short summary in Italian.

The journal is biannual and available on-line on www.dislivelli.eu. Every issue will deal with a specific topic or event. The approach to every topic will be pluridisciplinary, this is the reason for setting up the Scientific Committee, made up of experts in urban planning, geography and anthropology that are currently involved in alpine research. The first issue of the MOUNTAIN DOSSIER has been published with the support and collaboration of the Permanent Secretariat of the Alpine Convention.

L'Italia è fatta per quasi un terzo di montagne. In Italia si pubblicano ogni anno numerosi studi e articoli scientifici che trattano delle montagne e non solo sotto l'aspetto naturalistico: fin dal XIX secolo discipline come la geografia umana, la storia, l'antropologia, l'etnografia, l'economia politica, la progettazione architettonica e altre ancora hanno trovato nella montagna del nostro e di altri continenti un campo di studio particolarmente fecondo. Ad esempio solo sulla montagna del Piemonte si contano circa 250 pubblicazioni scientifiche dal 1980 ad oggi¹.

Eppure non c'è in Italia, a differenza di quanto si verifica in altri paesi, una rivista scientifica specializzata negli studi sulla montagna. La frammentazione degli studi e delle sedi editoriali limita la circolazione e la condivisione dell'informazione e perciò anche la cooperazione tra gli studiosi. Un'altra conseguenza negativa è che poco di quanto si fa in Italia viene conosciuto all'estero.

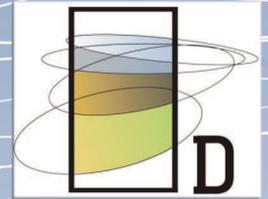
MOUNTAIN DOSSIER intende contribuire al superamento di questa situazione. Essa offre ai ricercatori italiani una sede editoriale in cui confrontarsi tra loro e con la ricerca internazionale. Offre agli studiosi di altri paesi, sia la possibilità di pubblicare i loro lavori, sia soprattutto di conoscere ciò che si fa in Italia. Perciò tutti gli articoli saranno pubblicati in inglese, con sintesi in italiano.

La rivista è disponibile on-line sul sito www.dislivelli.eu ed è semestrale. Ogni numero sarà legato ad un evento o ad un tema particolare. In relazione ai diversi temi, la rivista proporrà sempre una visione pluridisciplinare. In quest'ottica, è stato formato il Comitato Scientifico, a cui partecipano urbanisti, geografi, antropologi attualmente impegnati nella ricerca alpina.

Il primo numero di MOUNTAIN DOSSIER è pubblicato in collaborazione e con il supporto del Segretariato Permanente della Convenzione delle Alpi.

Giuseppe Dematteis
President of the Dislivelli Association
Presidente Associazione Dislivelli

¹ Registrato dallo studio promosso dall'Associazione Dislivelli: Puttilli M. (2012), *Studiare le montagne. Inventario della ricerca sulle terre alte piemontesi*, Milano, F. Angeli.



Introduction Introduzione

Federica Corrado e Marco Onida

The Alps represent a territory in its own right with homogeneous features and it goes beyond the political and administrative boundaries. There are about 14 million people living and working within this area. Starting from the Maritime Alps all the way to the Julian Alps one can find similar cultural features but above all similar challenges for the future. Over the past decades the Alps have lost importance compared to the past to the advantage of metropolitan areas which have "absorbed" most of the natural and human resources. Not surprisingly though, the Alps are a unique hub not only of cultures and know-how but also of natural resources such as water and wood, furthermore they offer leisure opportunities for body and soul. It is of pivotal importance to provide opportunities to exchange and compare ideas and results for those people engaging in research and studies, if we aim to enhance the importance of the Alps and also expect the appropriate compensation for the use of the local resources (e.g. the so called Ecosystem Services). Similarly important is the diffusion of research results.

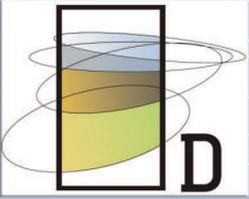


The *Forum giovani ricercatori per le Alpi di domani* (Forum of Young Researchers for the Alps of Tomorrow), which took place in Turin on 24th-25th May 2012, was an occasion for the young generation of researchers working on issues dealing with the Alps to meet and show their study projects and discuss the emerging current issues in the alpine area. This event was organised by the Associazione Dislivelli in collaboration with the Permanent Secretariat of the Alpine Convention, the Province of Turin, the Higher Institute on Territorial Systems for Innovation and the Education and Training Department of the University of Turin. The focus of the meeting was to reflect on the opportunities and perspectives of alpine research especially relating to the protocols and declarations of the Alpine Convention, the first and only tool of international law dealing with trans-boarder mountain areas which has given us the possibility to focus on current issues and needs.

The Forum has become a "place" where people can discuss and compare their ideas concerning the alpine space. Among new generations there is a strong desire to see the Alps not just as a recreational area or a reservoir of natural resources to be exploited, but as a place where people can live and have similar priorities to those living in the big cities. They dream that people born in these towns can choose to stay here, and those who study there have the possibility to return. With this in mind, this journal, MOUNTAIN DOSSIER, aims at becoming a virtual space to showcase, reflect or discuss research results concerning the mountains in general, with special attention given to the alpine context. It is open to the international scientific community and will follow up the work started by the Associazione Dislivelli. For this reason it is important to underline the fact that, even if the geopolitical and economic features of the different mountain areas around the world are different, in most cases, the Alps are considered a reference model. It is therefore important to make all the issues and research available at international level.

The first issue of this journal is dedicated to some of the most significant contributions during the Forum, which describe and thoroughly explain some very important themes concerning the Alps, such as repopulation of alpine territories and the challenges connected to it. After decades of demographic decrease, at last there are signs of improvement due to the new alpine inhabitants. The current political, economic and financial crisis is strengthening the role of the territory as a resource. Knowledge exchange contributes to the preservation of the territory and helps people to exploit it sustainably.

Il Forum dei Giovani Ricercatori per le Alpi di domani, svoltosi a Torino nelle giornate del 24 e 25 maggio 2012, è stata l'occasione per le giovani generazioni di studiosi che lavorano sulle questioni alpine di incontrarsi per presentare lo stato dell'arte delle proprie ricerche e per discutere delle tematiche emergenti nelle Alpi contemporanee. L'evento, organizzato dall'Associazione Dislivelli in collaborazione con la Provincia di Torino, il Segretariato Permanente della Convenzione delle Alpi, l'Istituto Superiore sui Sistemi Territoriali per l'Innovazione, il Dipartimento di Scienze dell'Educazione e della Formazione dell'Università di Torino, ha favorito una riflessione sulle opportunità e le prospettive della ricerca alpina anche in relazione a quanto



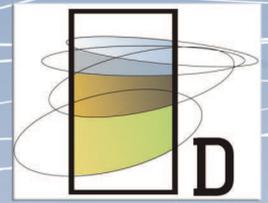
espresso nei Protocolli e nelle Dichiarazioni della Convenzione delle Alpi e, attraverso la partecipazione diretta del Segretariato Permanente della Convenzione delle Alpi, ha permesso di focalizzare necessità e questioni ancora aperte.

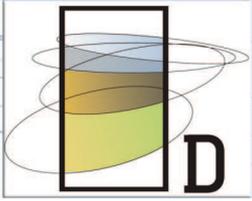
Il Forum è diventato così un “luogo” di dibattito e confronto a livello panalpino. In quest’ottica, questa nuova rivista, MOUNTAIN DOSSIER, vuole essere un luogo virtuale di presentazione, riflessione e discussione dei risultati della ricerca sui territori montani in generale, con particolare attenzione al contesto alpino, aperto alla comunità scientifica internazionale, continuando così il percorso avviato dall’Associazione Dislivelli.

Il primo numero è appunto dedicato alla restituzione di alcuni interventi significativi presentati all’interno del Forum, i quali inquadrano e approfondiscono aspetti di grande importanza per le Alpi a partire dal tema del ripopolamento dei territori alpini e dalle sfide ad esso connesse.

*Federica Corrado
Supervisor Research Area of the Dislivelli Association
Responsabile Area Ricerca Associazione Dislivelli*

*Marco Onida
Secretary General of the Alpine Convention
Segretario Generale della Convenzione delle Alpi*





The Alpine Convention and research *La Convenzione delle Alpi e la ricerca*

Marcella Morandini - Permanent Secretariat of the Alpine Convention

ABSTRACT

The Alpine Convention is an international treaty between the Alpine countries (Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia and Switzerland) as well as the EU, aimed at promoting sustainable development in the Alpine area and at protecting the interests of the people living within it. It embraces the environmental, social, economic and cultural dimensions. Research and monitoring are playing an essential role in the frame of the Alpine Convention, and their results shall provide the necessary tools for describing and understanding the complexity of the Alps and the relations with their surroundings.

www.alpconv.org



By taking a look at any satellite image of the European continent one feature immediately strikes the eye: a

white-capped arc stretching from the shores of the Mediterranean, swinging north above the vast basin of the river Po and ending beyond the Adriatic. It is the Alps. The satellite image of course betrays no national borders, revealing the Alps simply as a bejewelled crescent at the heart of a continent.

This territorial platform at the heart of the continent, shared by eight national States, with its biodiversity capital, water and wood reserves, is the natural, cultural, living and economic environment for nearly 14 million people and an attractive tourist destination for approximately 120 million guests every year.

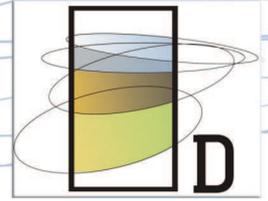
Acknowledging the complexity of the unity of the Alps as a single entity, beyond national borders, the Alpine countries (Austria, France, Germany, Italy, Liechtenstein, Monaco, Slovenia and Switzerland) as well as the EU signed the Alpine Convention on 7th November 1991, an international treaty aimed at promoting sustainable development in the Alpine area and at protecting the interests of the people living within it. In order to put this aim into practice, beside a Framework Convention setting the general goals, eight thematic protocols have also been adopted. They deal with land planning, agriculture, forests, nature and landscape, energy, soil, tourism and transport and embrace the environmental, social, economic and cultural dimensions.

The Alpine Convention is based on the assumption that common challenges, which obviously do not coincide with national borders, are addressed together by implementing a comprehensive policy with the principle of cooperation. The fact that not only the Framework Convention but also every Protocol contains a specific reference to research, monitoring and education shows the importance given to it. The Framework Convention in art. 3 states that Contracting Parties agree to cooperate in carrying out research activities and scientific assessment; develop joint or complementary systematic monitoring programmes and harmonize research, monitoring and related data-acquisition activities. Furthermore art.4 affirms that the Contracting Parties must facilitate and promote the exchange of legal, scientific, economic

and technical information relevant to this Convention. The Protocol on Conservation of Nature and Landscape Protection, for instance, in art.20 states that the Contracting Parties must "cooperate to promote and harmonize research and systematic monitoring programs". With regard to the results of the research, the Transport Protocol states that "the results of joint research and observation shall be duly taken into account when reviewing the implementation of this Protocol, in particular in order to devise methods and criteria for defining a sustainable traffic development and that the various result of national research and systematic observation are included in a common permanent observation and information system and that they are made accessible to the public under the existing institutional framework" (art. 18).

Research and monitoring therefore plays an essential role in the frame of the Alpine Convention, and their results provide the necessary tools for describing and understanding the complexity of the Alps and the relation with their surroundings. Science and research are crucial elements in enhancing sustainable development and especially activity-based research gives policymakers solid data on which they can base their decisions. In the Alps, research, on topics relevant to the Alpine Convention and its implementation is a major challenge: trans-disciplinary, integrative, application-oriented and heavily reliant on innovative ideas. In order to give young scientists the opportunity to contribute to policy-relevant discussions on Alpine issues in the frame of the Alpine Convention and to acknowledge their work, the Permanent Secretariat of the Alpine Convention has launched in 2012 the Young Scientists Award to award a diploma, dissertation, and master's thesis on topics closely related to the Convention's objectives and topics.

The Alpine Convention is a – still not adequately exploited – comprehensive framework which supports the development of coordinated and harmonized monitoring, observation and research activities. Already in 1998 a Working Group "Environmental objectives and indicators" of the Alpine Convention was set up with the mandate, inter alia, of developing a common Alpine-wide set of indicators as a base for long-term monitoring and sustainable development in the Alps, identification and assessment



of the success of implementation and gaps, as well as of Alpine risks and trends. The indicators are part of the System for the Observation and Information on the Alps (SOIA) of the Alpine Convention which promotes systematic monitoring activities for observation based on close network-like co-operation with institutions in the contracting States and with professional circles. The main result of this SOIA activity is the elaboration of the Reports on the State of the Alps (RSA) which every two years offers a shared and validated picture of the Alps on a specific topic selected by Alpine Ministers. Data is assessed, verified and compared with the information provided by the Contracting Parties, and trends are analyzed in order to identify future challenges at an early stage. The First Report on the State of the Alps was issued in 2007 and dealt with "Transport and Mobility", followed by "Water and Water management" (2009), "Sustainable rural development and innovation" (2011) and by "Sustainable Tourism" (2012), while the next one is already in the pipeline and will be on the topic of Demography.

The rich pattern of transnational cooperation on monitoring and research in the frame of the Alpine Convention is enriched by the activities of several Working Groups/Platforms, which study ongoing developments in different sectors (such as Transport, Ecological Connectivity, Natural Hazards, Demography, Water management, Energy, Mountain Forests,...) and develops recommendations and guidelines to address a specific issue maintaining the cooperative spirit of the Alpine Convention. The Platform Water Management in the Alps, for instance, developed and published the "Common guidelines for the use of small hydropower in the Alpine region" to provide general guidance for the identification of potentially favourable locations for small hydropower plants and for the subsequent authorization decision taking into account the principles of sustainable development in the Alps.

The Alpine Convention is far from being a dry treaty among States. It is rather a toolbox for the territory and for the people living in it. Its goals are achieved every day also with the commitment of many researchers, administrators and policy makers that are implementing valid cooperation and research projects from the Maritime to the Julian Alps, from a local to a national and international level also supported by European Territorial Cooperation Programmes such as Alpine Space.

The Alpine Convention is a pool for all these initiatives and instances. As an English journalist once said, thanks to research and cooperation we know the problems and in some cases we also know the solutions, but where is the political will to put those solutions into practice?



SINTESI

La Convenzione delle Alpi è un trattato internazionale sottoscritto dai Paesi alpini (Austria, Francia, Germania, Italia, Liechtenstein, Monaco, Slovenia e Svizzera) e dall'Unione Europea con l'obiettivo di promuovere lo sviluppo sostenibile e tutelare gli interessi della popolazione residente, tenendo conto delle complesse questioni ambientali, sociali, economiche e culturali. La ricerca e l'osservazione rivestono un ruolo di primo piano all'interno della Convenzione delle Alpi. Risultati condivisi e convalidati dagli Stati alpini permettono di descrivere e comprendere la complessità del sistema alpino inteso come piattaforma territoriale nel cuore del continente europeo, facilitando la cooperazione sia all'interno delle Alpi che con le aree limitrofe.

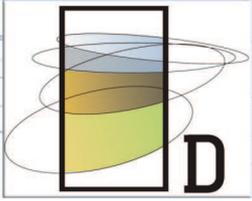
La Convenzione delle Alpi, infatti, si fonda sull'assunto che le sfide comuni – che raramente coincidono con i confini nazionali – debbano essere affrontate congiuntamente per approdare a politiche condivise di effettiva cooperazione territoriale. Anche nell'ambito della ricerca, anche grazie alla ricerca. L'importanza attribuita risulta evidente già dal fatto che non solo la Convenzione quadro ma anche ogni Protocollo contenga un riferimento specifico alla formazione, alla ricerca e all'osservazione.

La Convenzione delle Alpi si configura pertanto come una "cassetta degli attrezzi", una cornice comune per sostenere e promuovere lo sviluppo di attività coordinate di osservazione, monitoraggio e ricerca. Il ricco panorama della cooperazione alpina in questo campo è arricchito dalle molteplici attività dei Gruppi di Lavoro della Convenzione delle Alpi, che interessano vari ambiti tematici (tra cui Trasporti, Connettività ecologica, Rischi naturali, Demografia, Gestione delle risorse idriche, Energia, Foreste Montane,...) e permettono la redazione di studi comuni nonché lo sviluppo di raccomandazioni e linee guida comuni per far fronte a questioni che riguardano le Alpi al di là dei confini nazionali.

www.alpconv.org

Marcella Morandini is an official of the Permanent Secretariat of the Alpine Convention (Innsbruck/Bolzano). She is responsible for various projects for the local implementation of the Alpine Convention and is also involved with the activities of the System for the Observation and Information on the Alps (SOIA), as well as with European territorial cooperation.

Marcella Morandini è funzionario del Segretariato permanente della Convenzione delle Alpi (Innsbruck/Bolzano). È responsabile di vari progetti di attuazione della Convenzione delle Alpi sul territorio e si occupa, inoltre, del Sistema di Osservazione e Informazione delle Alpi (SOIA) e di cooperazione territoriale europea.



The vision of EURAC on Alpine research

La visione di EURAC sulla ricerca alpina

Thomas Streifeneder - Institute for Regional Development and Location Management - EURAC

ABSTRACT

The paper illustrates the transalpine and interdisciplinary research activities of the Institute for Regional Development and Location Management of the European Academy of Bolzano (EURAC Research). By giving some alpine wide figures and maps on tourism intensity 2010, population growth 2002-2009 and the development of farms 2000-2007 past developments and recent conditions on key socioeconomic aspects are depicted and described. Based on the experience of many international projects dealing with mountain areas as well as the institutes' integration in international networks the author refers some reflections on Alpine issues. According to Thomas Streifeneder the transfer of the large scientific knowledge from the Alps to other mountain regions should be fostered. Local potential and labeling schemes should be enhanced stronger. Data homogenization should be further developed in order to improve spatial monitoring of the Alps. The research projects should stronger follow holistic, interdisciplinary and transdisciplinary approaches. Finally there is a need for the research for new 'boundaries' of the Alps which better reflect the interrelationships between the Alpine regions and its bordering areas.

1. EURAC Institute for Regional Development and Location Management and scientific research activities regarding the Alps

The European Academy of Bozen/Bolzano (EURAC) is an innovative research and education centre which focuses on four scientific areas: Autonomies, Mountains, Health and Technologies. It is a private entity. The varied scientific background of the research staff allows us to adopt an interdisciplinary approach to research topics and gives us a chance to analyse multiple facets of the phenomena under study. The research activities conducted by EURAC's eleven institutes have strong links with the territory. Nonetheless, while taking their cue from the local reality, studies and analyses also include a wider European and international dimension.

Like all main research areas of EURAC – namely Autonomies, Technologies and Health, EURAC's research area Mountains was set up in 2012 and includes the Institute for Regional Development and Location Management, the Institute for Alpine Environment and the Institute for Applied Remote Sensing. All of these Institutes carry out basic and applied research in the environmental and social field. From the very beginning of its activities, the Institute for Regional Development and Location Management has been investigating the socio-economic development of mountain areas, especially in the Alps but also in the Carpathians. Indeed, the Institute's research focus lies in the dynamics of development: the economy, habitats and experience of mountain areas are evaluated according to the criteria of sustainability. Sustainability is our main concern also when it comes to assessing local conditions and the effects of trade on the environment, particularly in the field of tourism, agro-economy, agricultural consortia, transport and mobility. The Institute uses an interdisciplinary approach to research, which involves a wide network of contacts at international, national and regional level. Our ultimate goal is to actively help develop and organize territorial capital in mountain areas in a sustainable way. Agriculture,

transport and mobility, protected areas and urbanization are the key topics of our research activities. In the context of European, national and regional projects the Institute supports holistic and interdisciplinary research activities in relation to the above mentioned topics.

Great importance is attached to investigating spatial and territorial development in mountain regions using maps processed by means of geographical information systems (GIS). The Institute has drawn the boundaries of the 'Alpine region' at municipal level, which is an appropriate reference scale for monitoring socio-economic changes. With regard to this study area, which covers approx. 5.700 municipalities, the Institute cooperates in several scientific projects, including the preparation of Reports on the State of the Alps issued by the Alpine Convention. We are cooperating closely with the latter, also because the Technical Secretariat of the Convention is headquartered at the European Academy of Bolzano. This collaboration has given rise also to the Carpathian Convention, which has a similar structure to the Alpine Convention (framework agreement with specific thematic protocols – currently in the process of being drawn up). The latest example of scientific collaboration with the Alpine Convention is EURAC's participation in the Convention's Working Group on Sustainable Tourism and Demography (preparation of the 4th Report on the State of the Alps) and in the Convention's Mountain Farming Platform of agricultural experts.

Below are some examples of maps developed by the Institute: Fig. 1 shows tourism intensity at municipal level; Fig. 2 provides an overview of population growth between 2002 and 2009; Fig. 3 illustrates the development of farms.

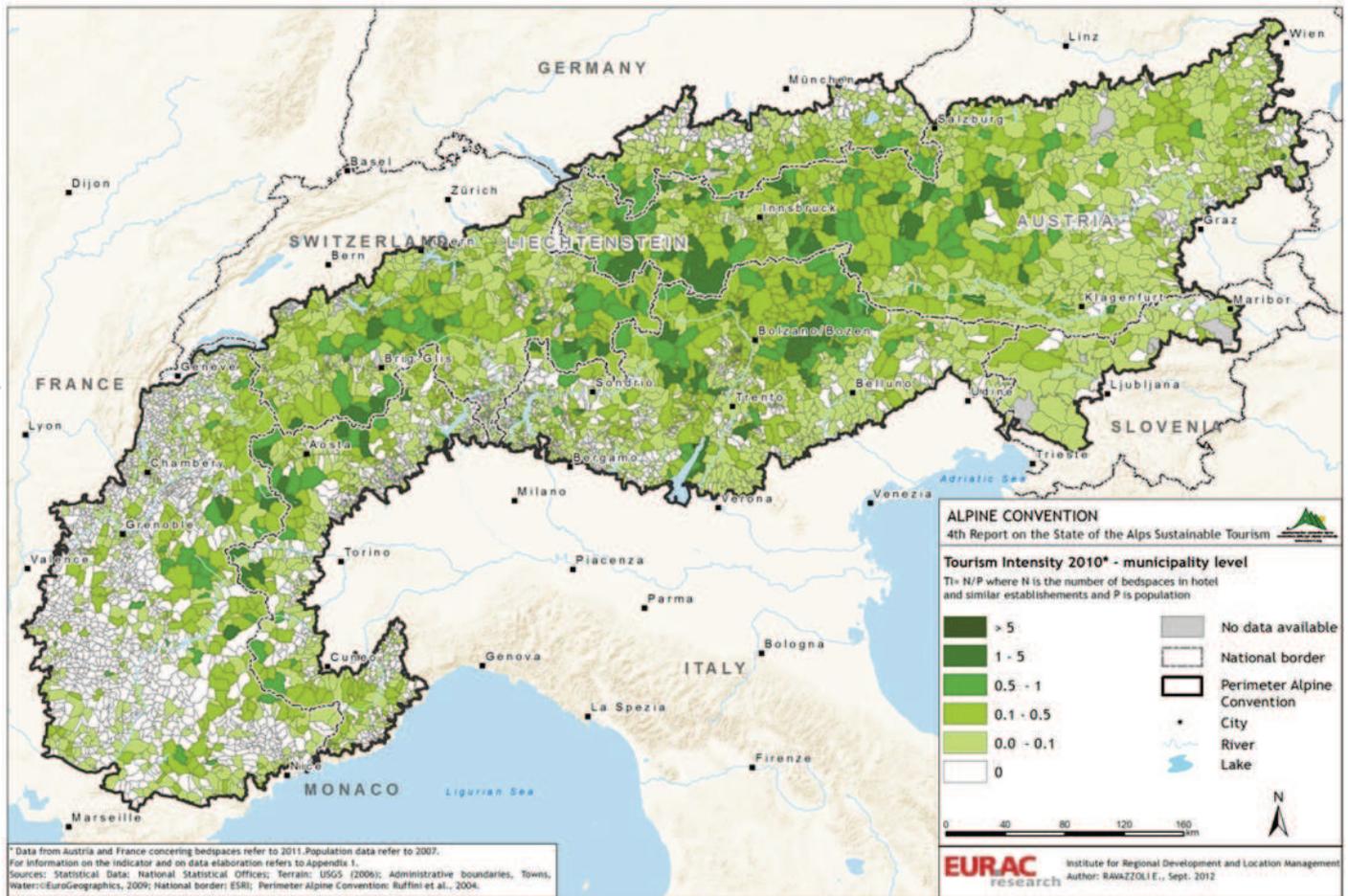
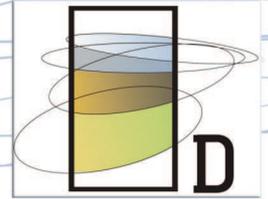


FIGURE 1 - Tourism intensity 2010 (Source: EURAC Institute)

While values are quite low in the easternmost and westernmost parts and on the outskirts of the Alpine Convention area, tourism intensity is quite high in the middle of the Alpine region.

2. Some thoughts on future research in the Alps New 'boundaries' for the Alps?

Current discussions on the future prospects of research in the Alps deal with the scope of the Alpine macro-region and its future geography. What are the future challenges in the Alps? Are these challenges closely related to the Alpine region? It should be noted that the current boundaries established by the Alpine Convention are 'conceptually broad': they include areas that strictly speaking do not belong to the Alps (such is the case of some areas in Germany, for example) and use uneven inclusion criteria, whereby certain towns, like Salzburg are considered part of the Alps, and others, such as Udine, are excluded. If our aim is to attract funding for disadvantaged mountain areas we need to define the geographical boundaries of the Alps as clearly as possible. From a scientific point of view and given the position of national alpine areas, the question arises as to whether the existing perimeter is suitable and adequate to map certain dynamics, such as the inter-relationships between urban and rural areas or transport flows and related issues. It is important to cla-

ify what we mean by "New Geography of the Alps": pre-alpine and alpine areas, as well as areas in the middle of the Alps are drawing closer to each other as a result of the construction of new railway infrastructure (e.g. the Gotthard and Brenner tunnels). This will entail significant changes in spatial planning and organisation, with direct and indirect socio-economic effects for the people living inside and outside of the Alpine region.

2.1 Holistic, interdisciplinary and transdisciplinary research approach

The above mentioned issues have macro-regional scope. It follows that the research in the Alps should not be confined within the current restricted Alpine region with its 5.700 municipalities. The European Spatial Observatory Network (ESPON) suggests that a trans-European perspective should be considered instead. ESPON has produced maps, similar to those generated for the Alps, using a different scale, a much larger one in fact, corresponding to Nuts¹ level 2 and 3, that is regions and provinces. Building upon that work, our future challenge consists in exten-

¹ Nomenclature of territorial units for statistics

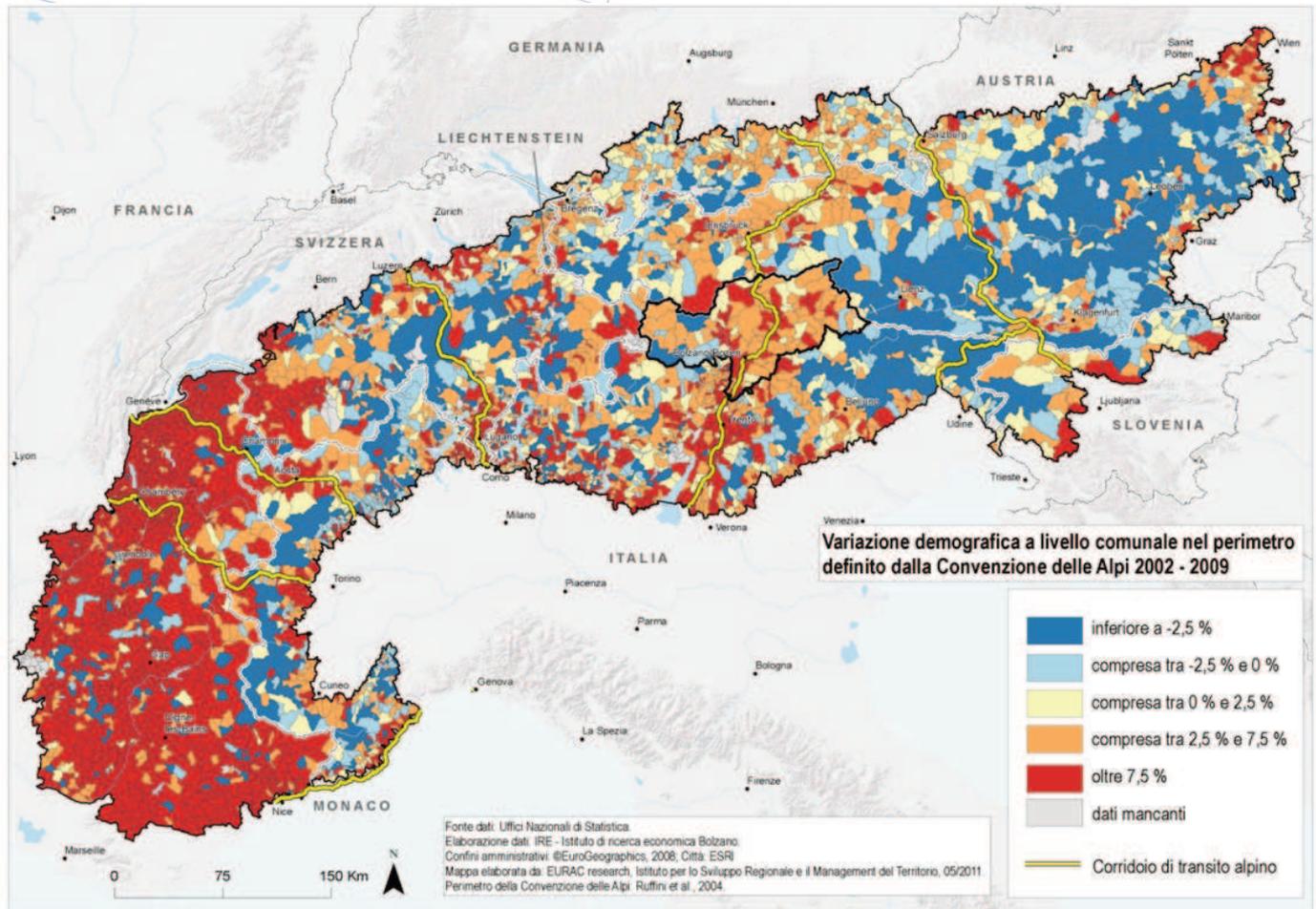
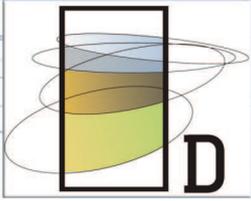


FIGURE 2 - Population growth 2002-2009 (Source: EURAC Institute)

A clear difference can be noted between the French areas, which after decades of decline have reported a slight growth recently, and the Austrian Alps, which show a severe population drop in recent years. A relatively heterogeneous situation can be observed in the central part of the Alps.

ding the study area beyond today's designated perimeter of the Alps, while analyzing phenomena at the appropriate level of detail, i.e. the municipal level. While this may seem like a minor thing, I believe that this will open up a fruitful field of research: socio-economic development issues will be explored, following the examples of national Austrian and Swiss studies. Finally, the research in the Alps should be more interdisciplinary and transdisciplinary and follow a holistic approach that helps understand complex phenomena and interrelationships between constituent parts.

2.2 Data homogenization

When conducting comparative research and studies on developments in the Alpine countries, national differences in the definition of statistical phenomena pose another challenge for research. The need to have comparable indicators and homogeneous definitions is an issue that must necessarily be addressed by the national statistical institutes under the aegis of Eurostat and will remain one of the most topical subjects for research over the next years, arousing competition and interest. Not long ago, for instance, this issue caused some severe pro-

blems at the time of processing maps of the hospitality industry. The research community must find plausible solutions for data homogenization so as to minimize discrepancies in quantitative data contained in complementary research and estimates produced by different countries. For some themes, however, the impossibility of comparing certain phenomena will remain (e.g. the international comparison of accommodation facilities that are not hotels).

The Alps are probably the most investigated mountain area of the world. No other mountain range can boast a specific research program with a European perspective like the Alpine Space programme. In the future we will have to capitalise on previous achievements and further our knowledge through the integration of new scientific results. In doing that we should avoid getting distracted by irrelevant details and maintain our focus on the overall objective and the key social issues at stake. The needs of society will have to be considered vis à vis general political strategies and trends, such as the EU 2020 strategy and the green economy.

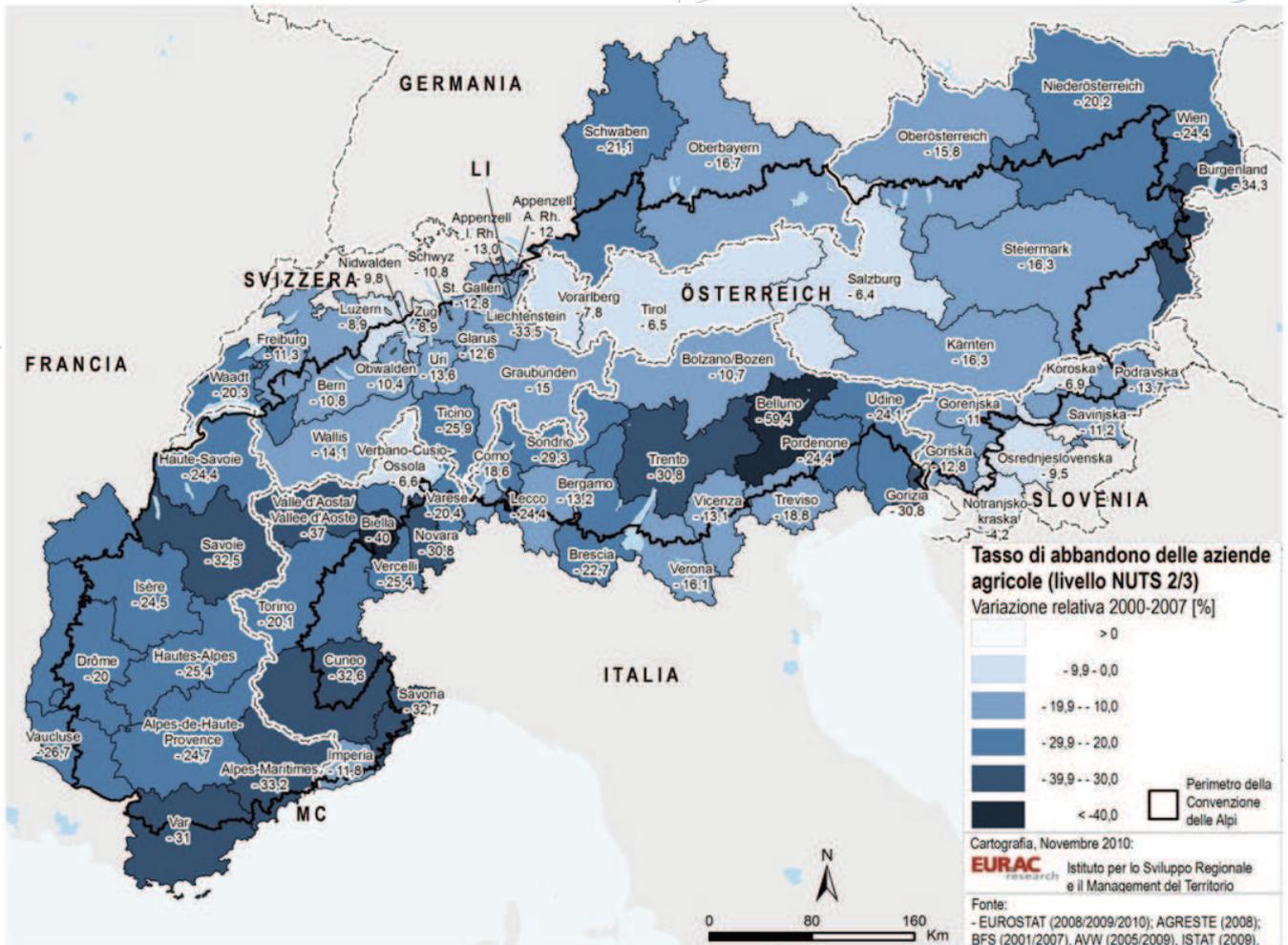
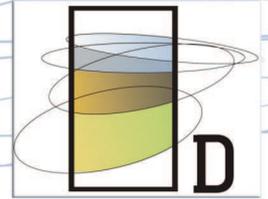


FIGURE 3 - Development of farms 2000-2007 (Source: EURAC Institute)
There has been a steady decline in the number of farms in the northern Alps, especially in Italy and France. A fairly stable situation can be seen instead in the areas of South Tyrol and Trentino.

2.3 Enhancing the local potential and labelling schemes

Why not make the Alps a region known for its organic products, an 'Eco-Region Alps'?² Why not step up the efforts that the entire region will in the future produce high quality local and regional products by making them at the same time easily recognizable through a specific label? Can the Alps be the 'green region' of Europe? Are these only visions or reasonable strategies? Considering that the Alpine region with its landscape, agricultural assets and traditions lends itself well to these visions and strategies, such hypotheses are not unrealistic. For most experts and scholars, the production and processing of high quality food products remain the only way to resist competition from 'the plain'. There are already many examples of projects and initiatives fully in line with these views. Many mountain pro-

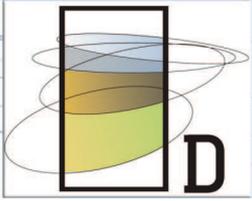
ducts can in fact boast superior quality and are successful in an increasingly demanding market, which is willing to pay for extra quality. In this context, the creation – in the very near future – of a labelling scheme for all mountain products, preferably recognised at European level, would be highly desirable. We can no longer accept labels containing the words 'Alps' or 'mountain' for products whose origin cannot be clearly identified. A good example here is the Swiss law on the use of the names 'Berg' (mountain) and 'Alp' (Alps)³, which clearly describes whether a product can carry said designations.

The debate surrounding the Alpine Convention's Mountain Farming Platform has shown that conditions vary greatly across the Alps and a common agreement is difficult to reach.

Two-thirds of Austrian organic farms are now located in the Alps:

² This is not a new idea. Back in 2001 the former EU Commissioner for Agriculture, Franz Fischler spoke of the creation of 'Eco-Regions' as a reasonable strategy not only for agriculture but for an entire valley or region: since existing agriculture in most cases is already extensive in nature, the organic supply chain should involve all other industries.

³ Ordinance on the marking 'Berg' (mountain) and 'Alp' (Alps) for agricultural products and processed agricultural products (Berg- und Alp-Verordnung - BAIV) of 8 November 2006.



this is a model, a positioning and specialization strategy that seems to be viable also for farmers in other countries. The Austrian Bundesland Vorarlberg⁴, an entirely mountainous area, aims to become an eco-region following the examples of Murau, Hohe Tauern and Mühl-/Waldviertel. Also in France, the Rhône Alpes region is implementing this vision and plans to convert its agricultural land to organic farming over the next four years⁵. Of course, transforming the entire Alpine region into an 'Eco-Region' or 'green region' still seems too ambitious, but in many areas organic farming can start strategically and has a strong and promising potential. Step by step, with better use of local resources and renewable energy, also the Italian Province South Tyrol can become a 'green region' engaged in climate protection, a genuine Climate-Country that relies heavily on renewable resources. This model could be followed by other Alpine regions.

2.4 Transfer of knowledge

The knowledge and scientific know-how gathered by the research on the Alps should be transferred to other mountain areas in a more efficient way. Other mountain areas in Europe such as the Carpathian Mountains, the Dinaric Alps and the Balkans could benefit from this transfer: working groups of the Alpine and Carpathian Conventions could work together, also in non-European areas and developing countries, to help avoid mistakes with development strategies, thus preventing the unwanted and unintended negative consequences of certain decisions made in the past decades. The new Alpine Space programme could include a priority axis devoted to these types of cooperation activities, while evaluating past actions and drawing some conclusions about them. The associations Euromontana and Mountain Research Initiative may play an important role. The transfer of knowledge concerns also governance practices undertaken in the framework of the Alpine Convention.

There are still many unanswered questions in the field of alpine mountain research. Answers are needed from interested researchers in order to improve the quality of life in the Alps, and EURAC is there to help!



SINTESI

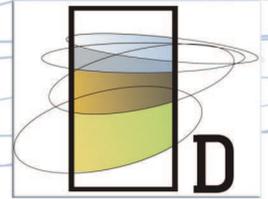
L'articolo illustra le attività di ricerca transalpina e interdisciplinari dell'Istituto per lo Sviluppo Regionale e il Management del Territorio dell'Accademia Europea di Bolzano (EURAC research). L'EURAC è un innovativo centro di ricerca e formazione privato con particolare attenzione su quattro aree scientifiche: Autonomie, Montagne, Salute e tecnologie. Le differenti competenze del personale di ricerca permettono di adottare un approccio interdisciplinare ai temi di ricerca e danno la possibilità di analizzare i molteplici aspetti dei fenomeni delle aree di montagna in Europa.

I dati a livello alpino e le mappe permettono una visione generale sugli ultimi sviluppi e sulle condizioni recenti dei principali aspetti socioeconomici. L'intensità turistica del 2010 dimostra che i valori sono molto bassi nelle parti orientali e occidentali e nella periferia della zona della Convenzione delle Alpi, mentre rimane piuttosto alta al centro della regione alpina. La crescita della popolazione 2002-2009 invece mette in luce una netta differenza tra le regioni francesi, che dopo decenni di declino hanno riportato una lieve crescita, e le Alpi austriache. Le ultime mostrano un grave calo della popolazione negli ultimi anni. Una situazione relativamente eterogenea può essere osservata nella parte centrale delle Alpi. L'articolo descrive lo sviluppo delle aziende agricole dal 2000 al 2007. Vi è stato un calo costante del numero di aziende agricole nel Nord delle Alpi, soprattutto in Italia e in Francia. Una situazione abbastanza stabile si rileva invece nelle zone dell'Alto Adige e del Trentino.

Sulla base dell'esperienza di molti progetti internazionali in materia di zone di montagna e l'integrazione dell'istituto nelle reti internazionali, l'autore espone alcune riflessioni su temi alpini rilevanti per il futuro. Secondo Thomas Streifeneder il trasferimento della conoscenza scientifica vasta delle Alpi verso altre aree di montagna dovrebbe essere favorito, lo sfruttamento del potenziale locale e lo sviluppo di sistemi di etichettatura dovrebbero essere migliorati. Ci vorrebbero più sforzi per una omogeneizzazione dei dati statistici per migliorare il monitoraggio spaziale delle Alpi. I progetti di ricerca dovrebbero seguire un approccio olistico, interdisciplinare e transdisciplinare. Infine, vi è la necessità per la ricerca di nuovi 'confini' per le Alpi che riflettano meglio le interrelazioni tra le regioni alpine e le sue aree limitrofe.

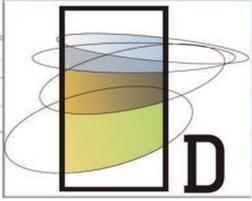
⁴ Leopold Kirner – Strategie Vorarlberg 2020: Ökoland Vorarlberg – regional und fair. Strategie Landwirtschaft Vorarlberg 2020.

⁵ <http://www.greenfvg.it/green/2010/01/18/la-regione-francese-rhone-alpes-sostiene-lo-sviluppo-dell%E2%80%99agricoltura-bio/>



Thomas Streifeneder (senior researcher, head of institute) is economic geographer and responsible for the coordination and strategic management of the Institute. He obtained his PhD at the Munich university in economic geography with a thesis about the agro-structural change and its causes in the Alps on municipality level. He is involved in many interdisciplinary projects on European, national and regional level ranging from issues about mobility to nature protection. Actually he is working out an indicator based target system for the agricultural sector of South Tyrol. His main research fields concern the agronomic and socio-economic development in mountain regions.

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Institutional involvement in studies on Italian mountains

L'interesse istituzionale per gli studi sulle montagne italiane

Andrea Omizzolo, Thomas Streifeneder - Institute for Regional Development and Location Management - EURAC

ABSTRACT

In 2011 a survey carried out by Eurac showed that today in Italy is impossible to have a clear and comprehensive overview of the main public and private entities conducting research on the Italian mountains. This study aims to fill such gap by trying to provide a picture of the main issues addressed by individual studies, hence laying the foundations for a more comprehensive and consistent inventory of research projects concerning Italian mountains.

Institute for Regional Development and Location Management

The research carried out by the Institute for Regional Development and Location Management focuses on the sustainable development of mountain regions. Practical solutions and possibilities are sought by means of regional, national and international projects in order to maintain and improve the quality of life in the economic and recreational areas of South Tyrol and the Alps, among other locations. The Institute forms part of an international network of government ministries, public bodies and other research institutes. The scientific research into regional development concentrates on interdisciplinary questions of traffic planning and agrarian economics as well as the management of environmental and nature protection. The aim is to analyze the socio-economic, environmentally relevant and spatial relationships between traffic, land use and nature protection. Another important aspect of the work is using the Geographical Information System (GIS) to make the research results available in cartographic form.

Research into location management is concerned with the economic, political and spatial fundamentals required to ensure that locations remain competitive on a long-term basis. The practical focus is on tourism, culture and its interaction with the economy, as well as integrated local and urban development. This involves the development of products and services, comprehensive destination and location management and the development of quality and co-operation strategies.



1. Introduction

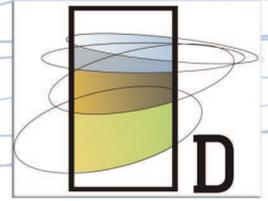
The strong presence of the mountains in Italy is well demonstrated by its 4193 mountain municipalities (more than 50% of the national total) that Italy's statistical office ISTAT surveyed in 2011. To govern and evaluate the complexity of Italy's highlands, however, one needs to understand those territories and the processes affecting them. The research community's interest in mountain studies is revealed by the keen attention that, at least formally, a variety of agencies pay to mountain areas, namely ministries, government agencies and departments, regional, provincial and local governments, universities and research centres, not to mention associations and local action groups. A preliminary survey carried out by Eurac in 2011 showed, however, that in the aftermath of the recent suppression of the Italian Mountain Authority (Ente Italiano della Montagna -EIM), there is no national co-ordination of research on mountain matters, nor is it possible to have a clear and comprehensive overview of the main public and private entities conducting research on the Italian mountains. This study aims to fill such a gap by trying to provide a picture of the main issues addressed by individual studies, hence laying the foundations for a more comprehensive and consistent inventory of research projects concerning Italian mountains, which EURAC is currently creating. The purpose of this work is therefore to stimulate debate on crucial issues around which to 'rally the forces' of stakeholders interested in the sustainable development of Italian mountains.

2. Scientific research on Italian mountains

The study involved a long search of sites and publications, which was made difficult by the lack of updated data. The following search keywords were used, either alone or combined together: montagna, mountain, montagne, berg, alpi, alps, alpes, alpen, appennini, appennino, appennine, apennins, appennines, aree montane, aree montuose, rilievi, montagna italiana, Italian mountains, isole, Sardegna, Sicilia, isole minori.

Ten research themes and the tentative names of research centres, universities and associations were added to that list. Both generalist web search engines (Google, Bing, etc..) and specialist ones devoted to bibliographic and scientific matters were used to gather information. Search results obtained were assessed and integrated with those of a large-scale survey of all websites belonging to national, regional and local authorities. Where possible, the bibliography of individual publications was screened in an attempt to systematize the huge body of knowledge by creating subtopics and identifying any useful links for further bibliographic searching.

Materials and information concerning Italian mountains in general were considered, with some in-depth examination of the Apennines and Italy's insular mountains. The Alpine region was not excluded from the research, however, given the large number of studies on the Alps which received EU funding, the decision was made to focus solely on key projects that can be considered as best practices and can be repeated in other mountain areas in the future. All major online bibliographic databases, websites and search engines were accessed between 15th March and 15th May 2012.



3. Italy's complex administrative framework

Italy's administrative framework is very complex: the regional level (NUTS 2) includes 20 regions, currently subdivided into 110 provinces, with 15 (planned) metropolitan cities, 369 unions of municipalities (officially entered in the National Association of Italian Municipalities' register and in the Ministry of the Interior's database as at 1 April 2012) and 8,092 municipalities. In all regions a portion of the territory has mountain features and as many as 4193 municipalities (i.e. more than half of the total) are considered mountainous according to the classification made by Italy's National Institute of Statistics (ISTAT). In the 1950s ISTAT began to use the definition of 'mountain area' provided by Law 991/52, which has now been repealed. All above mentioned institutions deal with mountain matters for various reasons: either because they are entitled to legislate on the matter, or because their institutional tasks include promoting or carrying out activities in mountain areas. Until 2007, the 'Report to Parliament on the state of the Italian mountains' used to provide an overview of the work of all of these organizations and institutions. That Report, however, has been discontinued: it is available in its thirteenth edition and therefore not updated.

4. Level of knowledge of Italy's mountain areas

The Alps have been investigated more than the rest of the Italian mountains. Obtaining data concerning the Apennines and insular mountains is generally difficult because certain Italian regions are often reluctant to share data and information, behaving in a similar way to countries in the Alpine area. It should also be noted that the degree of detail often varies from region to region and in some cases several data are not available because they have never been collected. In general, compared to research on the Alps, research on the rest of the Italian mountains is still inadequate, sectoral and focused on some specific areas only. An attempt to partially fill this gap was made in the framework of the European project APE - Apennines Park of Europe, which ended in February 2006 with its transition from experimental project to strategic policy through the Convention of the Apennines, a multi-party institutional agreement between Italy's national government, regions, provinces, (former) mountain communities, municipalities and authorities managing protected areas in the Apennines. However, research on some issues is not well developed yet, the territorial coverage is poor and information is not duly updated.

Which issues should be tackled as a priority to make sure that all Italian mountains are investigated in a thorough, consistent and comparable way, so that an equal level of knowledge can be achieved for all of them?

5. Research themes concerning Italian mountains

In Italy and in Europe, the signature of the Alpine Convention has marked a turning point for the preservation, promotion and development of mountain areas. Indeed the Convention represents much more than a treaty between States: it embodies the

international recognition of the fact that a coherent development of the areas under its jurisdiction, designed as a territorial system, necessarily requires the definition and use of common tools, joint policies and strategies that can enhance the distinctive features of the territory. For this purpose, 10 Protocols to the Alpine Convention devoted to specific macro themes were proposed, namely: Mountain Farming, Energy, Spatial Planning and Sustainable Development, Mountain Forests, Conservation of Nature and Countryside, Soil Conservation, Transport, Tourism, Population and Culture, Climate Change.

The themes of these ten Protocols, which are binding for eight European countries and have been thoroughly studied for nearly two decades by numerous researchers, do not represent the entirety of themes possible, but they can worthily represent and summarize the main issues at stake in Italy's mountain areas, be they in the Alps, in the Apennines or on the islands.

6. Key players conducting research on Italian mountains

According to our survey, in 2011, in Italy, there were 66 institutions that provided data, analysis, statistical and cartographic information on Italian mountain areas through the Internet and/or scientific publications both in digital and paper format. For the sake of completeness and a better understanding, also the institutions which conduct studies and research but do not make their results available for whatever reason were taken into consideration, or else generate information difficult to access. 20 state institutions, 14 regional institutions, 28 regional associations, foundations and private organizations and 4 observatories on mountain issues were identified. However, it is important to point out that this list concerns only the main players involved in research; indeed this list is by no means the final one and needs regular updating.

A part of the study focused on research conducted by universities¹ and was primarily based on a paper entitled "University education for the mountains" edited by Professor Davide Pette-nella of the University of Padua and taken from CTIM – 10th Report on the state of the Italian mountains (Ministry of Economy and Finance, Rome, 2004).

The university and research system in Italy is as complex as the administrative system. In 2011, the following entities were identified: 96 universities, 20 university foundations, 612 university faculties, 1554 university departments, 1401 university centres, 103 university institutes and 156 research institutes recognized by the Italian Ministry of Education, University and Research (MIUR).

Concluding remarks

Our survey revealed that all Italian universities based in mountain areas or close thereto are generally interested in research on mountain matters and are currently conducting relevant research activities, or have conducted them in the past. However, only a few centres specialise in matters concerning mountain areas. Among these, for example, the Polytechnics of Milan and

¹ Source: DB Educational offer MIUR – CINECA, last updated: 2011.

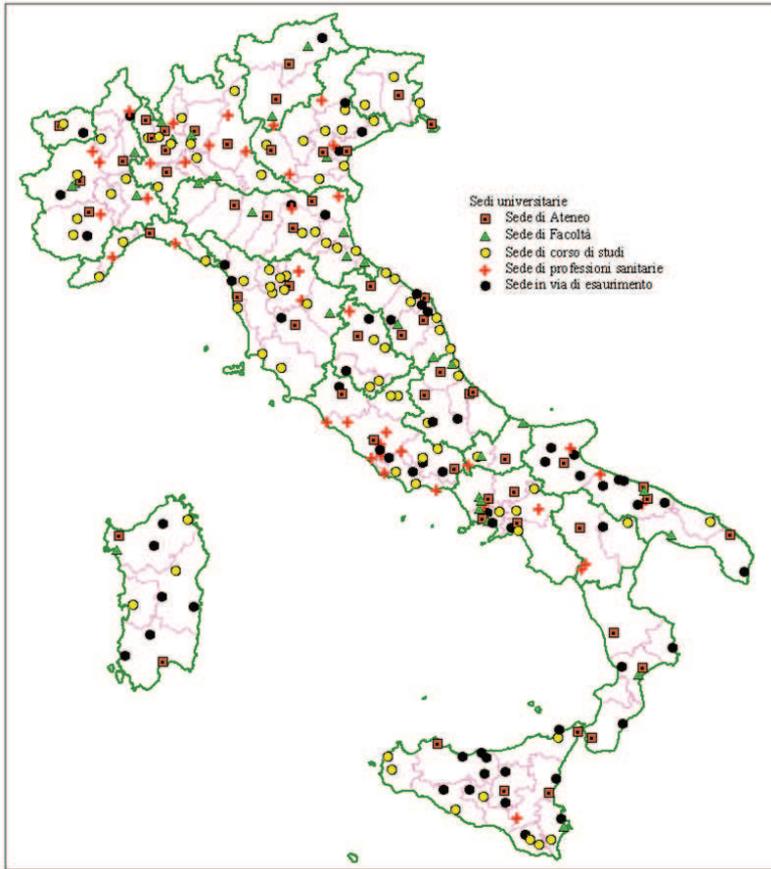
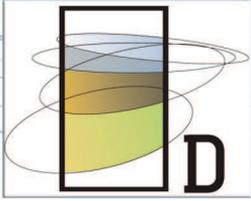


FIGURE 1 - Geographical distribution of universities; municipalities with at least one active course of study, academic year 2009/10 - Source: Eleventh Report on the State of the University System, Ministry of Education (MIUR) - National Committee for the Evaluation of the University System, 2011.

Turin which have activated courses specifically dedicated to the problems of the Alps. It is hard to believe that the Universities of Trento and Bolzano, which are located in the heart of the Alps, do not have a course of study devoted to mountain issues; more than likely they do not explicitly state such activities because they consider them as an integral part of existing academic programmes. The same holds true for the Universities of Padua and Udine, which in fact have proven their commitment to Alpine research. As far as the Apennines are concerned, two cases are worth mentioning: the Tuscia University, the only university that has created an 'Alpine Research Centre' for research on the Apennine mountains and the 'Observatory on the Southern Apennines' established by the University of Salerno which, however, only partly deals with mountain issues.

Among other things, our study highlighted the gap left by the abolition, in 2010, of The Italian Mountain Authority (Ente Italiano della Montagna –EIM) which, willy-nilly, served as an official centre of coordination, promotion and dissemination of research activities on mountain issues.

In troubled times like these, marked by an ongoing economic crisis, it is crucial to establish a network of researchers and national research centres that multiply the opportunities for exchanging ideas, sharing resources, networking skills and capitalizing on experience, in particular with reference to Alpine studies.

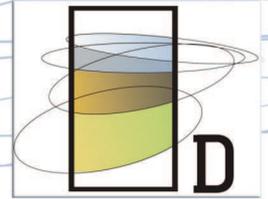
Moreover, the fragmentation of information and the lack of data concerning the Apennine mountain areas and insular mountains

highlight the need to devise and implement a unified national strategy for mountain research, which is currently missing in Italy. Eurac's survey on the involvement of institutional players in mountain research, which has been summarized here, intends to make a tangible contribution to this end, acting as a tool for starting collaboration in research on Italian and European mountain areas.



SINTESI

Nel 2011 una ricerca effettuata da Eurac ha evidenziato come non sia oggi possibile avere una chiara e completa visione di quali siano i principali soggetti pubblici e privati ad occuparsi della ricerca sulla montagna italiana. Lo studio, reso difficile dalla frammentazione delle informazioni e dalla scarsità dei dati sulle aree montane, in particolare dell'Appennino, mira a colmare tale lacuna cercando di ricomporre un quadro generale anche per quanto riguarda le principali tematiche trattate ponendo quindi le basi per un repertorio più completo ed organico della ricerca sulle Terre Alte italiane. Analizzando in particolare la situazione dei centri di ricerca e delle università il quadro che ne risulta spinge gli autori a sottolineare la necessità



di costituire un network di ricercatori e di centri di ricerca a livello nazionale che moltiplichi le opportunità di scambio di idee, di condivisione delle risorse, di messa in rete di competenze e la capitalizzazione delle esperienze, in particolare quelle alpine. La diversità e la ricchezza delle aree montane italiane, dalle Alpi all' Appennino e alle montagne insulari, evidenziano inoltre la necessità di ideare e attuare una strategia unitaria nazionale sulla montagna di cui oggi l'Italia è deficitaria.

Andrea Omizzolo (born in Cittadella - PD - Italy, 11 March 1980) graduated from the IUAV University of Venice in Urban and Regional Planning. After graduation he worked for three years at the Dolomiti Bellunesi National Park dealing with sustainable tourism and the management plan of the protected area. Since 2010 he works at the European Academy of Bolzano (EURAC) as researcher. Since November 2012 he is PHD student in Environmental Sciences at the University of Urbino. His main fields of activity are: territorial planning, monitoring of the Italian mountain, protected areas, landscape and spatial development, natural park management plans and value of natural resources.

Andrea Omizzolo (nato a Cittadella - PD - l'11 marzo 1980) è laureato in Pianificazione della Città e del Territorio all'Università IUAV di Venezia. Dopo la laurea ha lavorato per tre anni al Parco Nazionale Dolomiti Bellunesi occupandosi di turismo sostenibile e del piano di gestione dell'area protetta. Dal 2010 lavora presso l'Accademia Europea di Bolzano (EURAC) come ricercatore. Dal novembre 2012 è iscritto alla scuola di Dottorato di Ricerca in Scienze Ambientali all'Università degli Studi di Urbino. I suoi principali ambiti di ricerca sono: pianificazione territoriale, monitoraggio della montagna italiana, aree protette, paesaggio, sviluppo territoriale, piani di gestione di parchi naturali e del valore delle risorse naturali.

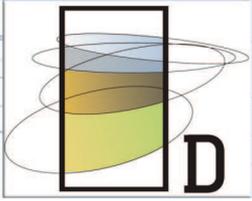
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sciplinari a livello europeo, nazionale e regionale, che vanno dalle questioni sulla mobilità alla protezione della natura. Attualmente sta lavorando su un sistema di indicatori per lo sviluppo strategico e futuro del settore agricolo dell'Alto Adige. I suoi principali campi di ricerca riguardano lo sviluppo agronomico e socio-economico nelle regioni di montagna.

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Territorial dynamics of repopulation in the Alpine area and their impacts on local development paths

Dinamiche territoriali di ripopolamento nelle Alpi e relativi impatti sui percorsi di sviluppo locale

Federica Corrado - Polytechnic of Turin and Dislivelli Association

ABSTRACT

The article deals with demographic issues in the Alps and territorial impacts of local immigrations in Alpine areas. In the article are illustrated recent demographic trends in the Alps with specific focus on an Alpine Olympic Valley, Susa Valley. The results is a process of repopulation due to new inhabitants and not to a birth increase. A direct link between territorial capital of mountain territory and focuses, desires and needs expressed by people who move to the mountains defines territorial dynamics of this process of repopulation. During this process new and old inhabitants (long-term residents) become parts of a cultural hybridization.



1. Tendential turnaround in the demographic trend of European mountain areas

The focus of this contribution deals with the issue of the recent phenomenon of repopulation in the Alps and its territorial impact on local Alpine communities, with specific attention to the Western Italian Alps. As Bender and Kanitscheider (2012) state, after a long period of emigration, since 1970 a new immigration process has started in rural areas in the French and Swiss Alps due to the decrease in population in the conurbation area. This situation is different in other parts of the Alps: the Western Italian Alps and the extreme part of the Eastern Italian Alps have been characterized by movements of emigration for a long time, while in the central Eastern Alps a very important decline in population has not occurred.

Observing the recent situation on demographic trends in the Alps (Fig. 1), it is possible to observe an interesting turnaround in some Alpine territories traditionally considered as marginal areas. This situation is not specific of the Alps but it also includes the European mountain territories, where the effects of this change become evident: from requalification of old villages and the creation of high-tech buildings, to the implementation of different forms of tourism (green tourism, soft tourism), experimentation of new services, implementation of sustainable mobility policies and finally the creation of green entrepreneurial activities (CIPRA, 2007, Corrado 2010, Messerli, Scheurer, Veit, 2011, Rullani, 2009).

A general overview on recent demographic changes has been pointed out in the Padima Project, an Interreg IV C project¹ for the exchange of good practices in fighting depopulation of mountain areas. In the Padima Project seven significant mountain areas were chosen as case studies and they were analyzed in relation to demographic trends, taking into account territorial dif-

ferences in terms of natural environment, morphology and population density. From the analysis it emerges that, in almost all Padima case studies during the first decades of XXI century, demographic trends have become positive, except for Buskerud and Hedmark in Norway (Tab. 1). The data on net migration is generally higher than the data on population increase (except for Brembana Valley in Lombardy Region, Italy). In Buskerud, the data on population increase is negative, but it registers a positive value for immigration. In Hedmark, the data on immigration is not positive but it reveals that immigration is better than the birth-death deficit.

In the Olympic Valley, the Western Italian Alps and the Spanish mountain study areas, the value of net migration exceeds the national value. It is interesting to note that in Mediterranean areas many people seem to be optimistic about living in mountain areas: they either come from big cities or are newcomers. This movement has generated a real phenomenon of repopulation more considerable in some parts of European mountains than in others. In the Alps, the situation is quite similar: there are mountain areas with a possibility/capacity to attract new inhabitants and other mountain territories in which emigration remains the prevalent trend.

2. A focus on territorial dynamics of repopulation in Susa Valley (Italian Alpine area)

Focusing on the Olympic Susa Valley (Fig. 1), it is possible to observe that the general positive value is not equally distributed in the whole territory. There are important differences: increase in population is registered in the high valley dedicated to the tourism sector and characterized by an important natural environment. An increase is also noticeable in the lower part of the valley that is commonly chosen by Alpine commuters, people who live in rural contexts but work in the Turin metropolitan area. It is important to note that the lower valley is also chosen by en-

¹ In the Padima Project, eight partners from five European countries (France, Italy, Spain, Norway, Sweden) were involved in a three years collaboration in order a) to organize a survey of key statistics characterising the situation and the good practices already developed at regional level, b) to exchange good practice identified between partners in the context of a thematic seminar looking at the potential transferability of these good practices, c) to deepen the exchange in the framework of inter-regional training sessions targeted at people in charge of developing actions to fight depopulation in the partner regions and to capitalize the results into a good practice and policy recommendations guide. Three specific issues were implemented during the project: education and training, territorial marketing, economic diversification in mountain areas (www.padima.org).

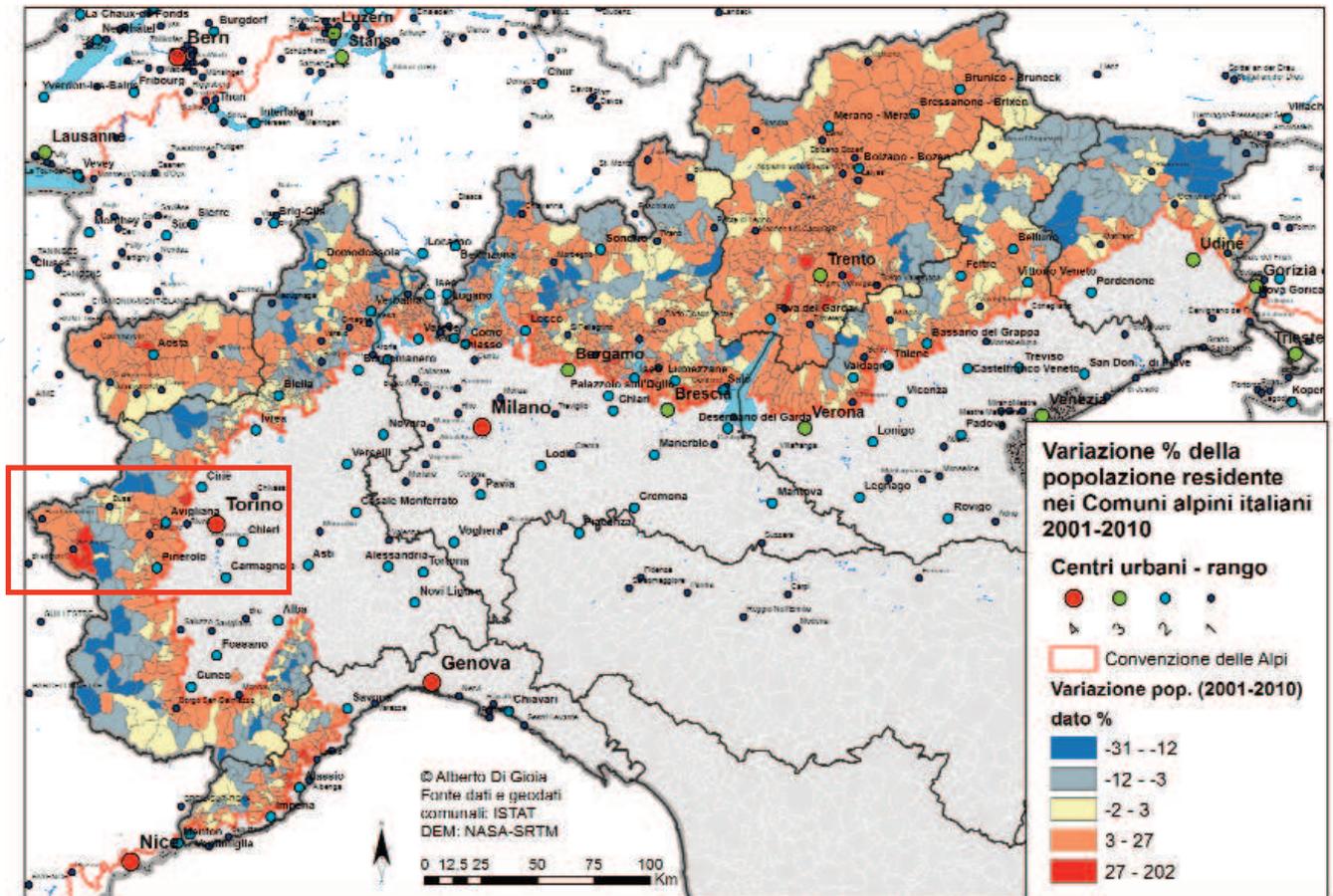
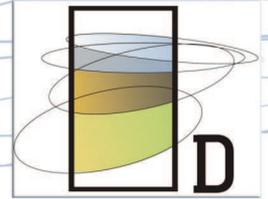


FIGURE 1 - Demographic changes (2001-2009) in Italian Alps - selected area is referred to Susa Valley cited in the text. (Map by Alberto Di Gioia on ISTAT data).

entrepreneurial subjects that invest in green, ethical and sustainable economy. Problems of depopulation remain in the middle part of the valley where there are few territorial services, economy is not sufficiently developed and there are no good service infrastructures. At the same time the middle valley is less urbanized than the other parts, though it has a potential in terms of environment and culture (Corrado, 2011).

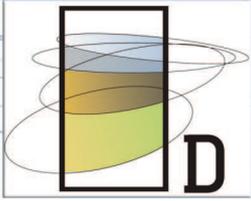
Considering all these factors, it is evident that the phenomenon of repopulation is generally linked to immigration processes and not to birth increase. Some analysis on this issue pointed out the existence of a group of subjects - called new inhabitants - determined to move to the mountains for a lot of different reasons: landscape, quality of life, contact with nature, job opportunities, outdoor activities, etc. (Corrado, a cura di, 2010, Dematteis M., 2010, Fourny, 1994, Padima Final Report 2012, Perlik, 2006, Varotto M, 2012). They are conscious of the potential, sometimes unexploited, of mountain territories. Their choice regards not only an economic project but especially a life project. They invest in their new life and surroundings, in many cases they become caretakers of the mountains and guardians of the

socio and territorial biodiversity.

They are “mountaineers by choice” (Camanni, 2000; Dematteis, 2010). People are not born mountaineers, they become mountaineers. In the history of the mountains, the populating process begins in other territories and only after it involves mountain areas: interactions through people that comes from different cultures have contributed to creating the mountaineer life style in the past as well as in the present (Zanzi, 2003).

3. Describing the processes of repopulation and their territorial impacts

Referring to this new process of migration to the mountains, it is important to make some distinctions not only in quantitative terms but also in qualitative terms. Different typologies of new inhabitants can be recognized as directly related to daily traveling, work and life style. On the one hand, we have permanent inhabitants, people who live for a long time on mountain territories for different reasons (from job and living cost to amenity features and presence of specific resources), on the other hand, we have temporary inhabitants as multi-local dwellers, seasonal



PADIMA study areas	Net migration	Increase in population
	<i>2005-2010</i>	<i>2005-2010</i>
<i>Mountain territory of Buskerud</i>	0,20%	-0,30%
Buskerud County	4,70%	5,80%
Norway	3,60%	5,50%
<i>Mountain territory of Hedmark</i>	-0,40%	-2,10%
Hedmark County	2,20%	1,20%
Norway	3,60%	5,50%
<i>Dalarna Region</i>	1,10%	0,10%
Sweden	2,80%	3,70%
	Net migration	Increase in population
	<i>2004-2008</i>	<i>2004-2008</i>
<i>Brembana Valley</i>	-0,36%	0,20%
Lombardy Region	-2,09%	0,10%
Italy (2005-2010)	3,69%	7,88
<i>Mountain area of Chiusella, Sacra and Dora Baltea Valley</i>	5,58%	3,83%
<i>Mountain area of Susa Valley-Olympic Valley</i>	5,44%	5,08
Piedmont Region (2005-2010)	4,20%	2,66%
Italy (2005-2010)	3,69%	3,19%
<i>Province of Teruel</i>	10,46%	7,88%
Spain	8,50%	8,68%
	Net migration	Increase in population
	<i>1999-2008</i>	<i>1999-2008</i>
<i>Massif Central</i>	0,46%	0,37%
France	0,26%	0,68%

TABLE 1 - Recent demographic changes in PADIMA study areas.

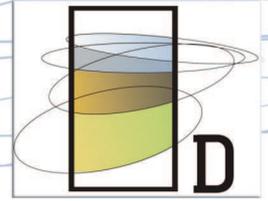
workers, second home inhabitants .

With reference to the situation of the Western Italian Alps, the most important role in migration processes is played by permanent inhabitants. On this base, it is possible to observe that there is a direct relation between territorial capital of mountain territory and the desires and needs expressed by people who move to the mountains. This relation is both vertical and horizontal.

Vertical relations are created by new inhabitants with local milieu resources: natural environment, local amenities, social capital, territorial services, communication infrastructures, quality of life, etc. They recognize local resources and use them in their new life project. This interaction process between individuals and local milieu is crucial to understand the reasons that attract people to move to the mountains and the localization factors of different types of people. In this interaction process innovation plays a major role: people bring new knowledge, ideas, information creating added-value to the local resources in order to

create and implement innovative solutions for development.

Horizontal relations are created at a different level. At local level these relations correspond to the interactions between new inhabitants and the local community and/or individuals. At supra-local level these relations are defined by the interactions between new inhabitants and supra-local actors or networks. In the first case, horizontal relations depend on socio-cultural aspects - such as social capital, capacity to integrate new subjects/cultures, emotional aspects - and on institutional aspects - such as local policies, local economic incentives to attract human capital, territorial services policies, concrete job opportunities or possibilities to implement innovative economic activities. In the second case, as new inhabitants arrive bringing their previous knowledge with them (related to their life experiences they may also have the expertise to create supra-local networks. Their interactions at supra-local level should be correctly balanced at local level, avoiding economic dependences or external imposi-



tions.

The outcome of these relations could reinforce local development goals (sometimes opening innovative development visions), it could ensure the reproduction of the local culture, and it could maintain local specificities through necessary re-invention. On the contrary, the outcome could generate social and cultural problems, strong opposition in territorial visions and a process of de-territorialisation.

In order to have positive effects and a real added value from the arrival of new inhabitants, it is important to share the local culture with newcomers - through courses on the local language, events on local culture - and to involve newcomers in the public community life as well as giving them a good quality of life.

In this way, new inhabitants could contribute to create an Alpine identity. As Salsa said (2009), mountain identity becomes a real “distinguishing sign of the diversity” compared to other territorial contexts as people experience an emphatic relation with the territory and feel a specific sense of place when they decide to settle in the mountains. The settlement in mountain areas is a cultural and ethical choice.

According to this, it is necessary to reduce “the constitutive asymmetries of hospitable dynamics, in many ways amplified in their potentialities of dissolution by the specific nature of mountain territorial configurations” (Bonesio L., 2003, p.7 translation by the author). Furthermore, in this sense, local and regional policies need to focus on the implementation of a mountain open-minded society able to manage cultural hybridization processes that include economic, technological, social aspects.

4. Territorial services, repopulation processes and local development

New and old inhabitants (long-term residents) become part of this cultural hybridization process through exchanges of ideas, efforts and information. In this process, the past represents the roots for the future and modernity and tradition are integrated in innovative ways .

The elaboration of the local territory carried out by new and old inhabitants produces new mountain landscapes that become important elements of reference during the process of territorial planning. “The ever increasing accessibility of cities, villages and alpine valleys, and the population migrations they give rise to, have continued to increase diversity among alpine inhabitants. The arrival of numerous citizens ready to make the daily journey to work in nearby towns, of retirees and remote workers, workers in the tourism sector, sometimes seasonal workers, has increased the heterogeneity of local populations and diversified cultural practices as well as expectations regarding services and amenities” (Debarbieux, 2008, p.48).

New inhabitants have demands about natural value preservation policies, welfare state (medical and social services), quality of life and, obviously, job opportunities. They require adequate territorial services: schools, medical centres, post offices, shops, banks, efficient communication infrastructures, organization of cultural events, sport activities and so on. This stresses the ne-

cessity of implementing policies on territorial services also in mountain areas where the cost-benefit situation is crucial.

Catering for these needs is very difficult in mountain areas for economic and physical reasons: time to reach services, difficult access and higher cost for services. On this base, ICT could play an important role to try to solve traditional demands in mountain areas in innovative ways and to fight the process of depopulation. Interesting examples of ICT application are offered in the Alps: long distance learning, centers with IT services are only some examples (Corrado, 2012).

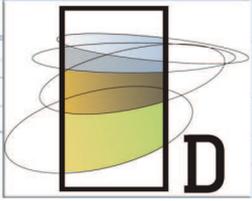
New inhabitants represent the opportunity to face the traditional challenges of mountain areas in innovative ways, they represent the possibility to maintain a presidium in the mountain territory because they bring ideas, knowledge and cultures. They favour a process of re-territorialisation of economic practices rooted in cultural heritage. They make use of local resources inventing new solutions. They create new jobs, they represent additional taxable income and property and new workforce. They are a potential in terms of social aggregation.

In this sense, they can work together with long term residents to build new images of mountain areas : as places of green, ethic and sustainable economy, eco-renewable architecture, cultural integration and environmental quality.

Finally, it is necessary to implement a strong involvement of stakeholders and networking among the different institutional, cultural, social and economic actors. According to this, territorial policies and action should be addressed to :

- policies welcoming individuals and enterprises, also through local information points or websites advertising local opportunities and options
- to reduce the digital divide in mountain areas,
- to experiment solutions to supply necessary territorial services,
- to increase incentives for new entrepreneurial activities in which tradition and modernity are integrated in order to diffuse the idea of the mountain territory as a comfortable and efficient place of social and economic residentiality.





SINTESI

In questo articolo l'autrice mette in luce e analizza un fenomeno interessante che si sta verificando nelle montagne d'Europa e nelle Alpi in particolare: l'inversione di una tendenza demografica che ormai da tempo registrava un andamento negativo, che sembrava essere divenuto ineluttabile destino della montagna, soprattutto di quella meno turistica e più fragile.

Invece, proprio a partire dall'inizio di questo secolo si registra un interessante e innovativo processo di ritorno verso la montagna. L'intervento, partendo da una descrizione più generale del fenomeno che include anche un confronto con territori montani extraalpini, presenta un focus sulla questione relativamente alla situazione migratoria all'interno del territorio alpino della Valle di Susa (Regione Piemonte, Italia).

Si tratta certo di un fenomeno ancora contenuto nei numeri e limitato nei territori coinvolti, il quale però risulta comunque importante per poter affermare che in alcuni contesti si è innescata una nuova dinamica sociale. Infatti, si tratta di un fenomeno legato maggiormente alla migrazione di nuova popolazione verso le montagne che all'incremento delle nascite, come si può vedere dai dati del saldo naturale e saldo migratorio proposti all'interno dell'articolo.

I protagonisti di questa rinascita sono nuovi abitanti con profili anche molto differenti tra loro, i quali però sono accomunati dal fatto che il loro non è solo un progetto economico ma un progetto di vita. Non sono più i neorurali hippie degli anni Settanta. Essi chiedono servizi territoriali adeguati, danno importanza alla qualità della vita e investono nella socialità. Sono soggetti portatori di idee che possono spaziare dall'agricoltura biologica, alla cyberimpresa, al rifugio tecnologico, alla bioedilizia, etc.

E' possibile osservare che esiste un collegamento diretto tra capitale territoriale del territorio di migrazione e bisogni e desideri espressi dai nuovi abitanti. Questo collegamento si esplica attraverso relazioni verticali tra nuovi abitanti e risorse del milieu locale e relazioni orizzontali create a differenti livelli tra nuovi abitanti e soggetti altri del territorio montano.

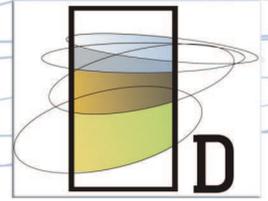
La costruzione di questo collegamento è l'occasione per innescare un processo di ibridazione culturale tra vecchi e nuovi abitanti che va verso una ri-costruzione dell'identità alpina locale e, dunque, diventa motore di innovazione territoriale.

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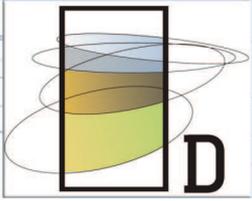
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Development perspectives for the Alpine urban systems. Spatial analysis upon role of services

Prospettive di sviluppo per i sistemi urbani delle Alpi. Un'analisi spaziale sul ruolo dei servizi

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ABSTRACT

The research proposes to deepen, by means of a multilevel analysis, the character of urban systems and the pre-conditions that can qualify life for settlers and the habitability of lands, and therefore the attractiveness of the various alpine settlements. After a theoretical part in the first section, the second part defines and uses a GIS methodology of spatial analysis specifically concerning urban and regional systems, with the identification of urban gravitational areas and areas of integration. In this first phase we obtain an assessment of the levels of potential accessibility of all alpine areas, with reference to accessible urban centers and integrated population. In a second part the report focuses on urban alpine area services provision, focusing on the Italian Alps. This analysis leads to the identification of municipal types defined on the basis of services and specialized activities, defined as strategic areas of intervention. The integration of this part with the previous one (referring to the urban gravitational areas) leads to the identification of a final classification of different levels of territorial marginality or centrality with a tripartite evaluation of marginality, isolation and functional autonomy of the municipalities in the Italian Alps.



1. Introduction

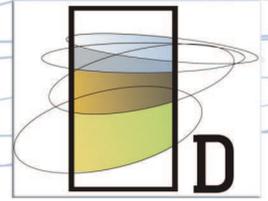
This text is a synthesis based on a PhD research on alpine urban systems and the role

that services have in making a place habitable. Its primary objective is to improve knowledge of regional urban systems in the Alps, based on the concept (well considered in literature) that, if regional development opportunities begin in urban centers (in relation to certain hierarchy and the functional specialization), it is only by improving our knowledge of them that we can make prospects for territorial improvement. In this report, we first examine the structure of the regional urban systems, defining types and interdependencies. Secondly, we explore the role of services and the housing conditions of the alpine territories. In the entire research there was extensive use of GIS analysis. For this reason, cartographical representations (see the full report for all the maps) are to be considered as an integral part of the work, not only as an integrative section or attachment.

The Alps are a set of systems with a high level of differentiation, subjected to intense multilevel practices, dynamics and processes. They stand out as a unique region of Europe (now also a "macro-region"), characterized by a dense palimpsest of overlapping cultural, social, economic and political elements, with intensive dynamics posed by change and, in recent years, increased by the transition to post-modernity. In fact, great territorial transformations were evident in the last century (processes well known by experts), with variations of trend in the last decade and new processes at present. 73% of Alpine municipalities across the borders, over twenty years - from 1981 to 2001- have witnessed an increase in resident population (Bätzing, 2005), which is now of about 14 million inhabitants. However, even if the population has certainly increased, it is not evenly spread on

the Alpine territory. Many localities in fact are characterized by the presence of significant regional imbalances. The manufacturing sector, now in decline, remains an important sector of specialization. The service industry is another major sector, however we need to consider the onset of specific economies characterized as interstitial economies (Raffestin, 1999), which are the result of the introduction of innovations in services, or innovation in some activities of the primary sector. These aspects are contradicting stereotypes commonly widespread in the urban culture, that considers the Alps as a postcard of yore, the home of local products and local cultures of mountaineers and shepherds, or exclusively a place for winter or summer leisure, as Leslie Stephen, Virginia Woolf's father, defined it in 1871, the Alps are "the playground of Europe."

The research proposes to deepen, by means of a multilevel analysis, the character of urban systems and the pre-conditions that can qualify life for settlers and the habitability of lands, and therefore the attractiveness of the various alpine settlements. After a theoretical part in the first section, the second part defines and uses a GIS methodology of spatial analysis specifically concerning urban and regional systems, with the identification of urban gravitational areas and areas of integration. In this first phase we obtain an assessment of the levels of potential accessibility of all alpine areas, with reference to accessible urban centers and integrated population. It is important to consider the different levels of hierarchy, considering the urban integration as the possibility of integrating multiple urban ranks not just a single one. The perspective behind this analytical phase is related to the fact that cities, especially in alpine regions, are not fixed entities but dynamic organisms: it is therefore necessary to work through relational evaluation techniques, allowing the correlation of different types of data and territories. A preliminary part of this section defines the methodology of the construction of a common data



base and a geographical data base, necessary for spatial analysis. This theme requires a significant amount of work, considering the size of the study area and the fact that the Alpine region belongs to seven countries (Italy, France, Switzerland, Liechtenstein, Germany, Austria and Slovenia).

In part three, the report focuses on urban alpine area services provision, focusing on the Italian Alps. The restriction of the geographical field, due to poor data availability, is determined by the time constraints of this research, they are unable to use the same geographical level for this section. This analysis leads to the identification of municipal types defined on the basis of services and specialized activities, defined as strategic areas of intervention. The integration of this part with the previous one (referring to the urban gravitational areas) leads to the identification of a final classification of different levels of territorial marginality or centrality with a tripartite evaluation of marginality, isolation and functional autonomy of the municipalities in the Italian Alps.

Through discussions, the research will then be used as an actual instrument for deepening the knowledge of the Alpine territory and for planning. It provides useful information tools and methodologies both within the world of research, potentially involving the interest of policy makers, and other subjects (from specific interest groups to individuals). Particularly interesting are the different methods of analysis and use of data, considering all the work to be transferred and reapplied in other peripheral regions characterized by interdependence between urban and rural areas. Additional significant items will be outlined in the report.

2. Data, geodata and analysis

The difficult preliminary phase was the construction of a transnational database for all Alpine systems including data and geodata referring to the five indicated categories. In particular:

- NUTS0-level administrative boundaries NUTS5, metadata harmonization and integration of the NUTS 5 level data with socio-economic and environmental issues;
- Data from European sources: Eurostat indicators and ESPON indicators inherent characters of spatial integration and settlement in urban centers;
- Digital Elevation Model, altitude in the Alps and processing of input data for the construction of weighted matrix for infrastructures;
- road infrastructure, defined on a hierarchical graph built up from the Eurostat infrastructural basis;
- European Corine landcover, with integration of the Swiss base (Bundesamtes fur Statistik BFS), necessary for the creation of a vector base of urbanized areas.

The second phase was developed focusing upon Italian Alps. There were added data of services, integrated with GPS indicators (see point 4. in this text).

The following are a summary of the analytical steps: :

- hierarchy of urban centers on demographic and socio-economical indicators, in 4 levels: local service centers, regional functional urban areas, urban areas functional transnational MEGA

cities;

- socio-economical parameters linked with urban areas and their geometry (geographic feature in GIS);
- potential integration of urban centers at European level (in this first phase), in relation to the accessible population on the basis of ESPON and using the spatial analyst GIS tool;
- construction of a weighted infrastructure graph on the basis of the hierarchy of the arche roads, slopes and average allowed speed and its subsequent use in network analyst. These elements are used to map and calculate the isochrone curve accessibility of all Alpine municipality centers and available local services (dealt in depth in the second phase only for the Italian Alps).

3. Gravitational urban areas in the Alps

On the basis of the abovementioned elements we have developed a construction method to calculate gravitational areas of Alpine centres, which provides a framework for the synthesis of interpretive analysis for the evaluation of potential relationships among urban centres. Overlapping secondary analysis of the characteristics of urban services, we can identify the different levels of territorial marginality and the possible integration of characters to the territories of the Alps (final section).

The size of the integration areas is required to integrate the accessibility of functional relationships within territories. This is a good guide to strengthen functional relationships between places, towns and cities. Gravitational areas are divided on the basis of the characteristics of physical geography and settlement of pre-existing elements, as well as administrative levels, the levels of actual gravitation and the relationship between hierarchy of centres. A first cartographic processing shows the levels of gravitation and defines the integration on the basis of possible accessibility with centres of different ranks.

The basic requirements to define urban gravitational basins in this work are:

- The achievement of a minimum threshold population for each trade area, which could justify the presence of a market and a consumer basin for the most important urban services, potential catalytic activity, accessibility and intangible dimensions of the informative chains (at different levels);
- The definition of potential accessibility internal to the Alps, referred to infra-systemic level, defined on isochrones of displacement not exceeding hours of transport for the majority of users within the system;
- The definition of an internal-external accessibility, referring to an intra-systemic level in relation to major European cities and lowland areas of the main centres;
- The adjustment made to the administrative boundaries at all scales, from the NUTS3 level (provincial) for gravitation on MEGA cities to municipalities (considered rather important in some areas of the Alps, in reference to the asset management and administrative services).

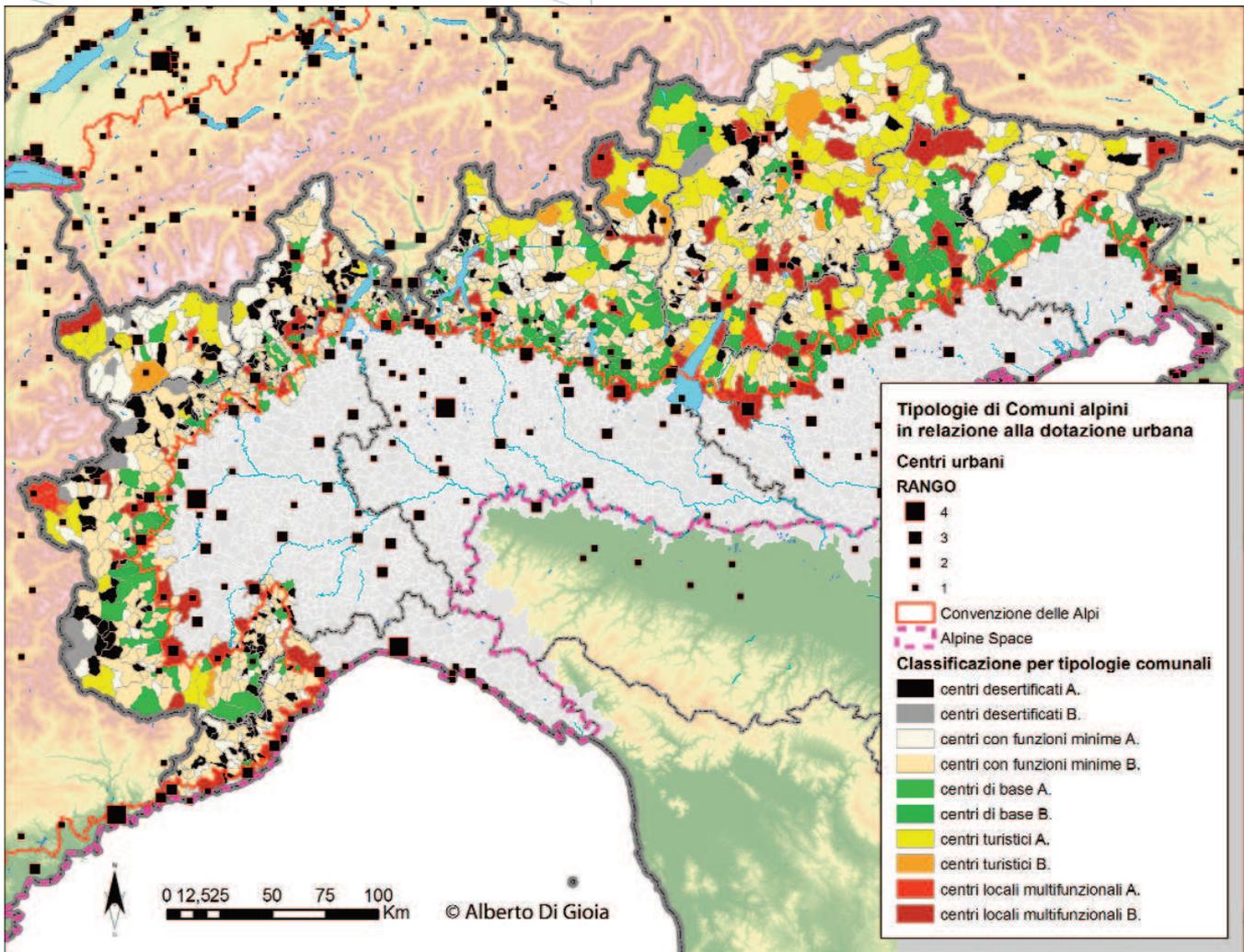
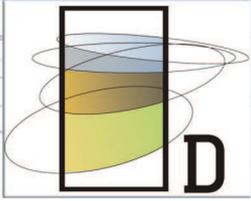


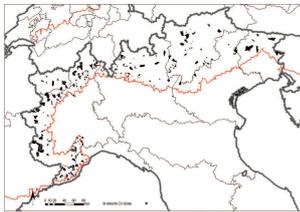
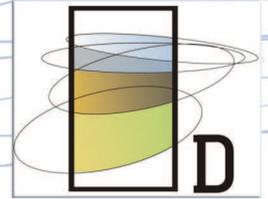
FIGURE 1 - Municipal typologies in the Alps related to the urban functions.

4. Services, marginality, isolation, functional autonomy in the Italian Alpine Systems

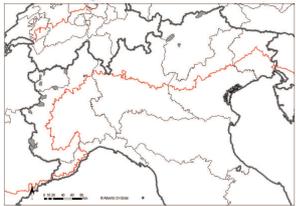
In the second analytical phase of the research focused on Italy, municipalities were classified on the basis of the hierarchy of urban services and amenities, from minimum to maximum specialization, considering the possibilities and attractiveness offered by each center for settlers, activities and residence. Indicators linked to the categories of individual services and collective services were used. The selected indicators were divided according to a basic classification, used first of all to define local hierarchies, secondly to define specializations. They are as follows:

- Minimal activity (at least one indicator): coffee-bar, food, primary schools, tobacco;
- Basic specialization (at least two indicators): schools, bakeries, banks, post offices, pharmacies, butchers, households;
- Intermediate specialization (at least three indicators): clothes shops, newsagents, ice cream parlours, stationery shops, home appliance shops and building material resellers;

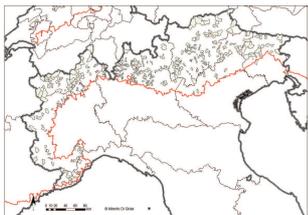
- High specialization (at least three indicators): libraries, shops specialized in hunting and fishing, cinemas, schools and high schools, jewelers, hospitals, beauty shops, universities, airports. These indicators were selected geo-statistically, on the basis of a frequency distribution in such a way that each group represents all the correspondent services according to their hierarchical level with which they are statistically correlated. On the basis of another set of specialization indicators (including touristic activities and other not useful to define hierarchy) using a specific ranking methodology, ten municipal areas for Alps were defined:



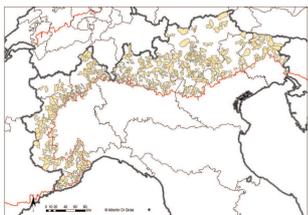
• **Deserted centers A.** Are centers that scored minimum values in the hierarchy, practically lacking commercial and service activities, minimum requirements for permanent residency in these centers. In Italy there are 250 type A centers;



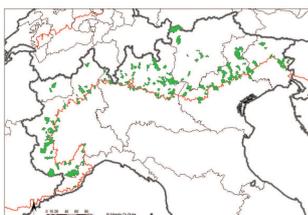
• **Deserted centers B.** It is a small group of municipalities that despite ranking really low in the hierarchy, have basic commercial activities or services, however not considered enough for permanent residency (there are services and activities, in fact born thanks to the work of another infrastructure;



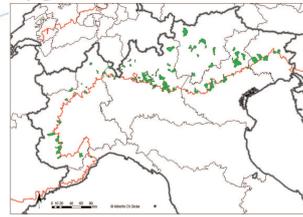
• **Centers with minimum functions A.** These centres possess the same characteristics as the first type, which is a very basic economic sector represented by the already existing town businesses (grocery store, primary school or other). There are 408 municipalities belonging to this group;



• **Centers with minimum functions B.** Similarly to the previous group their functions are very poor, but these centers include activities of at least two types (bar-coffee and food, or elementary school and food, for example). In reference to the hierarchy, while being considered similar to the previous group, nevertheless they may possess a minimum internal diversification, which is bound to a minimal function of centrality (in the case of the presence of a school, for example). 724 are the municipalities included in this group;

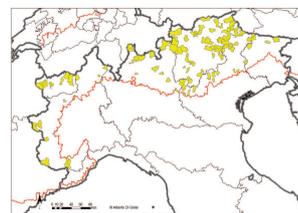


• **Centers of base A.** This category includes municipalities with an intermediate level of hierarchy and specialization, characterized by the presence of basic activities of different themes that make those centers attractive to small local reservoirs or infrastructures for external connection (especially those that are transport corridors, or in the valley areas connected by a single arterial road). This groups represents 210 municipalities;



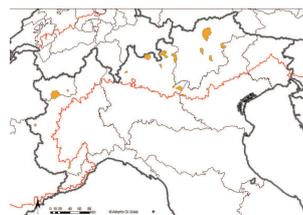
• **Centers of base B.** Similar to the previous group, also this one is ranked as intermediate with a basic differentiation of services and activities and a higher concentration of specific activities (for example catering, restaurants or services for education).

The difference is that it is still a residual category in relation to the previous one, which also includes all municipalities in the outer areas of the Alps and foothills, with a few exceptions such as in the high Valtellina, Sondalo and Silandro in Venosta Valley;

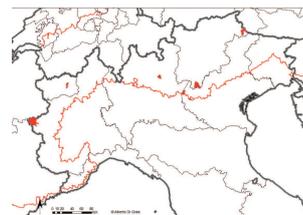


• **Touristic centers A.** This group includes centers ranked medium or lower-medium-including however, higher concentrations of activities related to tourism and accommodation. Contrary to the centers of the next group, these

are centers where tourism is a predominant sector, with little allocation and differentiation of other types of activities or services. They are considered mono-vocational centers. For this reason their local market faces the problem of seasonal fluctuations, in terms of labor supply and economic return of different types of activities. Other issues caused by this are related to services and public utilities, because other sectors do not adapt to mutations in population. 116 municipalities fall within this category;

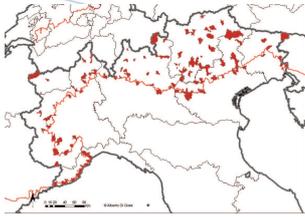
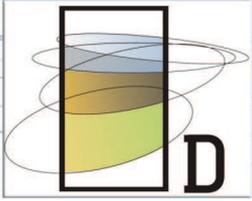


• **Tourist centers B.** Compared to the previous category, Tourist Centers B are ranked higher and show a greater differentiation of activities. There are collective services which are useful to the resident population. However, it cannot be enough to be considered as a multifunctional center and therefore this category is mono-vocational. 16 municipalities are in this group;



• **Local multifunctional A.** These centers are multifunctional and rank high compared to the average compared to the Tourist Centers B. They are more specialized, with a fair amount of basic activities, community services and private businesses. However,

compared to the following group, the presence of more specialized services or commercial activities is not as varied;



• **Local multifunctional B.** This group is characterized by a good or excellent diversification of primary and secondary sectors, with additional specialized activities. It is a rather important category, with 118 municipalities corresponding to approximately 5% of the total number of Alpine municipalities.

It is interesting to consider that the distribution among all local centers is not the same throughout the Italian Alps. In fact, some differences are evident between the north-west and the north-east regions, in reference to a stronger presence of intermediate-ranked centers in the eastern Alps. A number of centers are localized at the edge of the perimeter of the Alpine Convention, polycentric areas of the main cities of external lowlands. In addition to them, many others are available within the Alps, especially in the main valleys directly connected with the inner lowland areas, but also in the valleys further inland.

Comparing the features of urban services with those determined by the possibilities of spatial integration, defined by urban gravitational areas, we can create maps of the Alps on the basis of the concept of marginality, insularity and functional autonomy. In particular, these parameters are interconnected, based on previous analysis (for the explanation of every classification see the full report) and they are mainly:

- Comparing the minimum characteristics of urban amenities (indicators presented above);
- Possibility to access local centers within 30 minutes;
- Possibility to access regional centers within 60 minutes;
- Possibility to access a highly ranked center - Transnational within 60 minutes.

The combination of these parameters in the final classification of margins has produced 6 different classifications (Fig.2) for the municipalities following marginality criteria (for other criteria on insularity and functional autonomy see the full report):

- **Absolute Marginality.** Municipalities failing to meet all the parameters mentioned above, ultimately isolated and devoid of activity;
- **Relative marginality - very strong level:** usually fulfilling the first parameter, they have basic services or activities, but they are not accessible from external centers or are difficult to access;
- **Relative Marginality - strong level.** Municipalities possessing basic services and economic activities accessible to local centers;
- **Relative marginality - weak level.** Municipalities with few services but easily accessible or municipalities with basic services but poorly connected at the local level;
- **Relative marginality - only with large cities.** Municipalities that do not meet the last parameter only for their accessibility to major cities;
- **Not marginal.** Not marginal municipalities that include all the parameters considered.

The results show on the one hand that the levels of accessibility of large urban cities in alpine areas is especially efficient in Turin, Bergamo, Brescia, Verona, Trento and Udine. On the other hand, they show how the level of profitability, quite widespread, is in itself very different depending on the geographical areas. The absolute marginality or very strong levels are especially widespread in mountain areas further inland, in the province of Cuneo, the Valcamonica, High Valtellina, Venosta Valley and in more internal areas of Veneto and Friuli. However, the significance of this also needs to take in to consideration municipal types. Areas with very strong or strong marginality, but associated with the presence of multifunctional or tourist centers, as in the case of the High Valtellina or Venosta Valley, can also benefit from a certain level of autonomy, while this is not the case for marginal areas lacking in economic activities and/or services or not characterized by specialized activities.

5. Alpine Systems of integration

Finally, to summarise the results of the research, the different Alpine Systems are to be considered as a planning perspective. Starting from urban gravitational areas, in the first part of the analysis, and interlinked data related to local patterns in reference to urban amenities and services, it is necessary to identify development paths as reference for local projects for each alpine region. Cartographically, this synthesis was conducted spatially with symbolic representations and classification of the previous criterion, ranking Alpine spatial systems in four different categories:

- rank 1 - metropolitan systems;
- rank 2 - inter-regional systems;
- rank 3 - regional systems;
- rank 4 - local systems.

For every category, their characteristics were clearly outlined: main gravitational centers and widespread areas of integration (in respective tables), (into the conclusion) important aspects for planning, good solutions for administrative changes, quantification of municipalities in terms of marginality or, on the contrary, functional autonomies for services and resources.



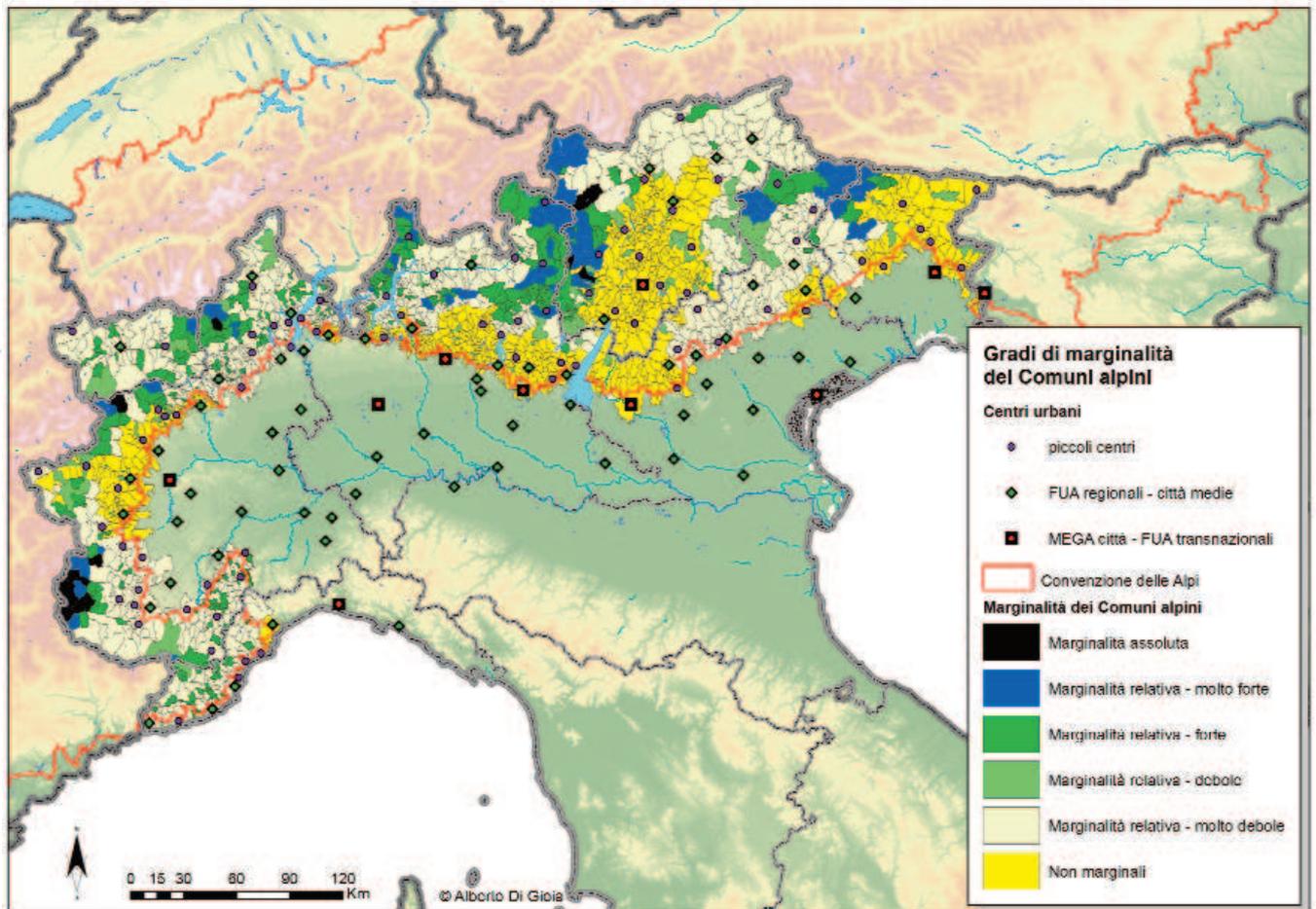
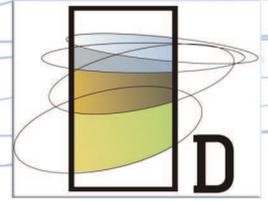


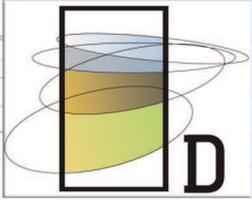
FIGURE 2 - Levels of marginality for the alpine municipalities.

SINTESI

Questo contributo vuole illustrare come il GIS possa porsi come valido strumento nella produzione di conoscenza analitica nell'ambito delle scienze regionali. Il GIS è stato utilizzato all'interno di un progetto di ricerca inerente lo studio dei sistemi urbani delle Alpi (intese come intero arco alpino, a livello transnazionale), al fine principale di individuare bacini transcolari di gravitazione urbana come condizione di sviluppo di servizi ed occupazione (parte che verrà sviluppata in futuro). Tale finalità ha reso necessaria l'integrazione di temi differenti e di conseguenza l'interrelazione di metodologie di analisi specifiche. I temi considerati: aspetti socio economici, aspetti demografici, centri abitati e morfologia degli insediamenti (quantificazione e localizzazione delle aree urbanizzate vere e proprie, accessibilità ed infrastrutture materiali, aspetti inerenti la geografia fisica come altimetrie e pendenze). Difficoltosa fase preliminare è stata la costruzione di una base dati transnazionale (le Alpi investono il territorio di 7 stati nazionali) comprensiva di dati e geodati riferiti alle cinque categorie precedenti. Su queste basi sono stati condotti approfondimenti, in una seconda parte, sulle Alpi italiane, individuando tipologie comunali e condizioni di marginalità, isolamento e autonomia funzionale.

Alberto Di Gioia, born in Turin in 1982, with a degree in planning, urban planning and environmental, has completed a PhD in Environment and Planning - Planning and Local Development at the Polytechnic of Turin, where he teaches urban and territorial analysis with GIS tools. Actively involved in the research and communication of issues related to alpine areas, especially the evolutionary dynamics and urban issues, also through the Dislivelli Association. He has participated in European projects of transnational cooperation, including Interreg IV C-FASST inherent food chains cross-border Italy-France, Interreg-PADIMA related to policies against depopulation in mountain areas with European partners in the Euro-Mountain, and consulting for ESPON projects.

Alberto Di Gioia, nato a Torino nel 1982, laureato in pianificazione territoriale, urbanistica ed ambientale, ha portato a termine un dottorato di ricerca in Ambiente e territorio - Pianificazione territoriale e sviluppo locale presso il Politecnico di Torino, dove è docente a contratto di analisi urbanistica e territoriale con strumenti GIS. Partecipa attivamente alla ricerca e alla comunicazione delle tematiche inerenti i territori alpini, soprattutto le dinamiche evolutive e gli aspetti urbanistici, anche attraverso



l'associazione Dislivelli. Ha partecipato a progetti europei di cooperazione transnazionale, tra cui Interreg IV C-FASST inerente le filiere alimentari transfrontaliere Italia-Francia, Interreg-Padima relativo alle politiche contro lo spopolamento delle aree montane europee con altri partner della rete Euro-Mountain, consulenze per progetti ESPON.

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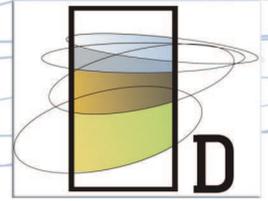
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Comelico: stay or leave? Reasons for returning to an Alpine valley

Comelico: restare o partire? Le ragioni per ritornare in una valle alpina

Elena Ferrario - University of the Highlands and Islands (UK)

ABSTRACT

One of the most significant factors of population decline in Alpine areas is the constant out-migration of young graduates, which drains the most proactive component of local communities, taking away resources to local development. An in-depth knowledge of the causes of this trend is essential to fully understand mountain societies and to conceive effective policies for repopulation. Through a field research in a valley of the Eastern Alps, the study addresses such phenomenon, analysing the relation between the education level of young mountaineers and the choices to return or to leave the valley. At least three main factors have an impact on the choices to return: professional opportunities, quality of life and feeling of belonging. New policies for repopulation and brain gain should therefore take into consideration these aspects to enhance the return of young graduates.



The complexity of demographic trends in the Alps is an acknowledged fact, where the population increase and decrease are coexisting phenomena. A more detailed and in-depth knowledge of the causes of these trends is therefore essential to fully understand mountain societies and their local culture. One of the most significant factors of population decline in the Alpine area is the constant out-migration of youngsters, which drains the most proactive component of local communities, taking away resources from local development. Nevertheless, in certain areas, there are signs of an opposite tendency, where young people decide to return to their valley of origin after having left to complete higher education studies. These trends open different perspectives for the future of the mountain inhabitants. A field research carried out in a valley of the Eastern Alps addresses this complex phenomenon by analysing the relation between the education level of young mountaineers, the choices to return or to leave the valley and in particular the reasons behind these choices.

1. Brain drain and brain gain in the Alps¹

Brain-drain is defined as “the loss of skilled intellectual and technical labour through the movement of such labour to more favourable geographic, economic, or professional environments” (Farlex, 2012). Mountain areas, being geographically marginal, are particularly affected by brain drain, which is part of the wider phenomenon of rural exodus and labour out migration (Debarbieux, Camenisch, 2011).

Brain drain can concern different components of society, and it is particularly severe when it touches young people accessing higher education. The young mountaineers who do not return to their valleys after having left to attend university, contribute to depopulation and ageing alpine population. This non-return represents a double loss, both from a quantitative and a qualitative perspective. Indeed, depopulation caused by brain drain relates to a qualified human capital that could potentially bring added value to local development.

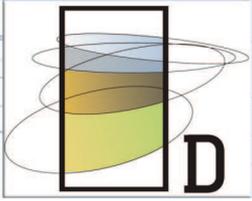
Brain-drain in mountain areas remains a rather under research

ed topic, although it is increasingly gaining attention among specialists of various disciplines. Recent sociological and demographic studies acknowledge the importance of the presence of highly qualified people on mountain territories (Debarbieux, Camenisch, 2011; Dematteis, 2011). Sociological researches claim that “it is necessary that young people are offered the possibility to stay in their home villages or alternatively to go away to study and receive advanced training, but then they should be able to come back bringing along what they have learned” (Morandini, Reolon, 2010). Other studies highlight that the fragility of remote Alpine territories is reflected in, among others, scarcity of professional competence to manage development processes (Corrado, 2010). Qualified human capital settled in the Alps is one of the possible responses to mountain regions decline.

Brain gain is instead defined as the arrival or the return of highly qualified people in a given territory. Brain gain in the Alps takes different forms. When highly qualified emigrants leave their valleys but keep a link with their territory through networks of emigrants, they become “ambassadors” of their region of origin, bringing added value to the development of the places they have left (Rérat, Jeannerat, 2011). This can be defined as a “distance brain gain”, a sort of “indirect gain” achieved thanks to the emigrants who left their home land. It should therefore be distinguished from another type of brain gain, where the highly qualified work force choose to settle in the mountains, becoming actor of the local development of the territory. This is defined as “in loco brain gain”, and because of its more direct impact on the local communities, it is more interesting for this research.

In literature there seems to be two sources of “in loco brain gain”. As several studies highlight (Centre for Mountain Studies University of the Highlands and Islands et al. 2011; Dematteis, 2011), brain gain can be linked to the arrival of the immigrants called “the new inhabitants of the Alps”, or “mountaineers by choice” (Camanni, 2002). Although there is still no agreed definition of the detailed features of this phenomenon, it is possible to affirm that new population movements are partially contrasting the demographic decline in certain marginal areas of the Alps. Some of the protagonists of re-population are the “amenity mi-

¹ The present text reports the results of a research carried out in the framework of the MSc Managing Sustainable Mountain Development, University of the Highlands and Islands (UK), May 2012.



grants”, i.e. those people who, coming from urban areas, settle in peripheral regions of the Alps, attracted by a better quality of life (Price et al. 1997). This type of immigration has an influence on the development of deprived areas (Steinicke et al. 2011). Amenity migrants are, indeed, very well aware of the value of the resources on the territory, and such awareness becomes a potential factor for local development, bringing new perspectives also to the local young generations (Massarutto 1999; IRER, 2006).

Nevertheless, while it is true that the new inhabitants may bring stimuli and ideas for development, they also run the risk of being “less anchored to local communities, detached from professional relations on a local scale” (Centre for Mountain Studies University of the Highlands and Islands et al. 2011).

Also the “mountaineers by birth”, i.e. those who were born and grew up in the mountains, can contribute to “in loco brain gain”. After a certain period spent outside their valley to complete higher education, they choose to return to settle in the mountains. This also seems to be a new trend, developing in parallel with the phenomenon of the new inhabitants.

Understanding the reasons behind the choices of mountaineers by birth to return or never come back to their valleys after terminating their studies, is extremely interesting to determine some of the causes of the young generations’ migration movements, and to draw possible scenarios for the future of the mountain inhabitants.

Furthermore, only by fully understanding the phenomenon of brain drain and brain gain, it is possible to set up new policies to fight brain drain and to create the conditions allowing young people to return to their valleys.

This was the aim of the research presented in this text. It focused on the graduates in a valley of the Eastern Alps, and on their motivations to return. The study also investigated the existence of policies and instruments to attract new residents and to give value to the presence of qualified human capital in the valley, potentially important for the local development.

2. The research: methodological aspects

In order to understand the reasons of leaving or returning to the valley, it is necessary to take a closer look to life choices of the young graduates, through a direct investigation. Such in-depth research has required a specific focus on a micro-area, corresponding to one valley of the Alps, called Comelico. A mixed method of analysis was adopted, where both quantitative and

qualitative approaches were used. The research population is composed of young mountaineers born between 1968 and 1988, sub-divided in three groups: graduates living in Comelico; non-graduates living in Comelico; graduates that have left the valley. As the census 2011 has just been carried out in Italy and no official data is available yet, it has been necessary to carry out a specific investigation to collect data regarding the graduates born in Comelico between 1968 and 1988². They resulted in about 250 persons³, 41% of them live in Comelico.

For a complete analysis, the research has been extended also to the non-graduates living in Comelico, with the aim of understanding the reasons why this group chose not to continue studies and to stay in the valley. Due to privacy laws, the registry offices of the municipalities did not release a full list of names that could be contacted directly, with the exception of the municipality of San Nicolo’, where a list of residents was given (a total of 88 people). Other residents belonging to this group were selected on the basis of a snowball sampling. The full population of non-graduates in the research is composed of 140 persons. A quantitative method has been used to map the selected population as precisely as possible. A questionnaire has been distributed to 323 people, and 198 responses have been analysed, with a response rate of 61%. The questionnaire was structured into two parts. The first one, identical for the three population groups, focused generally on the perception of the respondents on the life quality in Comelico. The second part was different for each group, and dedicated to the research questions on the reasons for leaving, staying or returning to Comelico.

A qualitative method was applied through interviews to a sample of graduates that live in Comelico, for an in-depth analysis of the reasons for returning⁴.

The research had also the objective of verifying the existence of local policies for re-population and brain gain. The mayors of the five municipalities of the valley, as well as some representatives of the local economic and cultural sectors were interviewed to collect their opinions on depopulation and brain drain, and to see whether some policy instruments are in place to face this phenomena.

3. The study area: Comelico valley

Comelico is a valley of the Eastern Alps in the province of Belluno, on the Austrian border. It corresponds to the extreme northern part of the hydro-graphical basin of the river Piave, in the

² Official statistics on the total number of graduates for 2011 are not available yet. 2011 data used in the research was object of a specific investigation made on the field. Data came from different sources: the monthly magazine “Il Cadore” publishes the names of the graduates in the valley on a regular basis. Editions from 1994 to 2011 have been consulted in the historical library in Vigo di Cadore. Moreover, the lists of graduate candidates for the scholarships of the “Magnifica Comunità di Cadore” and the “Comunità Montana di Comelico e Sappada” have been checked. According to the information received from the “Comunità Montana”, graduates candidating for these scholarships correspond to 95% of the total graduates in Comelico. By comparing the information coming from the three different sources, data coincided by more than 90%. Therefore, the validity of the information collected has been considered sufficient. Contact details of the graduates in the list were found through acquaintances in the valley, and the help of one reference person per hamlet who formed a network of “informants” that had good knowledge of the local population. The phone book of Comelico was also thoroughly consulted. Two articles were published on the dissertation in two local newspapers. A page on Facebook dedicated to the research was created, as well as a blog (comelicopartireorestore.blogspot.com).

³ 251 persons aged between 23 and 43 graduated from 1994 to 2011. Among these, 104 live in Comelico. There are however 46 graduates whose residence is unknown (they could live in Comelico or outside Comelico). Considering the lowest data (104 graduates living in the valley), 41% of the graduates between 23 and 43 returned to Comelico. It should also be noted that the information collected only includes the graduates aged 23 to 43. There may be some (although rare) cases of people who graduated in the same decade but don’t belong to the same age group (being older). These are therefore not counted in the figures.

⁴ The researcher spent four weeks in Comelico during February 2012, for the creation of the sample, the distribution and recollection of the questionnaires and the interviews.

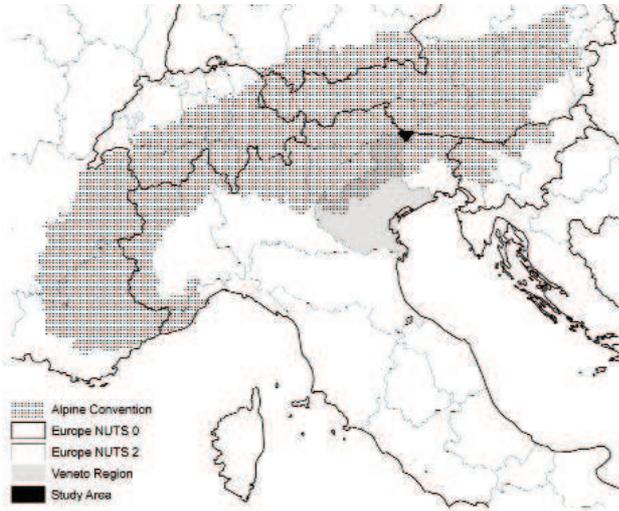
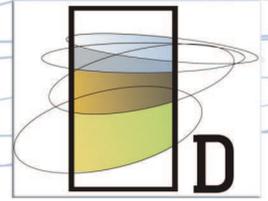


FIGURE 1 - The Comelico Valley in the Alps

north-eastern part of the Dolomites. It is administratively structured into five Ladin⁵ municipalities: Comelico Superiore, Danta, San Nicolò, Santo Stefano, San Pietro. They are organised in one “Comunità Montana” (inter-municipal institution) which, in addition to the 5 communes, also includes Sappada (Fig. 1).

Surrounded by the Dolomites, the landscape has favoured a certain level of tourism development, although not as strongly developed as in nearby valleys such as Cortina d’Ampezzo or Auronzo.

The major economic activity in the last 30 years has been the glassware industry. Glassware has provided Comelico with a number of very well paid local jobs, slowing down the demographic decline. Most of the families had a micro enterprise at home, and could easily earn a good salary with no need of high specialisations. This industry has experienced a slow decline since the end of the nineties, and the economy of the valley started to stagnate (Castiglioni, Ferrario, 2008). Nowadays, the most recent available data shows a certain diversification of economic sectors (Infocamere, 2009). Most of the enterprises belong to the secondary sector (manufacturers and building industry), representing 43% of the total businesses on the territory. Services cover 32%, followed by commerce (25%) and agriculture/forestry with less than 18% of enterprises.

Starting from the forties in the XX century, the valley has suffered a constant population decline. Now the total population is at its lowest levels, with 7.686 inhabitants (Comuni Italiani, 2011). Nevertheless, there is a small sign of revival: over the last 10 years, population decreased by 5,9%, which is less than the 7% recorded in the previous decade (1991-2001) (Fig. 3).

The possibility to commute slows down out-migration (CIPRA 2007). 3.597 residents in Comelico commute every day, and



FIGURE 2 - The north-west branch of Val Comelico seen from the south

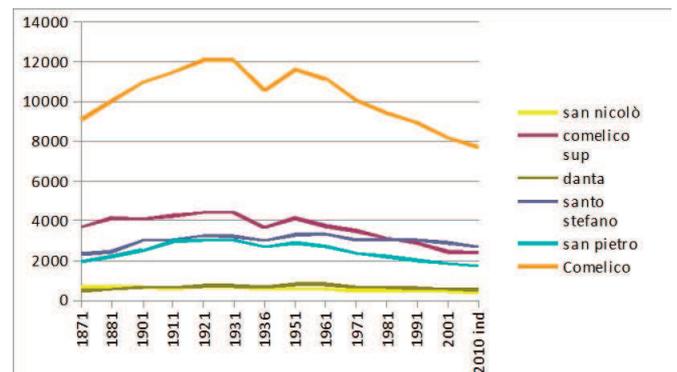


FIGURE 3 - Population decline in Comelico

Closest universities	Km
Udine (IT)	105
Innsbruck (AT)	118
Venezia (IT)	150
Padova (IT)	170
Trento (IT)	170
Trieste (IT)	170
Milano (IT)	400

TABLE 1 - Distances from the closest universities

1.680 go to work in a different municipality than the one they live in (ISTAT, 2009). This phenomenon contributes to maintaining the population in the valley, and it is mentioned by more than 50% of the interviewees as the solution which allows them to live in Comelico without giving up a qualified job.

⁵ The valley belongs to the area of the Ladin linguistic minority (according to Law n. 489 of 15 December 1999 on the linguistic minorities in Italy) (Repubblica Italiana 1999)

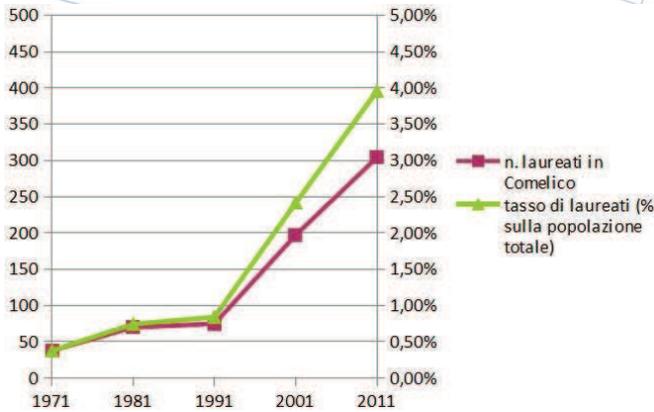
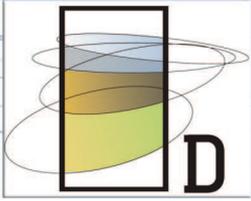


FIGURE 4 - Graduates in Comelico

Not only workers, but also students of CGSE and A levels commute. Comelico has two secondary schools, but students choosing a different field of studies than the ones offered there have to drive for at least 26 km to reach the closest secondary school outside the valley.

The closest towns offering higher education are listed in tab. 1, with the corresponding distances from Comelico. Data show how the fact of leaving Comelico for studying is not a choice, but an obligatory step.

Transport infrastructures are exclusively based on the road system. There is no railway, the closest train stations are more than 20 km away, the motorway is 60km away, and the closest airport is 120 km away (EURIS, 2004). Comelico is a remote border area, and structurally marginal. Such characteristics make the valley an interesting case study, due to the possible analogies with many other remote Alpine areas.

4. Young graduates in Comelico

The number of graduates in Comelico has increased over the last 40 years (Fig. 4). From 1971 to 1981 such increase was rather limited and the trend stopped abruptly between 1981 and 1991, where there was no significant change in the total number of graduates in the valley (in 1991 there were only 5 more graduates than in 1981). This long stagnation may be due to the growth of the glassware industry in the eighties. The continuation of education after secondary school became rarer, as families' choices were oriented towards immediate gain ensured by a full availability of jobs which did not require high levels of professionalism.

After 1991, the industrial sector started its slow decline, causing a growing gap in the economy of Comelico and a decrease of job availability. Young generations had to find alternatives. In 1991, the ratio between graduates and the total population was 0,94; while in 2001 it moved up to 2,41, representing an increase of 146,54% (A.N.A.P.I.A., 2011). Although there is a significant increase of residents holding a diploma, the percentage of university graduates over the total population remains quite low, in particular if compared to the average of the province of Belluno (5,4%), of Veneto region (6,2%) and to the national average

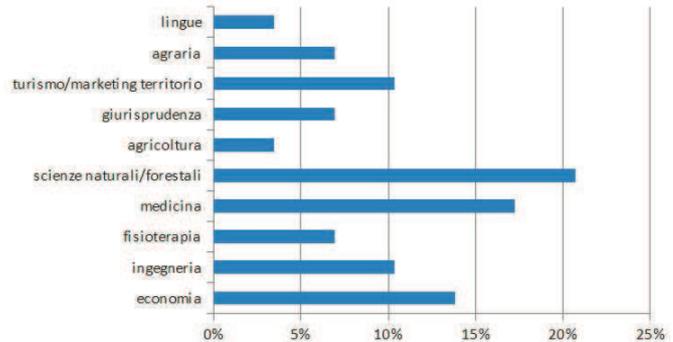


TABLE 1 - Fields of studies which offer job opportunities, according to the respondents.

(7%).

In 2011, the percentage of graduates over the total population is estimated to be 3,53%. Indeed, the growth of the last decade is significant, but still not comparable with the 2009 data of Veneto region (17% of graduates over the total population) and Italy (20,3%) (EUROSTAT, 2012).

5 Staying or leaving? What influences the choice

The core of the research was to investigate the reason why young mountaineers decide to stay in Comelico or leave the valley to settle elsewhere.

Young graduates and non-graduates have been asked about their reasons for having settled in Comelico. Young graduates who left the valley were asked what had influenced their choice of not coming back, and what could be the reasons for settling back in Comelico in the future.

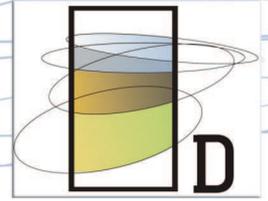
Qualitative data collected through questionnaires and interviews reveal a high complexity of situations and choices within the selected population. Nevertheless, there are some recurring issues which allow identification of some fundamental aspects around which the choices of the young people are built.

Since the research focuses on "in loco brain gain", special attention is given to the reasons influencing the choice to return to the valley for the graduates that are settled there. The most meaningful results are illustrated in the following paragraphs.

5.1 Job opportunities

The availability of professional opportunities is the fundamental factor at the basis of the decision to stay or to leave Comelico. 74% of the respondents that did not return after studies declared that work was the main reason that led them to settle elsewhere, as the valley does not offer adequate professional opportunities corresponding to their level of studies.

Only 40% of the respondents think that Comelico needs qualified work force. They claim that among the fields of studies which could give the possibility of finding a job in the valley are natural science, territorial marketing, tourism, as well as medicine and economics (Fig. 5).



Graduates and non graduates living in Comelico also have a rather negative vision on the job opportunities in the valley. 50% of them do not believe in professional development opportunities in Comelico. However, at the same time graduates state that the fact of having found a job in Comelico or in the surrounding valleys has been crucial in their choice to come back and settle over there.

Such results confirm what is highlighted in the existing literature on brain drain (Schmidlin, 2007; Soliva, 2007; Arge Alp, 2009). The availability of job opportunities is the factor attracting qualified human capital on a given territory, leading to a source of re-population.

However, there are additional interesting elements that make this “job factor” less obvious than what it may seem at this first approach. From the answers given by the interviewees, there are at least two dimensions that have a strong impact on their perspective towards professional growth in the valley. We could call them a “demotivating environment” and “uninformed pessimism”.

“Demotivating environment” refers to a sort of generalised fatalism, among both young and older generations. Statements such as “there are no jobs for graduates here” or “young people have to prepare their suitcase to leave” expressed by some of the interviewed local officials are quite significant in this regard. A young interviewee tells that she is used to being addressed by people of her parents' generation with questions such as “what are you still doing here? You will have to leave at one point, won't you?”. For those who have to face things such a fatalism daily with respect to the opportunities of the local context, the idea of having to leave becomes nearly inevitable.

The “uninformed pessimism” emerges from the answers of the questionnaire when respondents were asked to state whether they had actually looked for a job in the valley before deciding to leave. Results show that only 28% of them have actually looked for a job there after studies. This means that, if the large majority of those who have settled elsewhere has not even looked for a job in Comelico, the unavailability of job opportunities was taken for granted, or that they would have left Comelico in any case.

This aspect has been discussed also with the graduates and non-graduates in Comelico. More than half of the non-graduates think that there are no career opportunities or possibilities to enter the job market in the valley. Among the graduates, nearly half of them share the same opinion. But here, the most interesting result is the fact that 40% of the respondents do not have a clear opinion on this issue. In a way, this further confirms that among youngsters there is no real awareness of the job possibilities offered in the valley.

As a conclusion, if the “job factor” is key in the choice of leaving or returning to the valley, the elements influencing such choice are not simply linked to the actual existence of (qualified) job opportunities. The “demotivating environment” and the “uninformed pessimism” may play a significant role, sometimes even becoming more important than the actual reality of the job opportunities in the valley. The lack of information on the labour market

and the potential career paths in Comelico seems to be an aspect not to be underestimated when it comes to shape policies to enhance brain gain.

5.2 Quality of life

Quality of life is yet another very important factor. Quality of life takes different forms in the eyes of the young mountaineers: quality of public services, sense of safety, human dimension of the community, ideal context to build up a family, security given by family heritage and house ownership.

Although many highlight the difficulties linked to the marginality of the valley (difficult geographical and ICT accessibility), quality of life in Comelico is generally well perceived by the respondents.

“...When back in Padova at the beginning I would feel so awkward, exactly as a rough mountaineer would feel in the plane. When walking down the street and watching people's faces, I used to look for a nod of the head... no way, see. [...] I am used to going out and greeting people, entering a shop to get groceries not just because I need bread, but because I know that I will find someone familiar behind the counter, we chat a bit [...]”

“...It is so nice to be a child around here. To be a child around here is fantastic. It is a totally different way of living, it's fantastic. Because you open the door and you go wandering around. There is no danger”.

“...the fact that here in San Nicolò, we had a place we could stay. You have a house here, you give it a second thought before you say, we go renting somewhere else. It's another expense on top of the rest”.

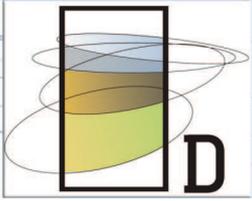
The natural environment plays an important role in the perception of quality of life for the inhabitants. It results being the most important reason for which 71% of the respondents among the graduates not living in Comelico would come back to the valley. It is also one of the main key factors for staying in Comelico for the non graduates. The beauty of the landscape, the proximity with nature, the leisure opportunities offered by the environment are all crucial elements for the young people of Comelico.

“...the bucolic side of things is priceless, I dare anyone in Milan to go out after dinner for a walk in the woods...”

“...It's because I like the environment so much, [...] I like walking the dog, getting around on foot, easy, without worries about dangers, or breathing dirty air, I like this idea of freedom and closeness with nature, I like this a lot. Say, you think, ok, one morning I feel like going to work on foot, and ok, I go down along the cycle path... I mean, these simple things, exactly the life style that I like here.”

For what concerns the cultural activities, respondents have contrasting opinions. 39% of the respondents who do not live in Comelico claim that they have left the valley in search of a more dynamic social and cultural life. Another 42% claim that this element has surely partly influenced their choice of leaving. Graduates living in Comelico also underline the scarce variety of possible cultural activities. They mention the bars which have a predominant role in the social life of the valley.

“...Cultural life is almost inexistent. [...] if you take away the bar,



where all the young and not-so-young gather, there's nothing else, and surely it's not a place you can call inspiring, a part from some rare conversation you can happen to have."

Distances can become a deterrent for the satisfaction of social life. Interviewees mention the difficulty of getting back in the car again, in the evening after dinner, and driving to some cultural events which are mostly offered outside the valley.

"...Leaving again from here to go to Pieve di Cadore at eight thirty at night... when I just got back from Cadore in the afternoon... it needs to be something really interesting, otherwise it hardly ever happens".

At the same time, however, interviewees tended to minimise the problem, with a sentence that is constantly repeated by all: "it is not true that there is nothing here", as a way to deny the generalised opinion among inhabitants on the lack of cultural activities in the valley. Interviewees mention small associations, village parties, sport activities which nurture the social and cultural life, and this for the people who have come back -often directly involved in such activities- is a strong motivation for their staying in Comelico.

5.3 The affective dimension, the sense of belonging, the "roots factor"

If the opinions of the respondents belonging to the three groups diverge on several aspects mentioned so far, there is instead an absolute homogeneity of judgement on the importance of the family links and on the affective dimension that bind the people to the valley. Family is the reason why 81% of the graduates that do not live in Comelico would come back.

When work is not the main reason influencing the choice of returning, there are other aspects -linked to the affective dimension- that influence young people to settle back in the valley. The major part of the interviewees claim that their attachment to Comelico has been a factor influencing their decision to come back to the valley, and it is an irrational, unexplainable reason. This is a remark made mainly by those who were most determined to return.

The affective dimension can have different forms. Some interviewees refer to the strong link with their families and friends. The majority of them refers more generally to their roots, their bond to the territory, the love for their land.

"...the first strong link is with the family. [...] From this derives the love for the territory. When in Trieste, I loved the city. But when taking the bus back home for the weekend, and arriving in Sappada, every time for all those years I felt the same emotion when seeing the valley opening up. [...] this is not explainable, it is what it is and that's it."

The feeling of belonging is part of the affective dimension. It refers to the idea of belonging to a community, opposed to the anonymity of the urban areas experienced during studies. Some interviewees identify this aspect as the key element that pushed them back to a place "where they belong".

"...here I feel that I am part of something, a group of friends, the family, society...you feel that you are part of a community [...] you know who they are, they know who you are, there is no need

to explain everything...when you are out there, you are a number, a shadow passing by."

Another interesting element resulting from the questionnaires is the "roots factor". The questionnaire did not foresee a specific query on the "roots", but the open questions as well as the interviews showed very clearly that this is a fundamental issue to take into consideration when investigating on mountaineers by birth. Roots and sense of belonging are developed from family bonds and environment, which somehow are the two addends forming the roots.

The sense of belonging has been underlined by the vast majority of the interviewees. Almost unanimously, young graduates as well as the local economic actors have spontaneously stressed this point. All are convinced of the importance of the sense of belonging and the nurturing of love for the territory as elements tiding up people to their living environment. Some graduates have a very clear perception of this, and they identify it as the key factor in the choice to come back. With a feeling of belonging and a sort of pride to be part of a community, also generated by the awareness of the resources and opportunities that the territory can offer, people are less ready to give up the place they are born in.

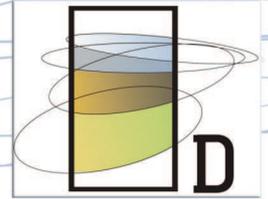
6. Policies and instruments for a qualified re-population

The phenomenon of population decline in rural and mountain areas has been gaining attention among policy makers since the early nineties. Policies and local initiatives have started to develop, entering the national or regional political agendas of some countries in and outside Europe. The degrees of development of such process vary from country to country, and the results obtained had different degrees of success.

In the absence of a national legislation, regions or smaller communities have developed spontaneous local projects to favour in-migration. This is the case, for instance, of the French Limousin, or Umbria Region in Italy. Other examples of this kind have developed in Finland, Norway or Spain (PADIMA, 2012).

Other countries have put in place a national legislative framework, as in Ireland (Bryden, 2000) and some US states (Artz, 2003). In Italy, the national Law 87, 31 January 1994, gives faculty to the regions to create legislation for mountain areas. Article 19 is especially dedicated to the possibility of creating incentives for repopulation. On the basis of these provisions, the Province of Trento has created Act 17, 23 November 1998, where specific measures to attract new residents to the mountain areas are offered (e.g. financial contributions for the purchase or renovation of buildings). The Veneto region does not foresee yet any specific instrument designed to attract residents to the mountain areas, including the present study area. The strategic policy at regional level is therefore rather scarce, and the impact of this "emptiness" in Comelico, as well as in other marginal valleys of the mountain in the same region, is clearly shown by the population data which record a decrease mainly due to out-migration (Provincia di Belluno, 2005).

What happens at local level? The mayors of the five municipalities in Comelico and other actors of the territory have been in-



interviewed to understand whether a certain awareness of the problem of brain drain exists, and whether brain drain is subject of a political reflection among local administrators. The majority of the answers given by the mayors show a lack of strategic vision on the potentialities offered by a qualified human capital on the territory.

The first factor hindering a joint reflection on brain drain and depopulation seems to be the lack of coordination among mayors and local actors. The sometimes difficult relationships between municipalities seem to inhibit any strategic thinking on the territorial development of the valley as a whole, including any strategies for favouring the return of the qualified human capital Comelico has got.

A second and perhaps most important factor is linked to the very acknowledgement of brain drain as a problem, and of brain gain as resource for local development. All local officials and economic actors agree on the importance of higher education to enrich one's own cultural background, but not everybody thinks that higher education can have an "operational added value" for the young graduates nor for the valley. For some, Comelico does not even need graduates.

"It is those who have not studied that could do something here. But no-one wants to do anything. It is impossible to find people for cutting forests. There are only a few plumbers left...they are all elderly people. [...] Instead of engineers, we need these professions. Graduates do not have possibilities to come back, because we do not offer anything" (a mayor).

However, not all interviewees are pessimistic on the value that higher education can bring to the inhabitants of the valley. For some, "intellectual richness adds value to the person and the territory where the person lives" (member of a Regola); "Graduates bring innovation and quality, they can contribute to the local development" (tourist operator).

"...I believe this is one of the concerns of Comelico but perhaps of all mountain areas...the fact that we do not have a significant part – I do not say all of them but a significant part- of graduates who can reinvest their knowledge here on their territory. [...] The ideal situation would be [...] after university, to bring back the richness of knowledge to the territory. Graduates are fundamental, they bring innovation and quality. If they cumulate experiences and then bring what they have learnt into the territory, they can bring a big contribution to development [...]" (a journalist).

All interviewees agree on the fact that at the moment there is no strategic vision for the re-population of the valley, nor specific policies for brain gain. Some Regole give some financial contribution to support the university courses for their members' children. Some municipalities offer contributions to young couples for their new-born babies. However, these initiatives are not part of an integrated, long-term perspective plan.

There are also some measures in place to acknowledge the value of higher education: every year, the "Comunità Montana" and the "Magnifica Comunità del Cadore" offer scholarships for the graduates, and organise an event where new graduates pre-

sent their dissertations to the local economic actors, in an effort to link the qualified human capital and the local business. Yet, these initiatives remain "symbolic", as one of the interviewees explains:

"Those few hundreds euros are not a real incentive for a family willing to settle here. The money does not even pay back the efforts of the university years. The scholarship does not influence the decision on whether or not go to university. So it is not an effective way to incentive young people to study, nor to come back afterwards. Because the most difficult thing is to incentive the return...when we return, what do we do?"

7. Conclusions

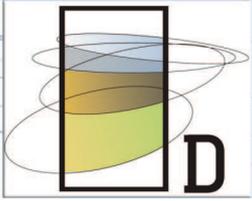
The Declaration on Population and Culture of the Alpine Convention (PSAC, 2006) states that education is key to the revival of the Alps. In the European context, transnational programmes of territorial cooperation reaffirm the importance of dig deeper to find the causes of brain drain in mountain areas (JTS Alpine Space programme, 2011). In the scientific arena, mountain literature is more and more enriched with references to brain drain as key element between demographic change and local development (Morandini, Reolon, 2010). As demonstrated also by the topic of the VIII European Mountain Forum (in Chambéry 2012), the role of the young generations in the mountain is on the top of the institutions' agenda and think tanks dedicated to the Alps and more generally mountain development. In this context, a better knowledge of the reasons for brain drain/gain may lead to a thorough understanding of the phenomenon and to a clearer definition of adequate policies to manage it.

The research in Comelico valley demonstrates how, despite the presence of a certain level of awareness of these issues among inhabitants, there is no integrated strategy to face depopulation and brain drain.

In this context, and on the basis of the research results, it could be possible to start defining some intervention areas where local policies and instruments could be set up. The research has highlighted at least three main factors influencing the decisions of the young graduates to return: job opportunities, quality of life, feeling of belonging/roots factor. New policies for re-population and brain gain should therefore take these aspects into consideration to multiply actions stimulating youngsters to return.

First of all, it is clear that brain drain develops where there are no opportunities for highly qualified jobs. However, other factors such as the lack of information can influence brain drain perhaps even more than the actual job market situation. The research suggests that next to specific jobs creation policies, it is essential to set up a large scale action for the dissemination of information on the possibilities existing on the territory. The scarce knowledge of the local economic sectors, and the a priori attitude of the young generations towards the working possibilities in the valley, need a clear policy agenda to be elaborated jointly by local administrators and actors for local development.

At the same time, in order to improve quality of life in the valley, it is necessary to fight against the feeling of emptiness and of geographical marginality which is strongly felt by the local inha-



bitants. Distances have an impact not only on the access to services, but also on the development of any professional activity. The lack of public transport, the insufficient infrastructures (both physical and ICT) are elements worsening marginality. New actions at local level must be put in place, to improve those aspects where Comelico is weak in the eyes of the young generations: better and more efficient infrastructures, ICT and public transport, as well as a richer cultural offer.

The interest shown for the research has been unexpectedly high both among youngsters and the local officials. This suggests the importance of deepening the analysis and increasing the occasions for exchange and dialogue between the institutions and the young generations, to feed reflections on the expectations and projects of those who could bring added value to the development of the valley. Young people seem to have many ideas to share, and in the course of the interviews they have often mentioned concrete proposals for Comelico: a better dissemination of the information on the local job market, the creation of cooperatives to keep the services in the valley, integrated projects for the wood sector, summer schools for universities are only some of the ideas expressed during the interviews.

Finally, the “roots factor” must not be neglected. This is a very complex element which would certainly need further analysis. However, it already suggests the idea that some reflection is needed on the necessity to nurture the feeling of belonging to a territory, through a better knowledge of the land, its population, its culture and the opportunities the territory offers.

The words of one interviewee draw a picture of an ideal Comelico, where “mountaineers by birth” grow into “mountaineers by choice”:

“It is important to boost the positive circuit of the people who want to stay and to build something, to build a community. Where there is a community, there are certainly the conditions to create something positive. The new generations can do this, by forgetting the family hates, the village critics, the borders between house properties...the positive circuits join local culture with the reflections on new developments for mountain areas...love for one’s territory and professional perspective linked to the contemporary society, adapted to the use of new technologies and the smart use of environment...if there are these circuits, the valley will have potential. We need to have our minds open to the external world, and hearts rooted on the rocks and meadows of Comelico” (a journalist).

SINTESI

Uno dei fattori di declino demografico più rilevanti nell’area alpina è l’emigrazione giovanile stabile, che drena la parte più propositiva e attiva delle società locali, sottraendo risorse allo sviluppo del territorio. In particolare, i giovani che partono dalle loro valli per accedere agli studi superiori spesso non ritornano in montagna, provocando così un diffuso brain drain.

In alcune aree si osserva però qualche segnale opposto, che apre prospettive diverse per il futuro degli abitanti della montagna. Almeno in parte, i nuovi abitanti delle Alpi contribuiscono al “guadagno di cervelli”. Ma certamente il brain drain è anche dovuto a quei giovani “montanari di nascita” che dopo la laurea tornano alle loro valli per stabilirsi in montagna.

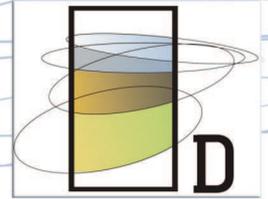
Questo testo presenta le premesse, la metodologia e i risultati di una ricerca sul campo condotta in Comelico, una valle delle Alpi Orientali. Sono state indagate le proporzioni del brain gain, le ragioni dei movimenti migratori dei giovani e della scelta di alcuni di tornare a vivere in montagna dopo gli studi. Una conoscenza più dettagliata e approfondita di questo fenomeno e delle sue ragioni è essenziale per concepire politiche mirate ed efficaci contro il declino demografico.

La ricerca ha adottato un metodo quantitativo e qualitativo, analizzando le risposte ad un questionario distribuito tra i giovani laureati e non laureati, residenti e non residenti in valle, e intervistando laureati che sono rientrati in valle dopo gli studi superiori.

Almeno tre grandi categorie di fattori influenzano le decisioni dei giovani di tornare in montagna: le opportunità professionali, la qualità della vita, il senso di appartenenza al territorio. Nuove politiche per il ripopolamento e il brain gain dovrebbero dunque prendere in considerazione questi aspetti per incentivare il ritorno dei giovani in montagna.

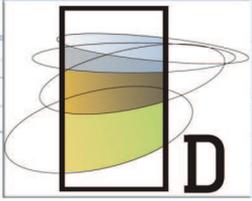
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New inhabitants in an Alpine community: population dynamics and conceptual challenges

Nuovi abitanti in una comunità alpina: dinamiche demografiche e sfide concettuali

Roberta Clara Zanini - University of Turin

ABSTRACT

This paper presents the results of an ethnographic research conducted in an Alpine community in Piedmont. The purpose was to study the dynamics of population change in an area of high mountain whose demographic history has repeatedly been characterized by waves of immigration. The research has shown that, in spite of a certain number of people leaving the mountain, equally important phenomena of neo-population can be highlighted. The ethnographic approach brought to light some local features whose unexpected complexity led to understand the importance of re-considering quite consolidated conceptual categories such as "new-old inhabitant", and of searching for a deeper conceptual analysis.

1. Introduction

Two years ago, during the first Forum of Young Researchers,

I put forward some reflections

on how anthropology might offer ideas, methods and approaches that could prove useful in the study of the phenomena of de-population and re-population of Alpine communities (Zanini 2010). I hoped, at that time, to have an opportunity to check, through a period of intensive field research, whether the impressions and suggestions that I was enthusiastically proposing had actual operational validity. Two years later, the second Forum offered a perfect opportunity to present, however concisely, some of the results of a research I conducted in Macugnaga, in the Piedmontese Ossola Valley, as part of my work towards a PhD in Cultural Anthropology and with the support of the Piedmont Region within the framework of the project "E.CH.I. Swiss-Italian Ethnographies for the valorisation of intangible cultural heritage". One of the purposes of my investigation was to verify how the dynamics of depopulation, repopulation and population change had unfolded in a high mountain area that appeared potentially interesting because of its distinctive history and culture. Thus, in the first section of this article I will focus on the historical dynamics that led Macugnaga to become a community used to population movements and that are worth considering because of their influence on the present context. In the following section I will then concentrate more specifically on recent population movements and, above all, on the conceptual challenges that emerge from an anthropological study of this kind of dynamics. As a matter of fact, the ethnographic approach brought to light some local features whose unexpected complexity enabled me to understand the importance of re-considering quite consolidated conceptual categories such as "new-old inhabitant", and of searching for a deeper conceptual analysis. Despite being a small-scale example, Macugnaga might then supply a helpful case-study in re-population studies, particularly in comparison

with other Alpine communities showing a similar economic milieu.

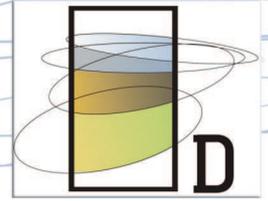
2. New inhabitants in the past

Rather paradoxically, one of the reasons that led me to choose Macugnaga was the fact that, at first sight, this place looked of little interest for a research whose primary purpose was to investigate depopulation and re-population dynamics. It would seem obvious that in order to observe re-population we need to focus on places that have previously experienced intense depopulation, and this is not actually the case of Macugnaga. So why did I select this village? The answer resides in the specificities of Macugnaga's demographic history, which has been repeatedly characterized by waves of immigration that have contributed to modify the composition of the population in very significant ways and in various moments.

The literature on the medieval peopling of the upper Anzasca Valley by Walser colonists from the Saas Valley in what is now Canton Valais is large and conveys rather mixed - and contrasting - interpretations about the very early stages of what is often called the "Walser colonization". It is not possible here to chronicle in detail neither the historical path that has turned Macugnaga into a Walser colony, nor the historical debate that has addressed this topic¹. We may just take note that the first documents attesting the presence of Alemannic populations in the territory of the Anzasca Valley go back to the mid-thirteenth century, and that migrations from the Valais to Macugnaga through the Mount Moro Pass continued until the sixteenth century and eventually restarted in the eighteenth and nineteenth centuries, with different forms and in an economic environment now affected by the presence of the extractive industry.

I mentioned the mining activity. In fact, Macugnaga was the stage of an intense mining past and the presence of the biggest gold mines in the Alps caused the arrival of large numbers of miners in the modern age and up to the middle of the twentieth

¹ For an overview of Walser history, see Rizzi (1992); for Macugnaga and the Anzasca Valley, see the book written by Rizzi in collaboration with Zanini and Valsesia (2006), and the one by Bertamini (2005).



century². Men from every part of Italy and Europe – at first from Tyrol, Voralberg and the mining area of Piedmont, more recently from Veneto and Sardinia - settled in Pestarena, the hamlet of the village where the extraction establishment was located. Just to give a few figures about the effect of the more recent waves, in 1871 the village recorded 603 residents, compared to 997 in 1951. It goes without saying that these early and intense waves of immigration deeply affected the community, "contaminating" the original Walser core and leading to significant economic development. The closure of the mines, due to their economic decline and to a tragic accident that killed four miners, led to a sharp decline in population, which fell from almost 1000 inhabitants in 1951 to 766 in 1971 and only 706 in 1981.

The demise of mining generated a need to convert the local economy, by orienting it to the tourist industry. Macugnaga is a historic site for the practice of mountain sports, climbing and mountaineering, as it lies close to the majestic and dominant - not only physically but also symbolically - Monte Rosa East face, the scene of some of the main alpine feats of modern and contemporary era. It is a presence, that of Monte Rosa, which affects the community in every aspect of its life, from the physical, economic and symbolic point of view, and it is considered by everybody as the horizon to which to refer, with no distinction between old or new inhabitants. The conversion from a predominantly mining community to a strongly tourist-oriented town meant that the population decline caused by the abandonment of many of the miners - but beware, not all! - was partly mitigated by the arrival of personnel employed in the hospitality industry and the related tourism facilities. In this case, new inhabitants were almost always people coming from the lower Anzasca Valley and from neighbouring areas.

3. Studying the new inhabitants of today: a conceptual challenge

These historical, social and economic features explain why Macugnaga did not experience the demographic collapse suffered by many Alpine localities and, therefore, also why it did not go through the kind of "rebirth" such as that recorded especially in certain municipalities in the Western Alps. All in all, although there are signs of a slow decline in the number of inhabitants, Macugnaga's population has not fallen dramatically. However, this apparent numeric stability hides dynamics of population turnover, which struck me as very interesting and clearly deserving to be studied in greater depth. Indeed, even limiting ourselves to consider statistical data on net migration, we can observe that, for a given number of people leaving the mountain, equally important phenomena of neo-population can be detected. It is there-

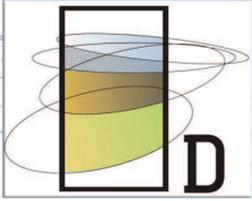
fore true that we are facing a slow decline, but if we "enter" the numerical data, we realize that it is possible to spot "uphill" migrations of new inhabitants. The aim of my fieldwork was therefore to figure out who these new inhabitants of Macugnaga were, what role they had in a community that has always been used to a constant change of its population and the reasons that pushed them to climb up the Anzasca valley.

The picture from my investigation is quite complex and this complexity has led me to reflect on what it means to "live in the mountains", on who can be defined an inhabitant of the mountains and how much attention should be paid when using such rather rigid categories as "new" or "old" inhabitant. As I early realized while conducting my research, I had taken for granted a definition of "new inhabitant"³ according to which everybody who had recently established permanently and continuously at Macugnaga could fall into this category. I was, then, looking for cases of new residents, in order to organize interviews, and statistical data were telling me that these people did exist. However, this appeared to be contradicted by responses I collected from local informants according to which it seemed that no new inhabitants were arriving, or had arrived in the recent past. The problem was, quite simply, that I was asking the wrong question. Ethnographic research is made of long moments of doubt and confusion and brief moments of light that allow you to see from new perspectives what has been done so far and to redirect observation and research. One of these moments was when I realized that in many conversations those people I used to refer to as "new inhabitants" were not regarded as such by the Macugnaga people to whom I was talking. By digging deeper it emerged that most of the people who had taken up residence in Macugnaga in recent years actually had behind them a long period of intense attendance of the locality, often as vacationers. It is almost always young people, approximately 25-35 years old, who had spent a long period of time in Macugnaga as children, becoming familiar with the places and at the same time becoming familiar with the inhabitants of the village. This familiarity does not directly translate into a total and unqualified, assimilation into the community, but in spite of this it seems to me quite clear that in these cases speaking of a "new" inhabitant is simplistic and potentially misleading. This is even more true if we consider that these same people are often not considered as new residents by the "locals" and do not see themselves as such.

I became thus aware that, once put to the test, the simple dichotomous "new-old resident" type was not probing enough to understand the local situation and its facets. Therefore, what it means to dwell in Macugnaga is not a matter that can be dealt

² Cerri and Zanni have dealt in depth with the mining history of Macugnaga (2008), particularly focusing on the population dynamics that were a direct result of the gold extraction. On these dynamics, see also the work by Viazzo (2009) and Zanini (2009).

³ The scientific literature dealing with the Alpine repopulation phenomena is very substantial. Since the first insights by Camanni (2002), Varotto (2003) and Bätzing (2005), who first directed their attention to the turnaround that has led the Alpine territory from a steady population decline to become a chequered area displaying important phenomena of growth, numerous studies have followed. Most of them have been carried out by demographers and geographers, who have focused on cases of demographic rebirth in the Alpine area and have wandered who were the neo-locals to whom such trend reversal was attributable. In particular, see the work by Perlik (2006), who explores the Alpine case within a broader analysis of the phenomenon of amenity migration (Moss 2006), and by Borsdorf (2009). For a discussion on the Italian context, see especially Corrado (2010), Corrado and Porcellana (2010), Dematteis (2011) and Steinicke (2011). For a general overview of the main theoretical contributions and of what is meant by "new resident", see in particular the work by Pettenati (2010). For a more specifically anthropological approach to the study of recent change in the composition of the Alpine communities see Viazzo (2012). Finally, a synoptic view of these demographic trends in the entire Alpine area, based on a careful review of the recent literature, has been recently provided by Bender and Kanitscheider (2012).



with by only two categories of analysis. On the contrary, it requires a series of intermediate elements, of alternative variables, which do not use continuous residence as an exclusive key of interpretation. This is certainly an important and in some respects decisive factor, but hardly sufficient. If we shift the stress from purely administrative aspects, as official residence is, to the representations of those who, in different ways, spend their life or part of it in Macugnaga, we can see that "living" in the mountain is something that has more to do with a sense of belonging, familiarity, recognition – one's own and from the others. It is rather a matter of awareness and knowledge of the places, acquired and recognized habits. Dwelling means then to be used to a place, in different and varying ways and to equally different and varying degrees.

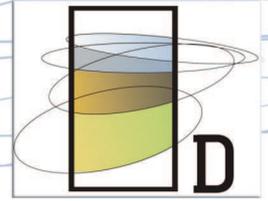
Macugnaga is an interesting setting from another point of view. In fact, not only has the community experienced moments of intense demographic change in the past, but it keeps being involved in continuous population movements that change the composition of the present population all the time. I am referring in particular to two categories of people: long-time vacationers and those residents who live for long periods in other contexts to study or work. Both these categories do not fall unambiguously within the definition of "inhabitants", since these are people who do not live permanently in the village, but that spend in it short and iterated periods. In some ways they are actually opposite categories: the first is composed of vacationers from outside the village who spend some periods of leisure there, while the latter is made up of people that belong to the community to all intents and purposes but for various reasons are not permanent residents. In both cases they are part-time dwellers: commuters, vacationers, regulars that fully conform to those parameters of familiarity, recognition, sense of belonging to which I referred earlier.

Such a human landscape is then populated by different categories of people who are not always and exclusively consistent with the image of the new or old inhabitant we have come to know through the literature. In the case of Macugnaga, but I have reasons to believe that very much the same applies to other locations with an important history as tourist resorts, I think that, to a certain extent, even those people who attend the place for decades and have acquired familiarity with its inhabitants and its customs can be considered "inhabitants". Of course, they are not indistinguishable from residents, but the fact that if they decide to move permanently to Macugnaga they are not considered and do not consider themselves as "new" inhabitants, is a significant indicator of what I have tried to point out so far, namely that dwelling is something that involves several aspects and that manifests itself in different and complex ways which can be most neatly highlighted by ethnographic research.

SINTESI

In questo contributo intendo presentare una parte dei risultati di un periodo di ricerca sul campo condotta a Macugnaga, nella vallata piemontese dell'Osola, nel quadro di un dottorato di ricerca in antropologia culturale e grazie al sostegno della Regione Piemonte nell'ambito del progetto "E.CH.I. Etnografie italo-svizzere per la valorizzazione del patrimonio culturale immateriale". Uno degli obiettivi dell'indagine era verificare come si articolassero le dinamiche di spopolamento, ripopolamento e cambiamento della popolazione in una località di alta montagna che, per le sue caratteristiche storico-culturali, si presentava come potenzialmente interessante. La storia demografica di Macugnaga è stata ripetutamente caratterizzata da ondate di immigrazione che hanno contribuito a modificare sensibilmente l'assetto della popolazione. A partire dal primo popolamento walser di epoca medievale, poi mediante l'arrivo di cospicue quantità di minatori impiegati nelle locali miniere d'oro in età moderna e fino a metà del Novecento, e infine con i flussi di personale addetto alla ricettività turistica, la composizione della popolazione è stata caratterizzata da un costante mutamento. Queste caratteristiche storiche, sociali ed economiche hanno fatto sì che non si verificasse il tracollo demografico conosciuto da numerose località dell'arco alpino occidentale e, di conseguenza, neppure fenomeni di "rinascita" come quelli attestati in alcuni comuni delle Alpi occidentali. Questa relativa stabilità, numericamente solo incrinata da una tendenza verso un progressivo ma lento declino demografico, nasconde interessanti fenomeni di ricambio dinamico della popolazione. Dall'indagine condotta è emerso come, a fronte di un determinato numero di abbandoni della montagna, si rilevano tuttavia altrettanto importanti fenomeni di neo-popolamento. Si osserva quindi un quadro complesso in cui si articolano diverse modalità dell'"abitare la montagna", non necessariamente aderenti alle tipologie analitiche che emergono dalla letteratura scientifica che si occupa con sempre maggior interesse dei fenomeni demografici in area alpina. Diviene pertanto necessario iniziare a ripensare le categorie concettuali a cui fare ricorso, in primo luogo il binomio "vecchio-nuovo abitante", in modo da disporre di categorie intermedie che siano maggiormente in grado di rendere conto della realtà emersa dall'indagine etnografica e delle differenti modalità, modulazioni ed intensità con cui è possibile "abitare la montagna".

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