Study on the role of the fortified systems of Trentino within the Austrian Hungarian Empire targeted to the valorisation of the fortified heritage (Дослідження ролі укріплень систем Трентіно в Австро-Угорській імперії, орієнтовані на ревалоризацію фортифікаційної спадщини)

Fiorenzo Meneghelli, architect Istituto Italiano dei Castelli sezione Veneto, Italia

In the year 2009 I was appointed by the Province of Trento – Superintendence of the Architectonic and Environmental Heritage of the task to perform the studies and researches and the preparation of the graphic layout of the "Catalogue of the fortifications of the Austro-Hungarian Empire".

The result of this work has been the preparation of the electronic format of the "Catalogue of the Fortifications of the Austro-Hungarian Empire" divided in 4 volumes:

- 1st Volume: Historical Overview Proposals. It is a comprehensive historical overview of the different schools of fortifications ranging from the French, to the Prussian and the Habsburg where there are analysed on one side the different typologies of territorial settlement of the fortified assets (defence systems, mixed polygon system, the entrench camp and the fortified regions); on the other side the different types of the fortified assets (artillery tower, polygonal fort, armoured fort, Trentino fort). The volume provides also a range of proposals of an European Network of the Fortifications of the Austro-Hungarian Empire;
- 2nd Volume: Fortifications of Trentino Region For each city or area that has a relevant defence system there a general fiche where firstly there is a historical-cartographic overview and analysis completed with historical maps, cartographic maps and Google maps where there are highlighted all the military installations. The further step is a detailed fiche for each single military asset, starting from a grid where you can acknowledge the key information on the status of preservation of the asset, the property, the current utilisation, the type of asset and the date of its origin and the following relevant architectonic modifications. The fiche is divided in two following paragraphs 1) the historical-architectonic features, and 2) environment and territory that are enriched with 3D graphic elaborations, orthophotos, cartographic extracts, historical drawings and photos;
- 3rd Volume: Fortifications of the Regions of Lombardia, of Veneto and of Friuli Venezia Giulia The same methodology of the former volume it is applied also for the 3rd and the 4th Volume. The analysis is enriched by diagrams of the different defence systems located in each of the three Italian northern regions;
- 4th Volume: European Fortifications: this volume is the crowning achievement of the other three volumes. It is enriched by the schemes of the European Defence Systems and deep comparative analyses thorough the "state of art " graphic tools of the various schemes of existent Austro-Hungarian fortified systems, taking into account the comparison of

different types of defence systems and fortifications according to a scientific and historical classification.

1. A work in progress.

The recognition of the value and the importance of the fortified heritage achieved by the Austro-Hungarian Empire, not only can be traced back to a dimension "of military history", but should be reported in a wider context, historical, cultural, social and economic.

The aim of this study not was to make an analysis of all these themes, though it is very important. We have wanted to research informations and elements in order to describe the consistency and the vastness of the built heritage fortified, as first element on which to develop a wider knowledge way.

In the ten countries examined: Italy, Austria, Slovenia, Croatia, Montenegro, Czech Republic, Slovakia, Hungary, Poland, Ukraine, have been identified 32 defensive system of urban or territorial feature (10 European and 22 Italian) with a total of 516 forts (323 European and 193 Italian).

In this context of big numbers, certainly are still remaining others fortifications to catalogue, and should be added the other works connected to the defensive system as the commands, barracks, arsenals, hospitals, military factories, storages and the depots, the powder kegs, and so on.., as well as road and railway infrastructure too.

These data emphasize only some aspects of this big complex of fortifications, for example the number and the status of preservation and the diffusion on territory; the aspects more "qualitative" historical, typological and technological, architectonic and environmental emerge from the reading of the study in its complex.

Furthermore, there must be considered also the relations that have featured this heritage in its history, not only for what is concerning the politics and the economy of the Austro-Hungarian Empire, but also accordingly to the established relations with the population of the states and of the local regions under the historic, economic, social and cultural perspective.

We must also underline how the urban and the territory developments have been affected, limited and fostered by the accomplishment of these fortified systems and how they have also defined also the following development of these sites until nowadays.

2. The European network of fortifications of the Austro-Hungarian Empire.

All the features that we have briefly described males unique, un-repeatable and Universal the fortified heritage built by the Austro-Hungarian Empire between the XIX and the XX century, such to consider it as World Heritage (UNESCO).

It represent an universal contribution to the history of the military architecture. The heritage is an evidence of the European evolution of the defense technology from the XIX to the XX Century, grounded on theories and strategies set up in a coherent relation with the territory.

The constructive genius made it possible to create works of great architectural value well integrated into a historical, urban, environmental-landscape context.

These works highlights an unitary vision of military strategy, architecture and building, engineering and technological innovation, economy and social organization.

With these premises, it is necessary the set up of an EUROPEAN NETWORK OF THE FORTIFICATIONS OF THE AUSTRO-HUNGAIAN EMPIRE, that should lead to the set up of a cooperation in the European framework.

The points summarized above to underline the role and the importance of this heritage on the European history and not only.

The big defensive system of Hapsburg, in a unit strategic plan, is divided in several regional areas; in turn divided in several fortified towns, which are still existed in 10 European countries. All defensive works are been conceived and realized in coordination with each other so that to form inseparable elements of a big "system"; for this reason is important to research a model of development that goes beyond the local area and extends to wider view of regional scale.

The European history has been featured by divisions and conflicts and the defense systems are the logic consequence, in fact they have been built as barrier between the North and the South, between the East and the West, between the countries and the regions...and so on.

Along these "borders" tremendous wars have been fought, were millions of men have lost their life and there have been created deep lacerations in the social fabric of the involved populations.

All this nowadays represent a relevant historic and architectonic heritage, that mostly is preserved, that other than to constitute the memory of this past, it can represent an opportunity of cultural, social and economic growth for many countries.

The process of the European unification, that has started at the end of World War II and that has continued with the fall of the "Wall of Berlin", has been an "epoch-making" in which the countries that have fought for countries, have started a new path of economic, cultural and social cooperation.

The set up of the **Trans-European** corridors (TEN) has represented one of these politics of cooperation, where goods, persons, energy and communication systems circulates.

In this framework of European cooperation, the fortified systems, from elements of "separation" can become elements of connection of territories.

The defense systems can become the "new European corridors", that is to say "CULTURAL INFRASTRUCTURES" were to promote the collaboration between the different countries according to a balanced economic and social development.

For this reason it is desirable the set up of the NETWORK OF THE EUROPEAN FORTRESSES that would allow us to set up paths and thematic itineraries that can connect the Austro-Hungarian forts with the Prussian, Italian, French, Dutch.... System.

3. Future objective

The valorization of the Trentino defensive system must be research in a wider territorial view, able both to recognize the peculiarities of this area by the historical, architectural and environmental characters, and to connect it to the larger system of the Austro-Hungarian fortresses in Europe.

The constitution of the EUROPEAN NETWORK OF FORTIFICATIONS Austro-Hungarian Empire should activate 4 actions of cooperation in Europe.

- Network of fortifications for the European Community projects:

Development of a collaborative network, local, regional and transnational for the recovery of the fortified heritage in Europe, with the establishment of a working group that promotes strategic projects in order to valorize the experience and skills of individual partners.

- Cultural network of fortresses:

The establishment of a cultural way for the European fortresses, capable of creating the economic development and tourism promotion.

The creation of a market and a common strategy of cultural resources, with the development of guidelines to use in each defensive system in order to promote the synergy between the resources and heritage of each local community.

- Innovative strategies: from cultural resource to factor of social and economic growth:

Elaboration of innovative strategies for the exploitation of defensive systems and their fortresses in order to assure the compatibility between recovery and use of the historic monument and its environmental context.

The research for a first base of financing is essential to promote a model of economic development, to be monitored over time, capable to start a self-sustaining economic mechanism of activities present or connected with the fortress.

The recovery of the fortresses is an opportunity to create "services", "urban quality", "environmental quality" and then a new sociality in the local communities.

- Scientific cooperation, cultural and educational:

Promotion of a cooperation between Scientific world (Universities, specialized Institutions), Cultural and Educational communities in order to produce locally integrated projects of culture.

The creation of the network of fortifications of the Austro-Hungarian empire can strengthen the link among the various European countries that historically have been part by promoting cultural activities and common socio-economic development of the territory.





CATALOGO DELLE FORTIFICAZIONI DELL'IMPERO AUSTRO-UNGARICO 1815-1915

Arch. Fiorenzo Meneghelli

Volume 2 - PROVINCIA AUTONOMA DI TRENTO PROVINCIA AUTONOMA DI BOLZANO

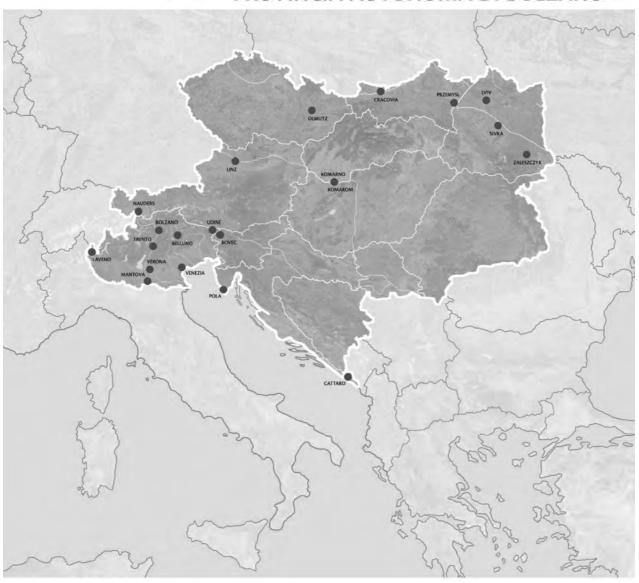
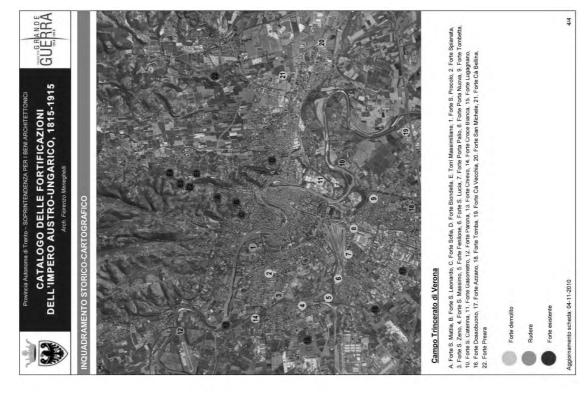


Table. 1. Catalogue of fortifications of the Austro-Hungarian Empire.



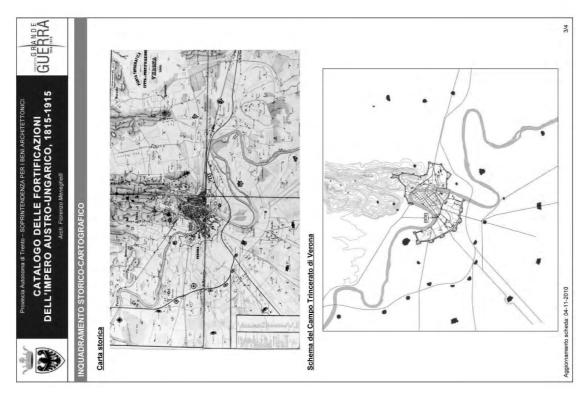
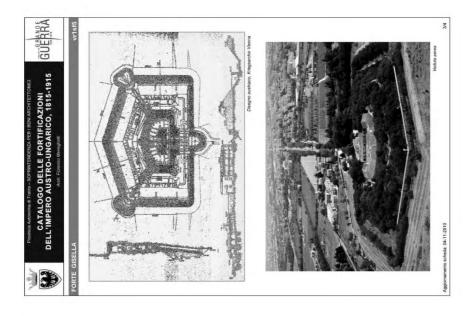


Table. 2. An example of a form in the catalogue. The case of Verona defence system





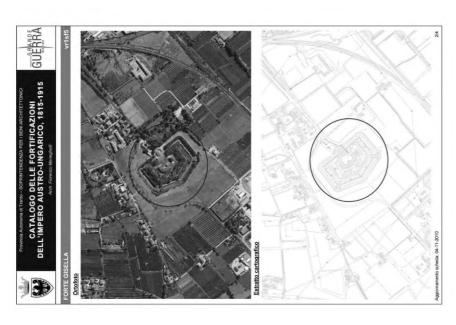


Table. 3. An example of a form in the catalogue. The case of Verona defence system: the form of the fort.



INQUADRAMENTO STORICO-CARTOGRAFICO

Il campo trincerato di Verona

Vervor rasce e si sviluppa come città militare, un noto questo evidenziato della costruzione di un formidabile sistemi rodificato in contrata suduzione, insportate serrope alla diverse esigenza diferisive della varie spoche (romana, comunela scaligenza, versorina, veneziane intrones, austriaco austriaco austriaco. L'INTERVENTO ASBURGICO (1814-1866); DALLA DIFESS BASTIONAȚA AL CAMPO TRINCERATO

L (INTERCENTO ASSURGANCE) (FIRE 1896) CALLA FUER ASSURTANCE (INTERLATED (TRACEATO) (TRACEATO)

L (INTERCENTO ASSURGANCE (INTERLATED SECURITY AND EXAMINATA AL CARGO TRACEATOR)

L (INTERCENTO ASSURGANCE (INTERLATED SECURITY AND EXPLAINED SECURITY (INTERCENTOR) AND EXPLAINED SECURITY (INTERCENTOR)

INTERCENTOR CONTRIBUTION OF THE ASSURPTION OF THE ASSURPT

The LAMPO TRINCERATO: Phina cerchia di Fordi (1846-89)

IL CAMPO TRINCERATO: Phina cerchia di Fordi (1846-89)

Rabatrà e la solita maggiore abustion of interval participato del vivo Schol troppo carezzo e frose non incessario in rapporto alla trincapita distancion e la prima cofficienza del participa del proporto del programma del productivo del productivo del productivo special controlar (robes). Are deliminante la zona mediotroria del situazione politica esprega. Si considerava inchesi participato special controlar (robes), che deliminante la zona mediotroria del signatoria politica esprega. Si considerava inchesi participato del programma del progra



GUERRA

CATALOGO DELLE FORTIFICAZIONI DELL'IMPERO AUSTRO-UNGARICO, 1815-1915

FORTE GISELLA

INQUADRAMENTO STORICO-CARTOGRAFICO

On the partial sells controlled seconds exerbia of foul (1889-66) di Votto. En incotessió quind, in relazione ale più do la puri della controlle di votto. En incotessió quind, in relazione ale più do la purchia della controlle di votto. Al control della controlle di votto. Al controlle della controlle di votto. Al controlle della co

Il fonte coatrutio nel 1860-81, fu initiodato a Ezchezzagin Gleella, figlia dell'imperatore Francesco Giuseppe, poi assurare il nome della lecitati Dossobouro, anche a posto a 1,5 fm. rial'ibbitato di Statte Lucia Il manufatto e posto a diffirmizione della statiatà statible verso Mantone, cionicidente con l'amine via Postuma, diffendente in innee ferroviarie per Mantone a Matero monche in vasta pianura verso. Vilatinnosa L'impianto di forma pentagorate è amongo ai lordi di Laggiamon, Azzano e Tomba; utula sito il profinimento e di poco le dimensionali e di unua sito il profinimento di obi poco le dimensiona. Il finote di goite è posto sul latori ordiverso is oldis, a forma di Tri, tuti tranco sono resconditi al

10°56° 32.5° E 45°24° 47.5° N

Caratteri storico - architettonici - architettonici

1

numeration, in territorio guide appearation studies are some an ambituro assistantial of contentiation to guide appearation studies. The studies are semicorolate net value, defende con le controniere ele fusibilitàrio de partie in territorio. The studies are architectura el la subilitàrio de despuis are architectura del superation de l'imparation de controliere in certifica de confidential controliere addition nel fabbricato consente di ottenere spazi razionali. Ben illuminati, asretti serviti di si controlio anularia, il quale con un otopoli bello di feribiere assolte ambita il prutzione di esternia difesa. I locale hamno il la parimentazione in tevedato di legiona assolte ambita il studie per il fiscaldamento. Il indiche le colegato dei muni con postazioni di fuciliera, the reseno un uno cortico, al ficurale in plantationi della della difficiali di consoli di tuto a forma polipicinale in inpetrato protezio della truppe con possizioni si altri protezioni di adighiera di consoli di tuto a forma polipicinale e in pietra squandrata possisi con leganie di bromba, il artifigiere incrociosioni di adighiera di comenzazioni della properazioni di adighiera di consoli di tuto a forma polipicinale e in pietra squandrata possisi con leganie di bromba, al artifigiere incrociosioni di adighiera di consoni di tuto a forma polipicinale e in pietra squandra possisi con leganie di bromba, il maggiungere is distanzione di fingina di consoni di tuto a forma polipicinale e in pietra squandra possisioni di adighiera di consoni di di condi di dire d

NALLA CITTA" WURATA" ALL'ESPANSIONISHO URBANO.

No 1816 Capture entro a lite price of Regron Citatal, virono prese grim parte della sua mipotanzia siziagio-millane.

No siziagio Capturo entro all'Espansionisho Citatal, virono prese grim parte della sua mipotanzia processora della compressora della compressora con consistenzia della resistenzia della consistenzia della con

allerta" aumentavano fino a 616, era dotata di 32 cannoni di calibro diverso

proprietà comunale. E' in concessione all'Associazione Santa Lucia che ha reso utilizzabile in struttura, avoige attività di centebre sociale, culturale in fortie è possi le infaltato di Santa Lucial, le aree produttive e il Quadrante Europa, in qualita prategia prategia produttive e il Quadrante Europa, in qualita prategia prategia produtti in cul antora permangiono alcune arte agricole.

Table. 4. An example of a form in the catalogue. The case of Verona defence system: description



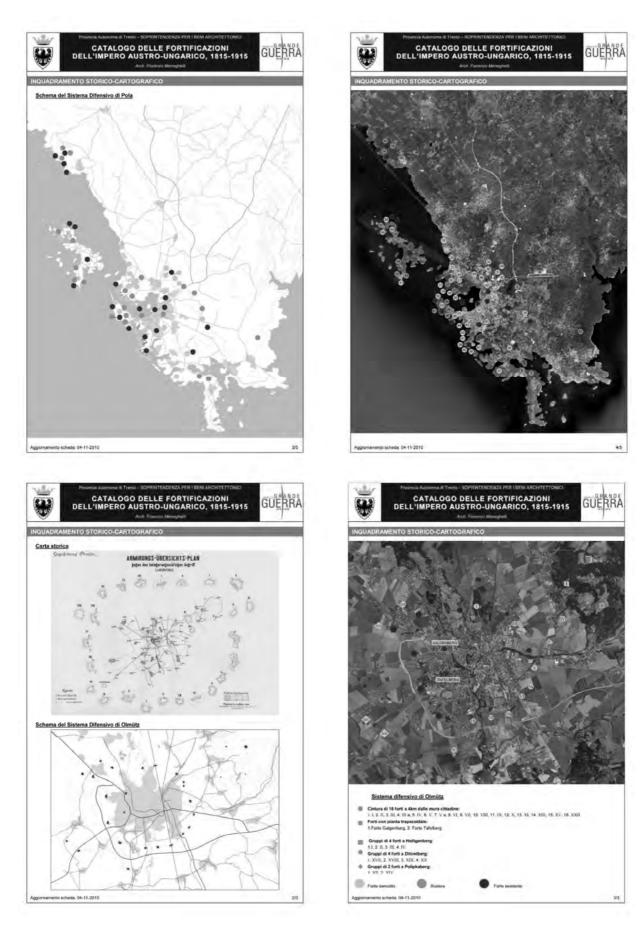


Table. 5. Scheme of european defence system: Pola, Olmütz.

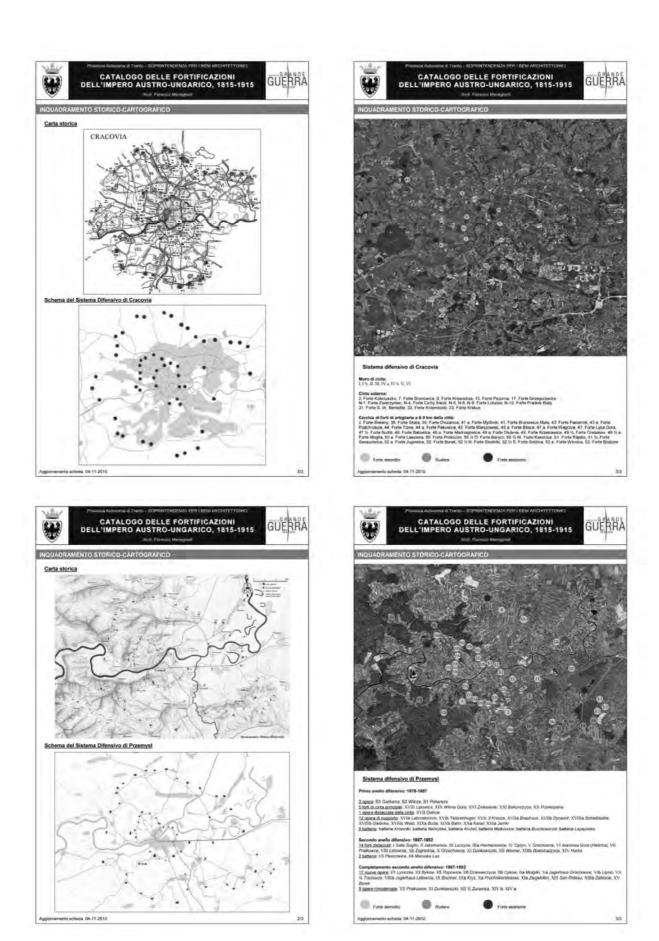


Table. 6. Scheme of european defence system: Cracovia, Przemysl.

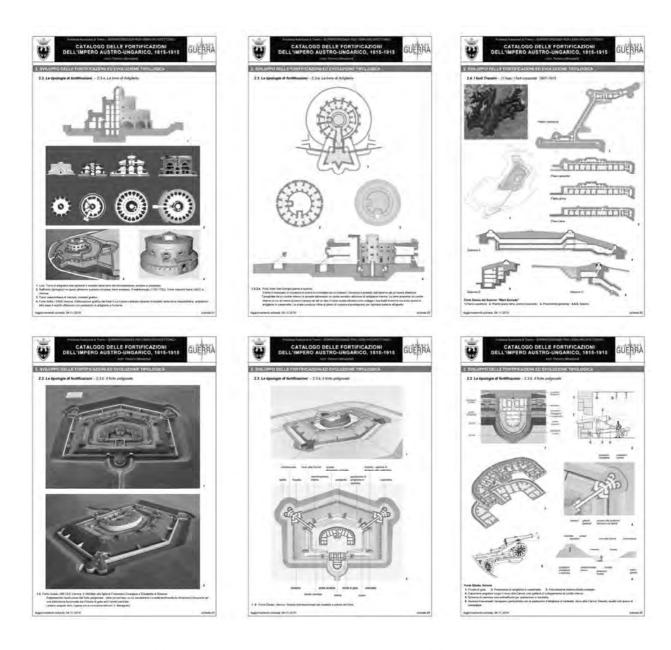


Table. 7. Comparison of type of fortifications and defensive systems.

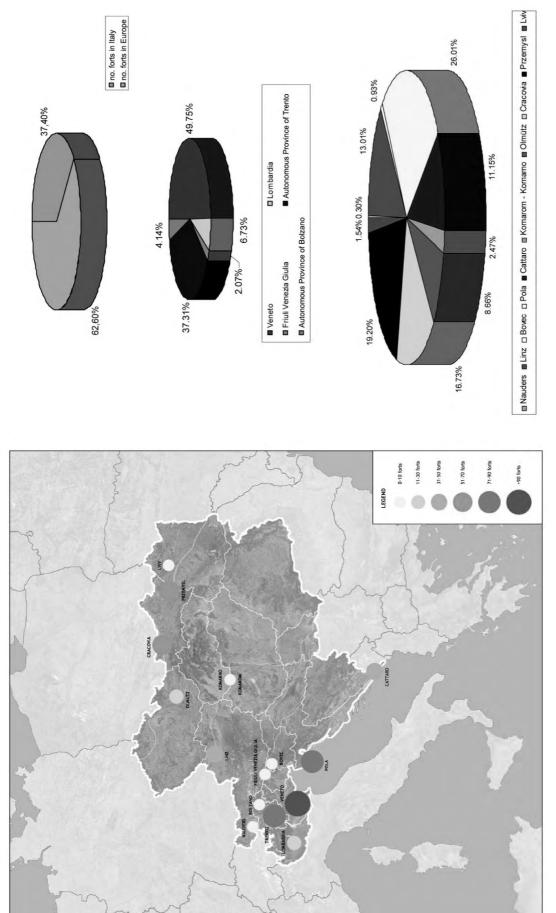


Table 8. How fortifications are spread in the Austro-Hungarian Empire.

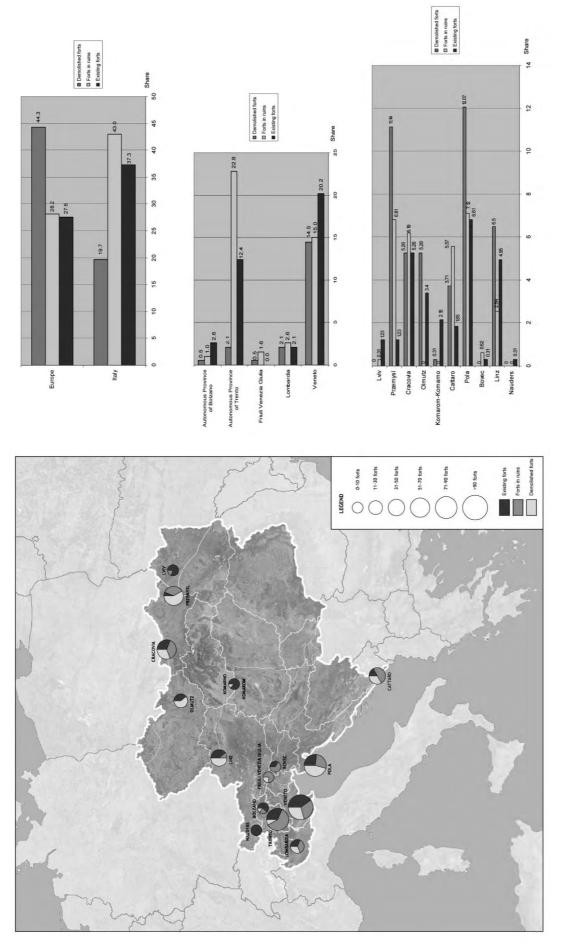


Table 9. Condition of the fortifications in the Austro-Hungarian Empire.

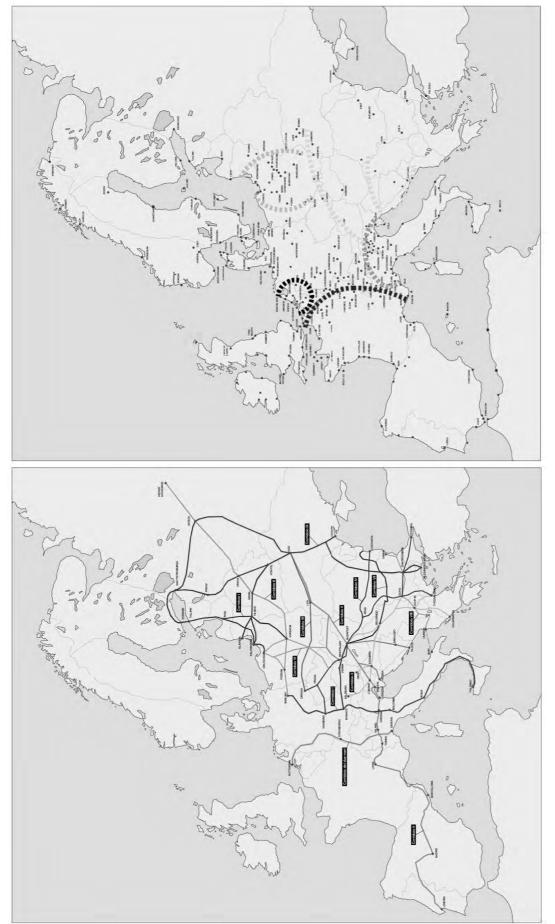


Table 10. The proposal of the network of the european fortifications. Relationship between the European infrastructure corridors

and the New Cultural hallways of fortifications.