Median Italy: Territorial Diversity as the Cornerstone of Regional Development

Donato Di Ludovico^{1,a}, Pierluigi Properzi^{1,b} and Andrea Santarelli^{1,c}

¹ DICEAA - Department of Civil, Building-Architecture, Environmental Engineering, University of L'Aquila, Italy

^adonato.diludovico@univaq.it, ^bproperzi@tin.it, ^candreasanta9@gmail.com

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Abstract. This text describes the results of a research conducted as part of the “Junction territories Project 2 – Abruzzo” by the Ministry for Infrastructure and Transport and the Abruzzo Region, which interprets the regional space of the Central Italy as *Median Macro-region*, implemented through the *Territory projects*. The identification of *Territorial Settlement Systems*, of *Tourist Systems*, *Territorial Frameworks*, *Network Cities* (in relational terms) is used to overcome the dualism that has always characterized the development of central Italy, its polycentrism and the imbalance of policies in favor of Metropolitan cities.

Introduction

Median Italy is a term used to identify the regions of central Italy. In this paper, it shall be considered as a coherent and optimal setting for the development of national and European policies, and in particular for the identification of a *Median Macro-region* [1] as a key area of Euro-Mediterranean development.

The traditional conceptual models that are often used in Italian territorial and regional policies refer to socio-economic and demographic analysis which clearly demonstrates their duality: the coast, which includes the more dynamic territories, and the hillside and mountain area, which involves a system of critical settlement issues (underuse and reconstruction). These policies have led to the development of areas around the Adriatic corridor and penetration towards inland cities. Consequently, the measures put in place have not managed to reconnect the regional territories and have often created a greater and clearer divide between inland and coastal areas. This interpretive model also supports the polarising effects which metropolitan areas have over them [2].

If we are going to overcome these patterns and understand the central Italian system within central Europe, we need to abandon the dual polycentric model and come to an understanding of the Territorial Systems which allows us to study the internal relationships within networks (local networks), as well as the external relationships with the network of Global Cities (widespread networks), such as metropolitan Cities.

Therefore, when the regional Settlement System is seen as a whole in all its complexity, it may be interpreted in relation to the demographic features of the centres, the morphological aspects of the systems or its interaction with agricultural or natural environments. However, it is particularly pertinent to take into account its relationships with other Systems and Cities (Core or Global Cities, Global City Regions and Mega-Regions [3, 4]).

Through an experiment carried out as part of the studies for the National Strategic Framework, four types of different *Territorial Settlement Systems* have been identified within the Region of Abruzzo [5]: (1) Major urban centres, (2) Linear coastal cities, (3) Networks of villages or minor Urban centres, and lastly (4) Inhabited countryside areas. In this interpretive model, the Cities, as hubs of relationship flows, and their networks, as more than a material axis of these flows, become areas of systemic planning. Together with their bottom-up characterisation, they are entrusted with resolving local problems, but also defining future regional planning. The integration among the four *Territorial*

Settlement Systems and the integration of these systems with the higher-ranking networks of metropolitan Cities could be a primary strategy for defining the Macro-regions. This would also take into account the assessment of critical mass, but in particular, it would involve establishing networks for all the local areas which otherwise would have been excluded from Macro-region development strategies.

A new development model for Median Italy

In recent years, the lack of joint social development models at national and local levels has supported “unplanned” and unsustainable transformation processes, facilitating the passive emergence of random, scattered, linear and porous settlement models which have been widely studied by urban geography [6].

The creation of a territory in parts through isolated events or disconnected and decontextualised urban projects has resulted in dispersed settlements, urban sprawl, rarefaction, high land consumption, fragmentation of ecological networks, as well as damage to urban and peri-urban landscapes. In turn, these phenomena have led to chaotic urban structures set on flawed infrastructural frameworks, based on self-reproductive rather than structural processes. These processes have heavily altered the regional settlement systems, in particular those at a higher rate of metropolisation, which now exhibit new post-urban structures that are difficult to understand and even more difficult to govern.

In this context, the interpretation of Macro-regions appears to meet the demand for a new development model that also incorporates a new social model. In fact, the identification of a *Median Macro-region* allows us to overcome the duality that has always characterised the “inland” space of central Italy, the duality between the inland area (the mountains and the sub-mountainous hills) and the coast, the duality between areas with well-developed infrastructures and natural or semi-natural areas, and the duality between the preservation of places and their transformation. This interpretation has led to the concentration of financial resources for inland areas on environmental protection projects, while for the coast and the main valleys branching down from the Apennines, and in particular for the metropolitan areas, the financial resources almost entirely go towards industrial and settlement development [2].

The Fig. 1 describes the Macro-region model which is thought to be effective for the development of Median Italy. The objective is to integrate both widespread and local networks (central Italy plays a key role in central Europe along the East-West axis as well as the North-South axis). In this context, widespread networks are formed by Cities with greater competitive influence (such as the metropolitan Cities of Rome, Naples, Ancona and Pescara) or by secondary territorial systems (which are nonetheless considerably influential). While local networks are formed by minor territorial systems that are generally isolated and excluded from the major development projects. The integration of development policies into *Territorial Settlement Systems*, and therefore into different levels of scale, may be achieved by analysing the relationships between these systems (widespread networks ↔ local networks) to support the bottom-up creation of a Macro-region. The relationships between these Macro-regions (endogenous ↔ exogenous and internal ↔ external) determine their critical mass and the relative variability based on the sector in question, while also paying attention towards local development by ensuring economic flows do not miss local systems without helping them. It is a transition from a balanced European polycentric policy towards a policy of regional competitiveness and of territorial strategies to complete territorial structures.

This interpretive model for the potential system of European Macro-regions, which is proposed for Median Italy, must be particularly aware of the variability of the so-called “critical mass” that in reality in the short-term is quite stable, particularly at places of intersections. However, it must be especially aware of the “destabilising” influence of Metropolitan Cities, such as Rome or Naples. The Cities within these areas, which often belong to secondary territorial Systems, could develop and become the central junction point. In this way, they would take on the role of a new hub connected to

the widespread networks of metropolitan Cities and Global Cities, as is already outlined by the proposed model of a *Median Macro-region*.

The model of the *Median Macro-region*

In the context of Median Italy, there is an important role to play for some of the analysis conducted for the strategic plan of the Abruzzo Region in support of the National Strategic Framework [5] and as part of the Strategic Platforms [7], in which the identification of different interconnected *Territorial Settlement Systems* can be seen as going beyond the traditional interpretive models that poorly describe the potential of underused and disadvantaged areas within the region (polycentrism and duality). As outlined in the introduction, these Systems are classified into four different types: (1) major urban Centres, the main hubs of the *City Network*, the first level of the medium-widespread network; (2) Linear coastal cities, which represent the continuous band of cities established along the coast, the second level of the medium-widespread network; (3) Networks of villages or minor urban Centres, which are the network of inland urban centres with a medium-low settlement influence, the first local network; and lastly (4) Inhabited countryside areas, which are the small centres that are different from the minor centres and mainly located in the hillside and mountainous territories involved with parks and the APE project (Apennines Park of Europe) [5].

It is not a division of similar geographical areas, since some centres may appear in more than one type of System, nor is it a subdivision for the direct allocation of resources (the Baltic Sea strategy was founded on three “No’s”: no to new funds, no to new legislation and no to new institutions), but rather a representation of the quantity and quality in play, their territorial structure and their role which aims to take into account the area and network paradigms, in other words local and identity factors as well as relationship factors. This interpretive model was adopted by the “Junction territories Project 2” [8] by the Ministry for Infrastructure and Transport and the Abruzzo Region, which went further into the “Territorial Projections for Cities” produced in 2012. It carried out in-depth analysis of the four *Territorial Settlement Systems* and went further into the issue of tourism, identifying the so-called “Tourist systems”. The *Territorial Settlement Systems* and *Tourist Systems* define a complex structure of networks and spaces that have allowed us to establish the first “dimension” of the *Median Macro-region* and to relate its components with all the *Territory Projects* currently underway or just being organised, which share the vision of Median Italy. In the framework of the Macro-region, the *Territory Projects* are seen as potential tools/criteria for the optimum selection and concentration of all the resources available in the territory, including the promotion of the excellent features built by the Cities themselves, involving vast areas and therefore the growth of competitiveness of the Cities and Territories. The promotion of these excellent features incorporates the issue of how inclusive they actually are: so, on the one hand, the *Territory Project* is achievable through governance and is based on the location of the services, production systems, innovation systems, research and knowledge, while on the other hand there is the recovery of urban and territorial margins with a view to environmental and social sustainability.

The “Junction territories Project 2 – Abruzzo” and the Central Abruzzo Quadrangle. The *Territorial Settlement Systems*, which feature different dynamics depending on their location and type, represent territorial sectors within which, or through which, it is possible to calibrate the *Territory Projects* covering Median Italy. The new policies connected to the Macro-regions can move beyond the dual model (described in the previous paragraphs), if the *Territory Projects* can stimulate different *Territorial Settlement Systems*: the driving force for development therefore becomes the Project, the elements are the Systems, the vehicle is the *City Network* and the territory equates to the Macro-region. In this way, it is possible to overcome territorial diversity and use it as a positive factor for development.

The “Junction territories Project 2 – Abruzzo” specialises further into the *Territorial Settlement Systems*, separating them in terms of their tourist appeal. In fact, by analysing the landscape and environmental areas of Median Italy, we have identified the variable geometry configurations of

tourist activities that are vital for launching *Territory Projects*. This involves possible nature trails through the systems of parks and reserves, but in particular through the rural hillside system. Through these components we have been able to establish Networks of tourist activities, which in turn have allowed us to identify a preliminary configuration of the so-called *Tourist Systems*. The objective is to map out and represent the system of local identities for the user. In certain cases, the *Tourist Systems* coincide with the so-called “Areas of governance checks for Territory Projects”, which are areas that have been identified for the management and assessment of these Projects in reference to the macro-regional territory involved.

In this model, *Territory Projects* (such as “Junction territories Project 2 – Abruzzo”) are connective tools which, within the *Territorial Settlement and Tourist Systems*, use *City Networks* and their competitive potential and socio-economic development potential. They connect regional territories, for example those in Median Italy which are well-known for containing high volumes of demand aimed at a variety of offers. We can use these territories to gather their experiences in the organisation of their own systems and in promoting their own heritage. These connections enhance and increase the efficiency of the so-called *Territorial Frameworks* (or Quadrangles), which are based on the following order: low coastline, mid-range hillside and valley ravines. They are historically located on ridges (historical centres) and in irrigated areas (scattered houses).

These frameworks are the main fabric of the *Territorial Settlement Systems*. They are autonomous and often have diverse dimensions and structures, which do not copy the traditional urban system in terms of centre-periphery or its functional relationships, but rather postulate a different composition. In fact, at the vertices of the framework, we often, but not always, find historical settlement aggregations (underdeveloped centres on the hillside and settlements based around railway stations). Another important objective of the “Junction territories Project 2 – Abruzzo” is to complete the infrastructure grid to stimulate these flows and to connect any weak *Territorial Settlement Systems* with stronger, wider systems, for example, Median Italy with the Euro-Mediterranean area.

Many of the weak territorial Systems are found within “inland” central Italy. The “Junction territories Project 2 – Abruzzo” specifically focuses on the systems located within the so-called Central Abruzzo Quadrangle, which is formed of vertices at the centres of L’Aquila, Carsoli, Avezzano and Sulmona. In terms of the existing development projects, this quadrangle is involved with two Strategic Territorial Platforms: the interregional transversal Lazio-Abruzzo platform entitled “C2” and the longitudinal Central Apennines platform known as “C1”. These two Platforms stimulate many *Territory Projects*, such as the projects linked to the transversal connections between Pescara/Teramo and Rome/Civitavecchia/Fiumicino, or to the longitudinal connections between Rieti/Terni and Isernia/Salerno, but also to the development/completion of the Quadrangle of L’Aquila, Carsoli, Avezzano and Sulmona.

Fig. 1 – To the left: the Median Macro-region and Territory Project (in green the Central Abruzzo Quadrangle); in the centre: a deepening of Territorial Settlement Systems in Abruzzo Region; to the right: Territorial Settlement Systems and City Networks (top left: Linear coastal cities, bottom left: Inhabited countryside areas, top right: Major urban centres, bottom right: Networks of villages or minor Urban centres).

In relation to the *Territorial Settlement Systems* and *Tourist Systems* and with the relevant *City Networks*, the Central Abruzzo Quadrangle contains a population of approximately 300,000 inhabitants (residents in the *Territorial Settlement Systems*) and involves an external area that contains about 1,000,000 inhabitants (who also reside in the *Territorial Settlement Systems*) which extends from the coastal linear Cities to the metropolitan Area of Rome (which is excluded), accounting for a total of approximately 1,300,000 inhabitants.

The “Junction territories Project 2 – Abruzzo” focuses on promoting several particular assets that are a feature of the inland areas and naturally have a dimension that goes beyond the Region’s administrative boundaries, as is the case with the Quadrangle. This also involves the upgrade and completion of the infrastructure framework that crosses the inland areas in longitudinal and transversal directions. This aims to assist the promotion of these areas’ tourism, with a specific emphasis on the A24 and A25 motorways, as well as the sections between Carsoli-Avezzano-Sulmona of the Rome-Pescara transversal railway line and the L’Aquila-Sulmona-Castel di Sangro part of the railway line system that runs from Perugia, Terni and Rieti crossing the Apennines chain longitudinally and arriving at Salerno. It is a project that completes the urban and territorial structures connected to the Quadrangle and tests new “smart” levels of services for the framework, which are mainly linked to the selective use of the potential of the Network of major urban Centres (which also includes the metropolitan Cities).

The area of the “Central Abruzzo Quadrangle” and the metropolitan Cities

As we already mentioned in the previous paragraph, the Central Abruzzo Quadrangle directly involves the *Territorial Settlement Systems* of about 300,000 inhabitants (an area equivalent to the level of NUTS-3 territories) and indirectly involves about 1,000,000 inhabitants (an area equivalent to the level of NUTS-2 territories), accounting for a total of 1,300,000 inhabitants. This estimation has deliberately excluded part of the settlements coming from the major magnets represented by the metropolitan areas of Rome and Naples.

In reality, the general model of the *Median Macro-region* cannot ignore the presence of metropolitan Cities, which can be interpreted as positive factors since they generate opportunities, or as negative factors because they are a massive, indifferent drain on resources.

In particular, the negative factors brought by the metropolitan Cities of Rome and Naples, but also by smaller cities such as Pescara and Ancona, have actually led to “underused” spaces, such as the *Territorial Settlement Systems* and *Tourist Systems* of the central Quadrangle. This underuse has been exacerbated by incomplete and inefficient frameworks, both in terms of the services offered and in terms of the production facilities stimulated. However, there has also been a lack of logic in the overall territorial planning, which could actually be recovered (along with the previous issues) by changing the development and social model proposed through the *Median Macro-region*. Most of these problems stem from an unbalanced financing policy which has favoured the major urban centres and has always been a feature of national policies. It has just seen the rest of the territory as an energy supply and an area for dumping waste.

The deepening of the metropolitan Cities’ role in the development of inland Quadrangles should be a central issue for the development of the entire *Median Macro-region*. Metropolitan Cities must not be seen simply as enlarged areas or as municipal unions that can replace the Provinces. They must take on the role of a Reticular-City (neither an Area nor a Region, but a fabric) [9], acting as a paradigm that can reverse, or at least rebalance, the draining effect of the major urban polarisation that it represents.

If we see metropolitan Cities as Reticular-City within the *Median Macro-region*, it will stimulate minor, underused settlement Systems together with the major systems, which in turn are connected to the global network. Consequently, the area of influence of the Reticular-City could stretch towards inland areas and towards the Systems involved with inland quadrangles (i.e. Central Abruzzo

Quadrangle), thereby moving its own critical mass in this direction and relieving the demand on resources, as shall be represented succinctly in Fig. 2.

When combined with the efficiency of *Territory Projects* to generate development (if these projects are well-calibrated they can complete the *Territorial Frameworks* as well as more generally the so-called territorial structures), this alliance between the Macro-region and metropolitan Cities (when seen as Reticular-City) could involve the entire central European sector, as well as the Euro-Mediterranean sector. At the same time as completing the networks, it would also develop the *Territorial Settlement Systems* and *Tourist Systems* of inland areas. There would be multiple advantages of using this model [9]:

- Territorial integration, environmental and landscape protection;
- Restoring the balance between Cities and rural spaces, which in turn restores the balance of demand on resources from major metropolitan Cities towards the surrounding territory, generally accepted as the first ring around the city;
- Socio-economic development over a wider and more balanced territory (the entire Macro-region) and not just focused on the major polarisation;
- Connection of underused territories with widespread and global networks;
- Reduction in the inequalities between infra-regional territories and the creation of a partnership between the centre and the periphery;
- Redistribution of knowledge and an increase in social diversity, thereby working on the issues of social exclusion and spatial segregation which are a feature of Italian Cities, and creating social innovation [10];
- Application of Governance models that refer to the so-called “Areas of governance checks for Territory Projects”, flexible, multi-level and multi-scale models which are based on Knowledge and Assessment, on the networks launched by the different *Territory Projects* and created by the integration of formal and informal structures [10].

Fig. 2 – The Central Abruzzo Quadrangle and the relationships (blue lines) of the metropolitan City of Rome (Reticular-City) with the related Territorial Settlement Systems.

Conclusions

We are able to find the right balance between metropolitan cities and inland areas by using the *Median Macro-region* model to interpret the space in central Italy, and in particular by breaking down this Macro-region into *City Networks*, *Territorial Settlement Systems* and *Tourist Systems* stimulated by *Territory Projects* with verifiable governance in specific fields. However, the application of this model must not see the Metropolitan Centre as an area with defined boundaries nor as a City-region, but rather it must be interpreted as a Reticular-City, in other words as a network of Cities belonging to different levels, from a global level to a local level. Now equipped with a new positive diversity, this will enable the weak critical mass of inland areas and the relevant settlement and *Tourist Systems* to be integrated and rebalanced with the critical mass of the Reticular-City, deriving benefits in terms of governance, inequality, the distribution of knowledge, the relationship between Cities and rural spaces, and economic rebalancing.

References

- [1] European Union: *Macro-regional strategies in the European Union* (2009). Information on: http://ec.europa.eu/regional_policy/cooperation/baltic/pdf/macroregional_strategies_2009.pdf
- [2] D. Di Ludovico, P. Properzi: *Evolution of the network of cities in the central macroregion between reconstruction and underuse*. In: *IX Biennial of European Towns and Town Planners - Genoa 14th-17th September 2011. GATEWAYS - Smart Planning for Europe's Gateway Cities. Connecting peoples, economies and places*, edit by A. Vergano, A. Caruana, INU Edizioni, Roma (2012), pp. 1-9
- [3] A. J. Scott, J. Agnew, E. W. Soja, M. Storper: *Global city-regions*. In: *Global City-Regions, Trends, Theory, Policy*, edited by Allen J. Scott, Oxford University Press, Oxford (2001)
- [4] R. Florida, T. Gulden, C. Mellander: *The Rise of the Mega-Region*, Cambridge J Regions Econ Soc (2008), 1(3), pp.459-476, first published online January 1 (2008)
- [5] Abruzzo Region: *Territorial Projections for Cities*, working paper (2007)
- [6] D. Di Ludovico: *The comprehensive urban project "landscape-based" for a new social model of the citie*. In: *Procedings of X Biennial of European Towns and Town Planners*, Cascais, Portugal, (2013), in press.
- [7] S. Fabbro: *Reti infrastrutturali*. In: *Rapporto dal Territorio 2010*, edited by Pierluigi Properzi, INU Edizioni, Roma (2011), p. 324
- [8] Abruzzo Region: *Junction territories Project 2 – Abruzzo, Scenarios and territorial offer packages*, working paper (2013)
- [9] European Union: *OPINION of the European Economic and Social Committee on European metropolitan areas: socio-economic implications for Europe's future*, European Economic and Social Committee, Brussels (2007), pp. 12-13
- [10] European Union: *Cities of tomorrow, Challenges, visions, ways forward*, Brussels (2011), p. 71