

Public facilities as elements of territorial cohesion. Case Study University and Hospital networks in Galicia.

Cristina García Fontán, University of Corunna, Spain

1. Introduction

Last 30 years have been very important for the regional development in Spain. The process of decentralization of competences from the central government to the regional administrations, has had a great impact in the territorial development, especially of the most peripheral regions. The case of study is one of those peripheral regions, Galicia. It is located in the peninsular northwest, a sort of European Finisterre.

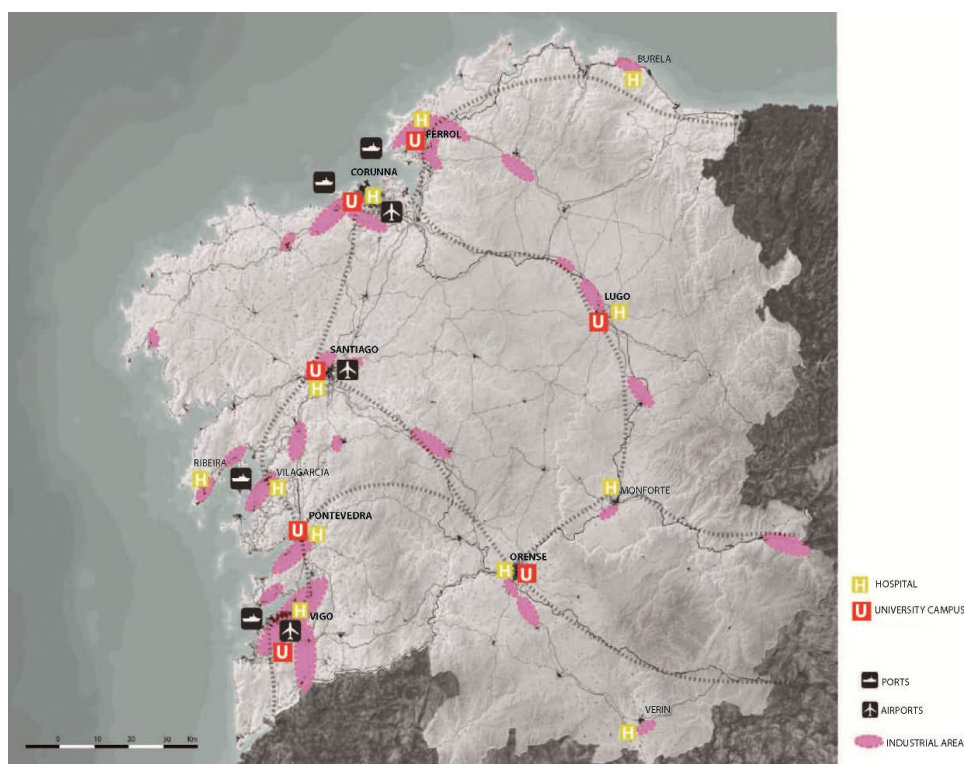


Figure 1: Galicia, main cities and facilities.

In 1981 there is approved the Statute of Autonomy of Galicia that exposes as exclusive competence the land management, the coast, the urbanism and the housing. The first Land management law was approved in 1995 and the first Territorial planning was approved in 2011. But the dynamics of growth of the cities and metropolitan areas have not stopped to wait for the documents.

From 1981 to 2011, there has been created most of the public facilities, they have developed great quantity of housing estates and the most important territorial infrastructures have been realized. And all of that without developing territorial planning, apart from the sectorial planning, the only planning instrument that existed was the municipal planning.

In this paper we will analyze from the comparison of cartography, the public facilities of major impact in territorial scale, the universities and the hospitals. We think that they are the two

big systems that are implemented, and that have had a bigger impact in the quality of life and social cohesion of our territory. Also both facility systems were created in 1989 the University Galician System and the Galician Health Service.

Historically Galicia (a territory with 2.778.913 inhabitants) has been disadvantaged, for its peripheral situation, concerning public facilities. It has been manifested on a minor index of high education graduates in relation with Spain and Europe. Also it is one of the Spanish regions with major aging population, low index of industrial development, etc.

2. Universities and Hospitals

In 1991 the model of centralized universities was transformed into the University Galician System that goes on from a university of medieval origin in Santiago de Compostela to a system of 3 universities distributed in seven Campuses: University of Corunna (Corunna and Ferrol), University of Santiago (Santiago and Lugo) and University of Vigo (Vigo, Orense and Pontevedra). The same cities also receive the main Hospital facilities.

The effort that was done in the 90s to relieve this deficit creating 2 new universities expresses positively, in the number of graduates. It goes from 124.848 top graduates in the year 1991, to 250.535 graduates in the year 2001. Therefore the insertion of these facilities in the territory has had an impact. Let's see how this growth has been demonstrated physically.

From ends of the eighties at the beginning of the nineties, the new university campuses were cooked in all cities. The development of new campuses was depending directly on each university institution, and were placed in areas yielded in his most by public institutions, municipalities, provinces. The campuses of Vigo and Corunna, were supported also by bank companies or private foundations.

The position of those campuses in the urban environment presents all the variables indicated by Pablo Campos (Campos Calvo-Sotelo, España 2000), and that are similar to the indicated ones for (den Heijer 2011). Both established mainly 3 types of campus that are: far from the city, in the periphery of the city and integrated in the city.

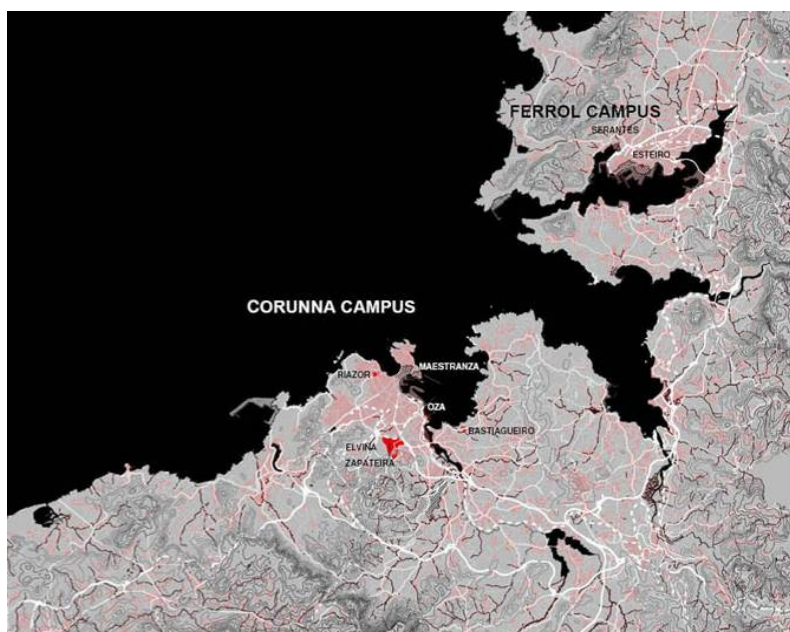


Figure 2: University of Corunna. Regional distribution


3. Planning approach

The majority of the campuses were developed through partial plans approved at the beginning of the 90s. This one was the only planning instrument, available at that moment. This instrument, thought principally for the development of residential areas, has demonstrated as slightly appropriated for the development of a facility changeable and little defined in the moment of its creation. Another problematic aspect has been that, even though the public administrations were contributing great quantity of soil, they were the responsables of the expropriation of the total land that was delimited in the states, something that it has not managed to materialize in most cases.

An excess of ambition at the moment of delimiting the surfaces destined for the university use, has provoked that some of them are still involved in urban development processes of management without being solved. Due to the inflexibility of the partial plan, the campuses have been an object of numerous modifications that have not also served to solve the above mentioned problems of management.

From 1995 and due to the approval of the Galicia Land Law, it has been established the figure of the supramunicipal project and sectorial plan, it is supposed more adapted for the planning of these type of public facilities. Using this figure, only there will develop the last Campus that belongs to the University of Vigo, the Campus of the ETEA. These sectorial projects have been in use also for the planning of the last hospitals of the region, the Hospital of Lugo and the hospital of Vigo.

Analyzing the cartographies we can see the great surface that those facilities consume in relation with the size of the cities. We will see the different areas compared with the totality of urban scale of the city and we believe that taking advantage of the synergies of these two big equipments it might improve many aspects of the quality of life in the cities.



City	Inhabitants	University Students	University workers	Hospital Beds	Hospital workers
Corunna	246.028	16.571	1.914	1.448	5.408
Ferrol	72.963	2.766	323	438	1.952
Santiago de Compostela	95.207	20.950		1.181	4.835
Lugo	98.007	5.275	324	814	2.708
Vigo	297.241	11.864	1.837	1.650	5.349
Pontevedra	82.400	3.603	160	623	2.906
Ourense	108.002	4.533	257	852	3.475
TOTAL GALICIA	2.778.913	65.562	7.781	7.764	29.652

Figure 3. Some regional data.

Relations between the University and Hospital

The relation and complementarity between Hospitals and Universities is proved historically. Santiago de Compostela is a good example of it, the hospital and the university were placed one in front of the other, in the Obradoiro's square in the s XVI, and they have returned to be close in a more peripheral position nowadays.

Another good example is the case of the university location in Orense and in Ferrol, renovating former pavilion hospitals from s XVIII into faculties and other university facilities.

Shifting functions and positions, the complexity of those facilities from the medieval era until now is amusing (Shane 2011). Universities and Hospitals had being transformed from enclaves to heterotopias (Foucault 1984).

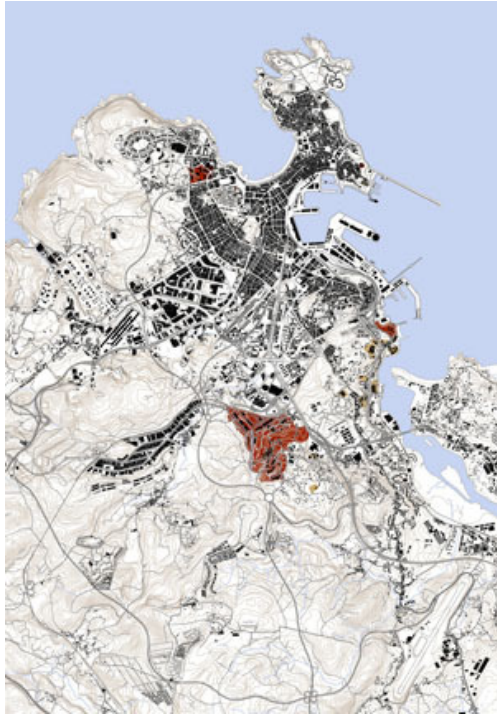


Figure 4: Corunna Universities and Hospitals

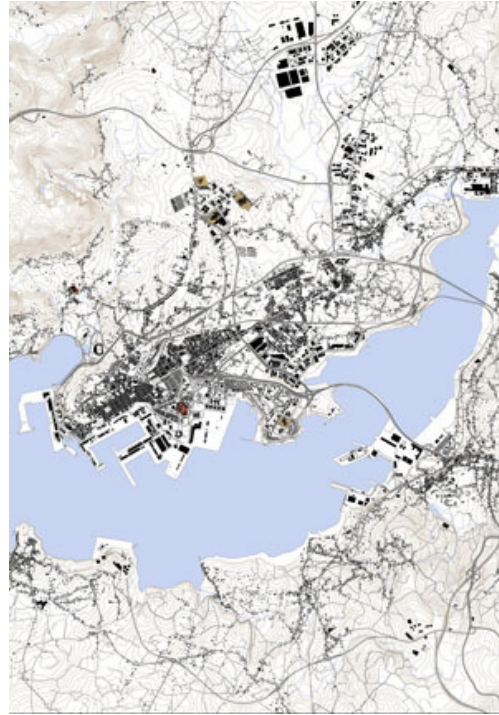


Figure 5: Ferrol Universities and Hospitals

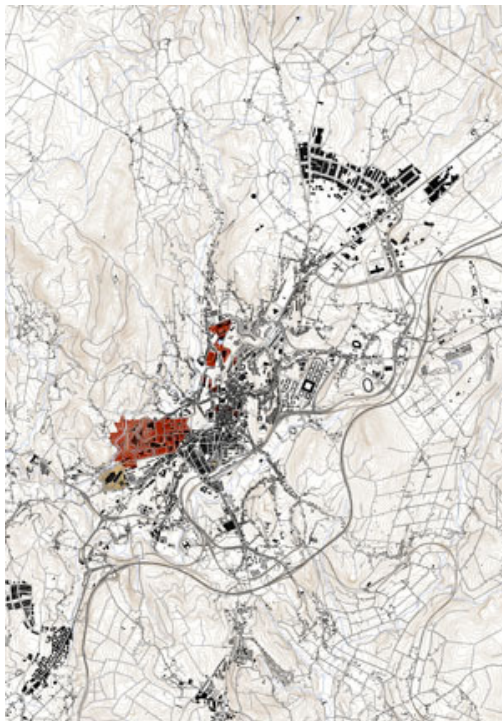


Figure 6: Santiago Universities and Hospitals

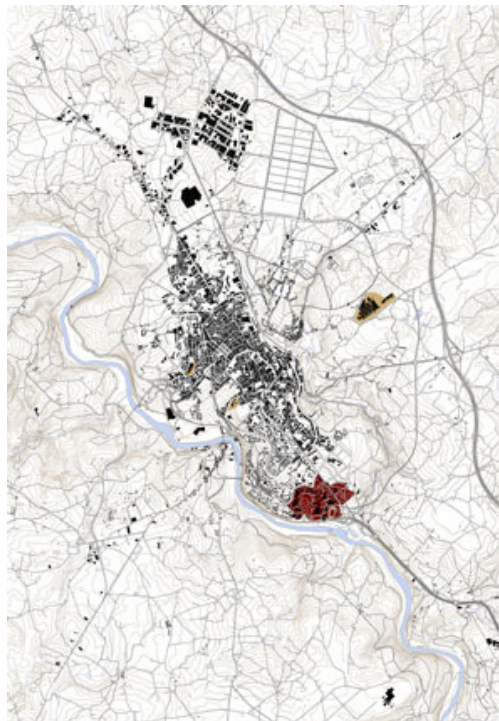


Figure 7: Lugo Universities and Hospitals



Figure 8: Pontevedra Universities and Hospitals

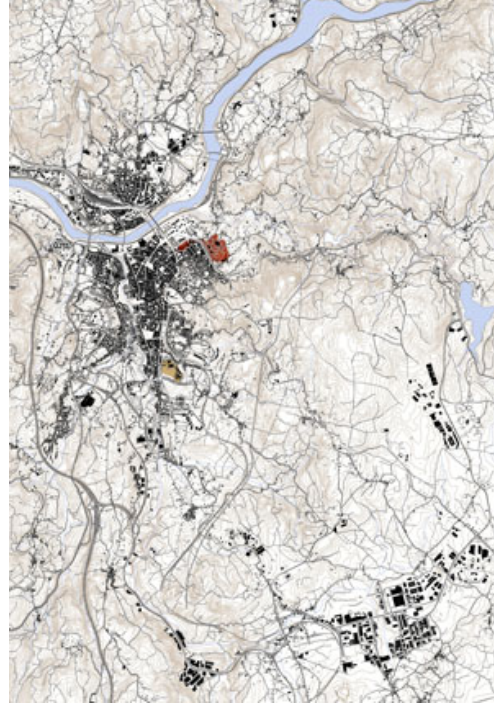


Figure 9: Orense Universities and Hospitals

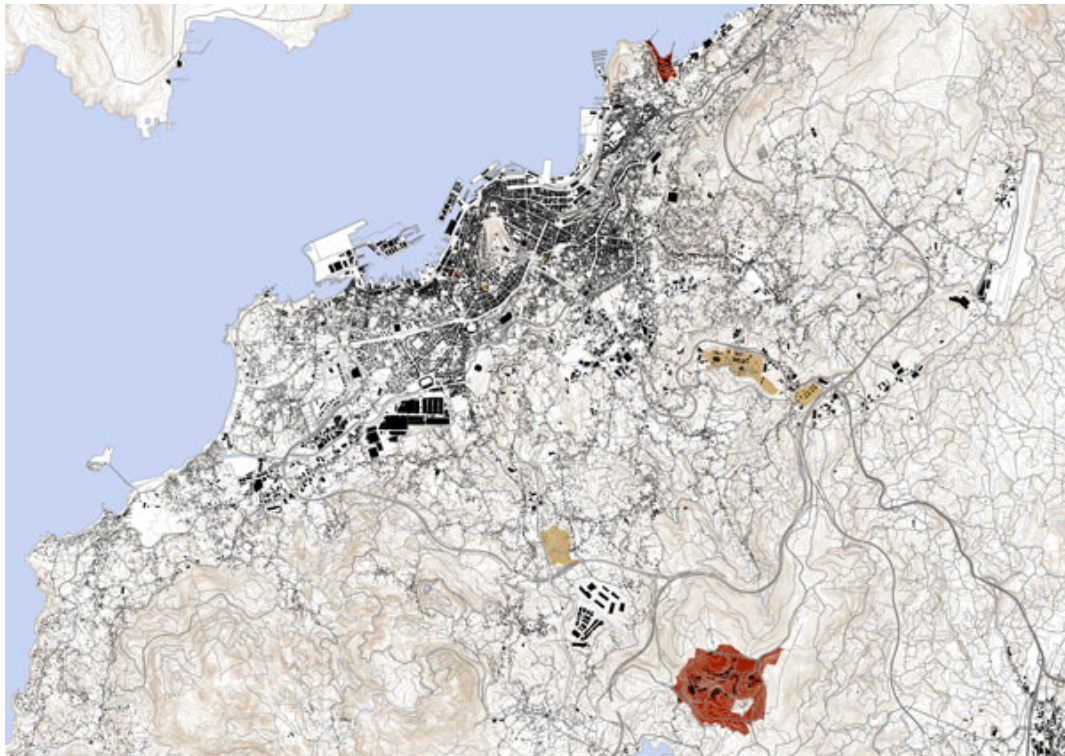


Figure 10: Vigo Universities and Hospitals



Figure 11: University of Corunna Campus

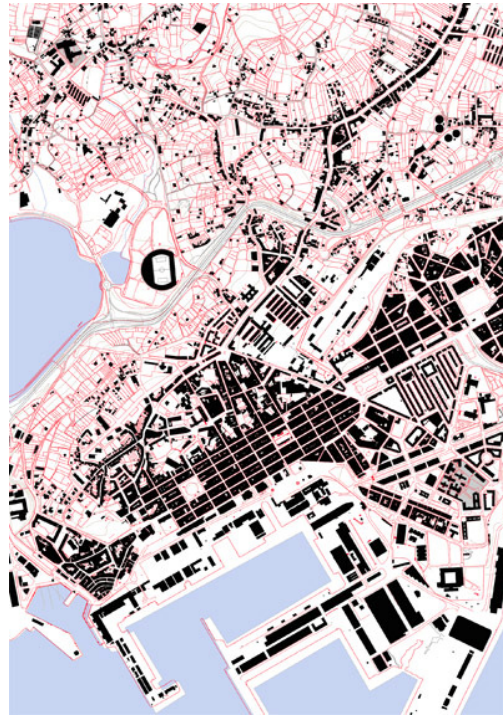


Figure 12: Ferrol University Campus



Figure 13: Santiago University Campus

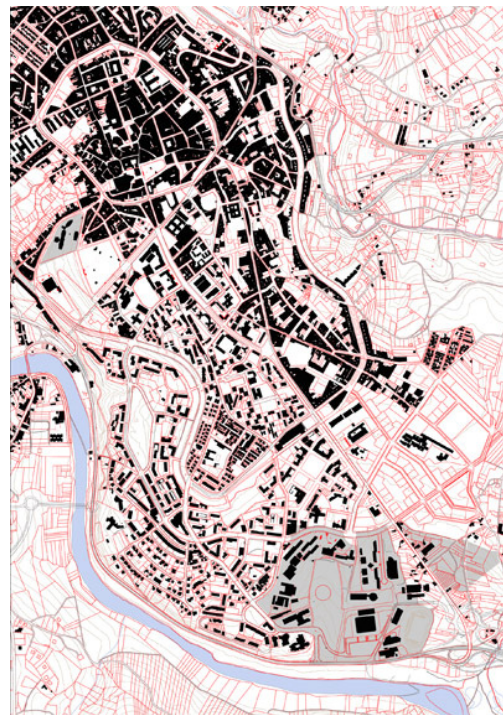


Figure 14: Lugo University Campus



Figure 15: *Pontevedra University Campus*

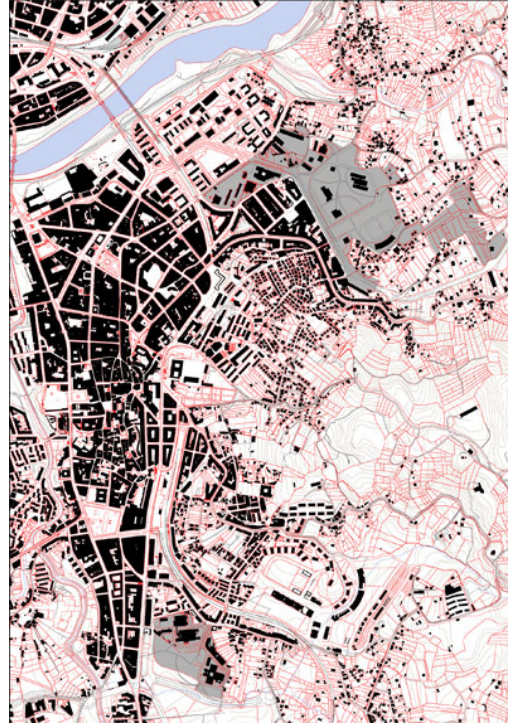


Figure 16: *Orense University Campus*

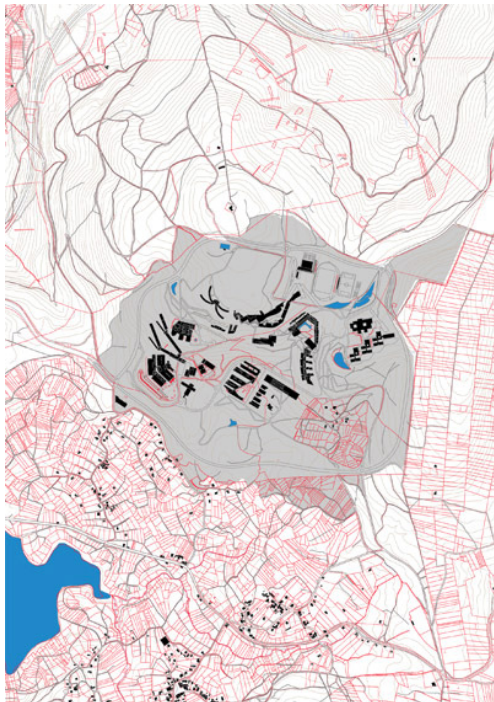


Figure 17: *Vigo University Campus*

4. Position matters.

The opportunity and the immediate possibility had been the main aspect to place universities and hospitals in the territory, without giving priority to criteria of sustainability, accessibility or suitability. The hospitals and the universities that had been present historically in central places of the city, leave their position to move to peripheral and like that positions in order to get more surface. The loss that takes place is a minor visibility in the urban scene. Segregation of functions and creation of big buildings, almost megastructures, they do not relate with the urban scale, not with the most near environment.

The way of doing city has been lost as on having nailed these equipments in closed impermeable fragments, without the multiplicity of functions that are necessary to create *city*.

Universities and hospitals are facilities that in their recent typological versions, consume great quantity of land, and the value of the urban land increased a lot in the 90s in Spain. The positions that they adopt at the peripheral locations can be catalogued in two:

- The facilities that are located in places with very steep slope or in the top of hills, with topography not adapted for their insertion, but cheap land.
- Those which are placed in zones of environmental fragility, product of landfills of estuaries or maritime zones.

Nowadays they are not in privileged places but in the worst and less accessible places of the territory.

Galicia has a dispersed occupation and a fragmented property of the land, it makes complicated to get the big surfaces required. But it is necessary such area to get few dispersed buildings on it?

Vigo is the paradigm of the facilities dispersion, the figure 10, the university is placed 10 km from the city center and without a clear accessibility, position inherited from a planning of the 70s. Hospitals are also on top of the hills.

5. Conclusion

In 1990 the surface dedicated to University facilities was 797.443sqm distributed in 3 cities. In 2012 the University surface in our region (fig 11 to 17) is 4.094.171sqm. With a ratio of 63sqm/student and growing, because of demographic reasons the last ten years there are 10.000 less students. In the case of Hospitals is more contained in terms of land surface but the built surface increased more than three times the last 20 years but not always in the appropriate place.

The fact is that the dispersion of the facilities achieves to be more accessible for the population, and in the last 20 years the territorial and social cohesion was increasing. But things can be done better. The main lack is the capability to produce qualified public space, besides the space for the car.

The peripheral situation of those facilities has confronted them directly with rural villages that have been excluded from their limits. Rural villages have remained as islands inside university campus or near hospitals, without connections with their historical ways deleted, without their territorial references, etc. This problem could be transformed into something positive to give sense to many aspects of the free space in those institutions. They occupy land of great agricultural productivity or former forest zones linked to the cores and that have made the villages senseless of being rural.

Now it is presented the opportunity of putting in value the free spaces, recovering the historical memory of thousands-year-old and rich territory full of history, which in altars of the development has changed suddenly, without considerations, because there was hurry. In short, it is necessary to integrate them better in the territory that they occupy.

On the other hand the impact they lost in urban scale they got it in landscape scale. The goal should be to integrate and to make it as engine to put in value the natural areas that surround those facilities, emphasizing landscape values and trying to find the identity of the place.

Though all these facilities have director plans for their internal management, it is necessary to take again the hanging subjects with the territory and the environment.

It would be necessary to make landscape plans and environmental protection plans. They would be important instruments and that would help to improve the image and the territorial identity. Landscape understood as generator of territorial identity.

The current crisis also there is questioning the model of territorial current mobility based on the use of the car. In many cases the accessibility for public transport is insufficient. This can modify the concept of what till now was considered to be accessible.

It exists also the opportunity to use these points of the territory, the intelligence centers, to propose compatible uses. This would allow a more efficient use of time and space especially in case of the universities.

In the frame of uncertainty in which we are, it turns out difficult to venture a solution to the chaos generated by a planning growth that seemed to be unlimited. A way of planning that has generated urban voids, disconnected fragments, occupying more and more land. Without limit, and what is even worse, without an aim.

References:

- Campos Calvo-Sotelo, P. & España 2000, "La universidad en España: historia, urbanismo y arquitectura" in *Serie monografías / Ministerio de Fomento* Ministerio de Fomento, Centro de Publicaciones, Madrid, pp. 1037.
- Castells, M. 1990, *Estrategias de desarrollo metropolitano en las grandes ciudades españolas: la articulación entre crecimiento económico y calidad de vida. Las grandes ciudades en la década de los noventa págs. 17-64*, Fundación Sistema, Madrid.
- den Heijer, A. 2011, *Managing the university campus*, Eburon Uitgeverij B.V.
- Foucault, M. 1984, "Des Espace Autres", *French journal Architecture /Mouvement/ Continuité*, vol. October.
- Hall, P. 1997, "The university and the city", *GeoJournal*, vol. 41, no. 4, pp. 301-309.
- Reques Velasco, P. 2009, *Universidad, sociedad y territorio*, 1^a edn, Universidad de Cantabria, Santander.
- Shane, D.G. 2011, *Urban design since 1945 :a global perspective*, Wiley, Chichester.
- Viganò, P. 2012, *Les territoires de l'urbanisme. Le Projet comme producteur de connaissance*, Metispresses, Genève.