The Morphological Interpretation of the Peloritani Mountain Range

A Guidance for Strategic Actions Aimed at the Development of the Area of the Strait of Messina

The Morphological Interpretation of the Peloritani Mountain Range. A Guidance for Strategic Actions Aimed at the Development of the Area of the Strait of Messina. *This study proposes a project for the enhancement of the cultural heritage of one of the European Straits that are part of the ESI (European Straits Initiative) network and that, owing to their particular geographical location, fall within the Mediterranean coastal and maritime regions. Within the overall project, this paper particularly concerns the Area of the Straits of Messina and proposes the enhancement of the specific area of the Peloritani mountain range. The peculiarity of this research activity is that it aims at finding, in the morphological characteristics of the territory, the potentials for its development, which should be the target of strategic actions. Among the many types of spatial interpretation, this study focuses particularly on the so-called "storia operante" (operative history) developed by Saverio Muratori and his School.*
Keywords: Straits network, morphology, "storia operante" (operative history), territorial system, development

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The Strait of Kvarken, the Strait of Bonifacio, the Strait of Otranto, the Strait of Sicily, the Strait of Fehmarn Belt, the Gulf of Finland, the Strait of Messina, the Strait of Dover, the Strait of Gibraltar, the Strait of Corfu, and the Corsica Channel are unique places in the European continent having the common characteristic of being composed of two neighbouring regions separated by a stretch of sea.

In 2009, the will to recognize the uniqueness of these geographical contexts led to the creation of the European Strait Network, upon the initiative of the Kent County Council and of the Pas de Calais County Council. The network includes 11 Straits representing 23 partners from Albania, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Morocco, Spain, Sweden and United Kingdom.

In particular, this paper focuses on the Strait of Messina, a place that, owing to its beauty, has always inspired mythological poems, verse and other literary works. The great Italian poet Giovanni Pascoli provided an impressive description of the Strait, of a sea full of voices and a sky full of visions. He described a sea where forgotten Nereids still howled and a sky where hovering dead cities often fluctuated. In this sacred place, in the morning serenity, Greek and Latin waves blended to form a huge bath of pure sparkling metals, while, in the evening mist, they lay down generating all the iridescent crimson shades of the shells. In this sacred place, between Scilla and Messina, at the

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bottom of the sea, under the blue cobalt, under the glittering metals of the dawn, under the iridescent crimson shades of the sunset, lay death. Yet, not the kind of death that picked a flower or a fruit from human plants leaving branches free to blossom and bear fruit again, rather the one which withered up plants; not the one which pruned, rather the one which uprooted; not the one which left tears in its wake, rather the one followed by oblivion. This hidden power emanating ruin and stranglehold had wiped out so much history, beauty and grandeur, whose traces, however, were still in the sky, just like the echo of the sea. Where history was almost destroyed, there lay poetry. (Cf. G. Pascoli, *"Pensieri e Discorsi",* 1914).

Besides being specifically interested in the Straits, the European Union is also concerned with the maritime and coastal regions, as it clearly showed in 2008 by establishing the European Maritime Day. It was established in order to provide a forum for people from different areas of the ocean economy, from the world of science, from public government and administration to showcase their activities, learn from each other, discuss crosscutting issues and develop joint visions.

The role of Cultural Heritage for a sustainable economic development of the whole European Continent is more than highlighted in all EU policies. For instance, a Call concerning *Cultural Heritage of European coastal and maritime regions* has been launched within the Horizon 2020 Programme. It requires a multidisciplinary approach to enhance the cultural heritage of coastal areas through a project that may contextualize that heritage in its territory and tackle the various aspects related to enhancement, risk mitigation, and involvement of all the stakeholders.

The proposed research activity, which is aimed at enhancing the cultural heritage of the Area of the Strait of Messina and of which this paper is an initial progress report, focuses on the Sicilian coast of the Strait converging the above-mentioned EU interests. Following a well-defined methodological path, the cultural heritage will be classified according to the role it plays in its territory.

The main goal is to find, in the morphological characteristics of the territory, the potentials for its development, which should be the target of strategic actions. In other words, the analysis of the stratifications, which have followed each other over time and resulted in the current territorial morphology, allows foreseeing the future scenarios of this organism and reactivating the productivity that had determined its form.

1. Saverio Muratori's *"lettura operante"*

The spatial interpretation method utilized to acquire the necessary information is the so-called "lettura operante" (operative interpretation) developed by architect Saverio Muratori.

Muratori's concept of territory draws on the one defined by the German scientist Alexander Von Humboldt who, in the first half of the XIX century, convinced the European middle class to abandon their contemplative attitude towards nature and to prefer that type of scientific knowledge which enabled to dominate the world. Humboldt suggested replacing the landscape with the territory, which was made up of architecture and territorial engineering, *i.e.,* replacing the bucolic vision with the huge human work, which became a second nature operating with civil purposes. (Alexander Von Humbolt, *Kosmos. Entwurf einer physischen Weltbeschreibung* 5 voll., 1845-62).

Unlike the landscape, the territory is what can be represented on paper, what is most suitably represented geometrically and rationally on paper.

The representation of the territory on paper can include not only physical objects but also events, functions, geometries, and space-time transformations.

Hence, according to Muratori, the territory originates from the interaction between man and nature. The first approach to the territory occurred when man started to travel paths: by travelling the territory, man appropriated it. Such paths started from crests and then

continued to hills, valleys and, finally, plains.

To retrace the phases of the anthropization of a territory allows knowing its history and genetic heritage, which marked its past and will guide its future.

Muratori also stated that the territory is a continuously evolving entity made up of a material physical component (the environment) and of an immaterial component, which is man bringing continuous changes to the environment.

The territory is the output of a cyclical structuring process whose cycles tend to repeat themselves and have precise timing.

Since it is impossible to make any place productive or to occupy it without first travelling it, it is clear that the structures that first affect the territory are paths. A second level of appropriation of the territory is the utilization of its spontaneous productivity, which led to the creation of the first temporary settlements needed to take advantage of the natural productivity of a place. A third level coincides with the will to make a place permanently productive and, consequently, to enrich settlements with areas destined to stable production. Finally, the last level coincides with the hierarchization of existing elements in order to form proto-urban and urban areas for product trade and processing.

Each level corresponds to a parallel phase of development of human civilization: the first phase, in which man travelled paths on the territory, corresponds to a phase of nomadism, when human groups had no stable settlements and their only form of production was the harvest of natural products. The second phase corresponds to the creation of seasonal settlements with only natural production structures. The third phase is characterized by farming and pastoralism; man started to conserve the products he obtained from nature to use them later. The fourth phase corresponds to the specialization of human activities, which implied the trade of products through suitable structures: urban areas and markets. It should be noticed that human-induced structures are located on a territory that has already its own natural structure with morphological characteristics (mountains, valleys, ridges, rivers, etc.) and climatic characteristics; thus, the relationship of man with the territory is different depending on the natural characteristics of the portion of territory he wants to anthropise.

Therefore, the function and form of settlements depend on their location in relation to paths: the centres situated along ridges play an inevitably different role from those located at the crossroad of several paths, such as the centres in valley floors and in the plains. The buildings, patterns, and organisms of a settlement on a ridge differentiate from those of a settlement in a plain and become increasingly complex because they have to meet different requirements.

The consequentiality between natural and anthropic components determines precise and univocal forms and functions for paths and settlements.

The ridge path, which is one of the most travelled, is a distributor of centres on secondary ridges. The hillside path, which connects the settlements on a promontory, is used for trade and distribution. The valley floor path connects several specialized centres and is used for various types of trade.

In this study, the method of "lettura operante" was applied to the Sicilian coast of the Strait of Messina and, specifically, to the area of the Peloritani mountain range in order to deeply understand its structure and reveal its cultural heritage, which is mainly found in the systems of villages and hamlets that are located on secondary ridges and actually define the layout of this region in the province of Messina.

The section of the Peloritani mountain range that corresponds to the Sicilian side of the Strait of Messina is divided into two sub-organisms: the Ionian side of the Peloritani mountain range and the area of Capo Peloro with its hinterland. Moreover, each of the two secondary organisms is made up of ridge, hillside, valley floor and plain areas. To analyse the phases of anthropization of these areas, which mark also chronologically man's conquest of the territory, starting from the ridges and ending in the plains, allows

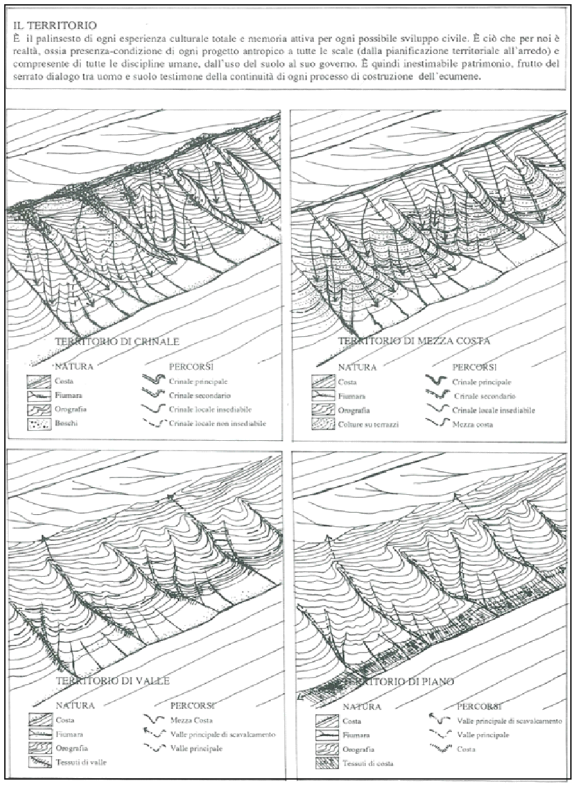

Fig. 1
Territorial areas (Figure Amato, 1995)

Fig. 3
Ridge area (Figure Amato, 1995)

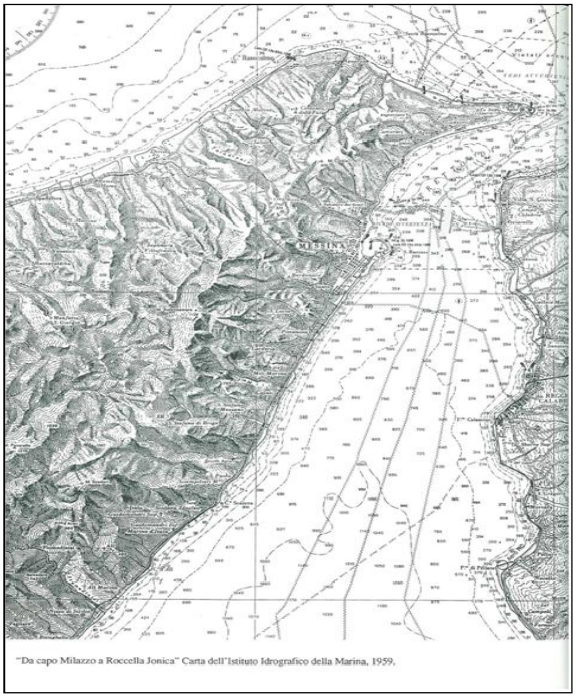

Fig. 2
The area of the Strait of Messina (Figure Amato, 1995)

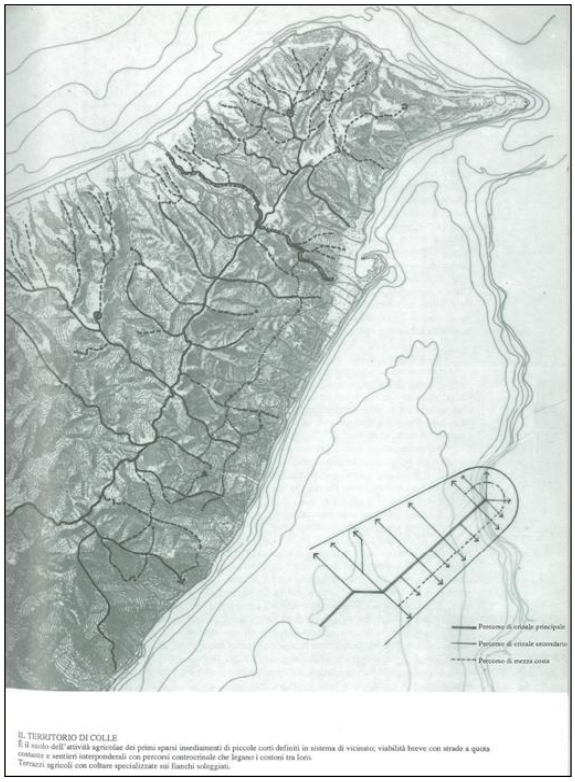

Fig. 4
Hillside area (Figure Amato, 1995)

Fig. 5
Valley floor area (Figure Amato, 1995)

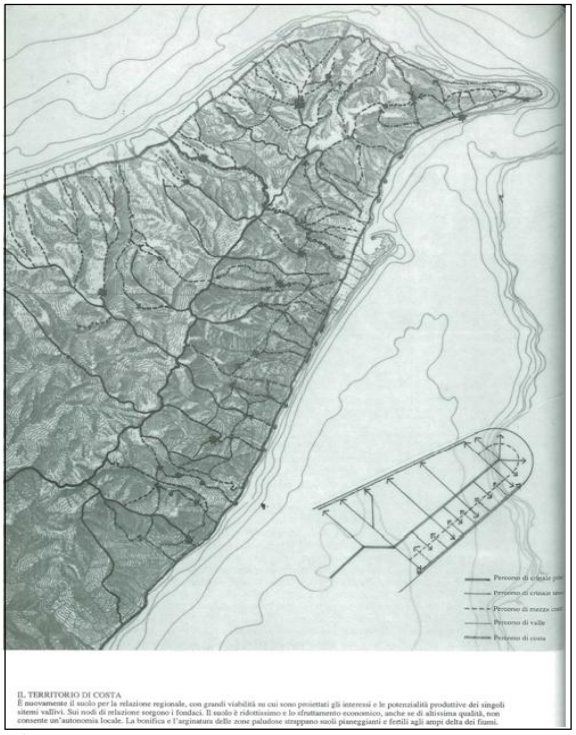

Fig. 6
Coastal area (Figure Amato, 1995)

understanding their current structure and better identifying potentials and possible hypotheses of future development.

2. The Ionian side of the Peloritani mountain range from Scaletta to Fiumara Guardia

As an example of the methodology adopted, a short description of the characteristics of this territorial organism, which was performed by applying the "lettura operante" to the four areas comprising it (ridge, hillside, valley floor and plain), is provided below.

2.1 Ridge area

The section of the Peloritani mountain range from Monte Scuderi (1253) to Portella Castanea is the main ridge from which paths stretch on the two sides towards the coast. Actually, it is at the same time a connection and a border between two different worlds: the Ionian side, with its constant and fragmented nature, and the Tyrrhenian side, with its long ridges and wide plateaus.

The valleys on the Ionian side are narrow and short and create separate and sheltered worlds. Yet, a few of them connect with the opposite side and, therefore, with ridges comprising important settlements.

This is the case of Scaletta, a very important southern border, the last ridge of the comb-like system before the great valleys (Fiumedinisi, Savoca, and Agrò); a system of mountain passes leads from Scaletta to Milazzo through Santa Lucia and Gualtieri.

A mountain pass allows crossing the Peloritani mountain range from the ridge on Santo Stefano di Briga to Monforte San Giorgio; the Cummara mountain pass allows reaching Rometta from Larderia; and, finally, there is the fundamental secondary ridge of "Quattro Strade" (of the Four Roads) with Gesso on one side and Messina on the other. As mentioned above, valleys are narrow and the first settlements lie on the lower heads of the ridges.

The Crest of Castanea is the end of Via Grande Peloritana, and, like any other end of a road, it is peculiar. It is the place connecting the two sides of the vertex of Capo Peloro. The regular comb-like system of ridges of the Ionian side radiates from the mountain pass of Castanea to connect with the Tyrrhenian coast. It is a land furrowed by not very deep valleys climbing up just before the mountain pass.

2.2 Hillside area

The hillside area is included between the ridge of a hill and the edge of the irrigated valley. It was the most suitable land where a people, who decided to abandon nomadism, could settle for the first time. The hill face was divided into farm holdings and man took possession of them: he measured the land and became its owner. Moreover, farmers benefited from the springs which offered them subsistence and fertility. Each hill became the closed world of a social group. Paths were closely linked to the use of the surrounding lands of the same unitary organism. They were essentially short paths connecting farm holdings and winding at constant altitude with minimum human intervention. There existed great hillside civilizations, such as those of Cosenza and of Valle del Crati, yet, in the case of the valleys of the Ionian side of the Peloritani mountain range, isolation was all but inevitable. The land was so steep that no agricultural practice could be used except for terracing. Nonetheless, extremely rich intensive farming developed exactly in this place.

Except for the top and the valley, the hillside is almost completely made up of farming terraces in a continuum laboriously shaped by man. Huge steps mould the hillsides, even the most inaccessible, transforming the landscape and conferring it unity. Among the terraces, only small stairs and, at high altitude, small paths connect farm holdings with each other and with the residential area. The economic structure of this territory rests exactly on this laborious transformation. It is the only place of production and it must be taken into account even today.

2.3 Valley area

In the valley there is water, which represents life. Also terraces are irrigated thanks to the smart system for collecting spring water and rainwater, but they need hard work and masses of labour. On the contrary, the valley is level and fertile and widens near the coast, where the market takes place. However, the valley is characterized by a very limited portion of land near the foot of the hills and by an equally limited soil reclaimed from the river. Yet, owing to its high productivity, the valley became the new economic reality. It converged the interests of the single communities and wove them into economic relations. The valleys of the Peloritani mountain range produced new urban centres, to which people moved from the original centres on the hills. A large village was established in each valley, hidden in a meander of a torrent or protected by a ridge. They often aggregated to existing processing structures, such as wineries or mills. This was the case of two villages, both called Santo Stefano, and of those of Giampilieri, Briga, and Santa Margherita. The same happened to the valleys near the city, with the large villages of San Filippo, Bordonaro and Camaro. In a narrow valley, there are usually three centres: the original centre, on a hill rising sheer from the stream; another, slightly down the valley but always in its upper part (usually at an altitude of 200m); finally, a new centre halfway down the stream (between 100 and 80 m). A network of transversal paths uninterruptedly connects all the centres in the valley with each other in a structure that, after passing over Messina, reaches the hills of Castanea forming a sort of territorial organism.

2.4 Coastal area

Valleys widen near the coast where they are connected with each other by long and fast paths, along which goods, civilizations, information, laws and processed products are transported from and to the great tertiary nodes. Coastal paths go beyond the municipal dimension and become trunk roads, consular roads, railways, motorways. Over time, agricultural soils were abandoned and only those with higher yields were kept almost until today. Scattered settlements were replaced by few high-density centres in the plain. The narrow valley was almost completely abandoned and farming survived only where the streambed widened enough to offer flat and irrigated soils. It was the case of the low valleys of Larderia, Zafferia and, to a lesser extent, S. Filippo, Santo, Camaro. Coastal centres lay near one of the two banks of the stream and developed along the Consular road as far as an intermediate "fiumara", which marked the border with the next group of houses. The small size of the settlements allowed keeping available arable soils.

3. Conclusions

The “lettura operante” allows interpreting the complexity of a territory in two different steps. In a first step, as it was done in this study, the territorial reality is split into its constitutive elements, which are analysed and classified individually. In a second step, the single elements are re-aggregated to grasp specific roles, relationships and hierarchical relations through which they form territorial systems that can be divided into subsystems.

Each territorial system is autonomous and each element comprising it contributes to the general balance of the system.

A single element can play different and more or less important roles if it is analysed as an element of the main system or as an element of a subsystem. Within each system, all the roles and relations between the elements are defined; several systems interacting with each other compose organisms. Muratori defined the territory as a “system of systems”, owing to the highest possible complementarity existing between its elements.

In order to intervene on the territory, man should understand the rules of the internal organization of the systems and, at the same time, analyse the territory without limiting himself to physical dimensions, but rather considering its fourth dimension: time.

Man should interpret the flux of the territory and become aware of the progressive changes

of the evolutionary process of reality. Even if, at an elementary level, this consciousness is spontaneous and instinctive, it is increasingly forced to make choices as it enriches with experiences.

As mentioned above, the proposed research activity applies Muratori's method of "lettura operante" to the territorial organism in the province of Messina that corresponds to the Ionian side of the Peloritani mountain range, which is a part of the higher organism of the Area of the Strait. The goal of the study is to identify, through a deep knowledge of the structure of the territory and of the relations existing inside of it, the guidelines for a future development of the Area, which is already a strategic region in the Euro-Mediterranean context. Certainly, although, in this phase, attention is focused only on the Sicilian side of the Strait, it is understood that such guidelines should concern the whole Area of the Strait.

Muratori stated that, in order to intervene on reality, a notion of process, which should be at least indicative and based on suitable and precautionary approximations, if not impossibly precise, is needed. Attention should be focused on the possibility to acquire a rational criterion for operational forecasts and, therefore, for an evaluation of the process of reality and of social life which may govern action programmes. ❐

Summary
Nel 2009 è nata la Rete degli Stretti Europei con la volontà di indirizzare l'attenzione dell'UE alla particolarità ed alla unicità di questi luoghi. L'attenzione per gli Stretti, dunque, insieme all'interesse dell'UE per il patrimonio culturale e per le aree marittime e costiere sono alla base della ricerca proposta finalizzata alla valorizzazione del patrimonio culturale dell'Area dello Stretto di messina, di cui il presente paper costituisce un primo stato di avanzamento.

L'obiettivo è quello di voler ritrovare nei segni della struttura del territorio, le potenzialità per il suo sviluppo, sui quali indirizzare le azioni strategiche. In altre parole dalla lettura delle stratificazioni che si sono succedute nel tempo e che si concretizzano nell'attuale morfologia dei luoghi è possibile comprendere quali potrebbero essere gli scenari futuri di quest'organismo facendo riattivare quella produttività che ne aveva determinato la forma.

Il metodo di analisi utilizzato per acquisire le conoscenze necessarie è quello della cosiddetta "lettura operante" messa a punto dall'architetto Saverio Muratori. Tale lettura è stata applicata alla fascia costiera siciliana dello Stretto di Messina e nello specifico al territorio dei Monti peloritani per comprenderne fino in fondo la struttura e farne emergere il patrimonio culturale, localizzato principalmente nel sistema di borghi e casali che sui crinali secondari del sistema si sono formati definendo l'assetto di questa parte dell'organismo territoriale della città di Messina.

Per poter intervenire sul territorio l'uomo deve comprendere le regole di organizzazione interna dei sistemi, e contemporaneamente operare una lettura del territorio non limitata alle sole dimensioni fisiche ma estesa anche alla sua quarta dimensione "il tempo". L'uomo deve leggere il divenire del territorio, deve prendere coscienza del progressivo mutare del processo evolutivo che esiste nella realtà..

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