Urban growth in Valencia and Athens

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1. Prologue.

When I had to think about of the election of the topic to follow for the elaboration of this essay, I decided to choose the growth of the cities. Because this topic is an issue that, even if a lot of time passes, it will be a problem that always the cities must be continued worked. Since cities never stop changing and developing as societies never do, this developing could be in a better or worse direction, but it never stagnates.

For these reasons I decided to make this essay about the growth of Valencia, my city of origin and Athens, the city in which I have been living during this year. To have a comparative and broader vision of what awaits in the future growth of these two cities, which I have liked so much and have been able to feel with my own experience.

But first, I must contextualize a bit the development that these two cities have had in recent decades, in order to better understand the way in which they want to continue growing. For this I will explain its evolution from the point of view of urban planning and a little from the sociological, which are closely related. Then I will focus on the current growth guide that each of them has, and later I will specify the possibilities of growth in specific areas of both cities.

1 The first masterplan of Athens by Kleanthes and Schaubert

2.1 Urban development in Valencia

In its origins Valencia was a medieval city, whose characteristics were walled and very dense inside. This dense city was surrounded by orchard to its environs and embraced by its North part to the bed of the river Turia. And to its surroundings, within the same orchard there were a few villages, which were a little scattered and isolated, are the villages of Campanar, Benicalap, Benimaclet, Cavañal, Patraix and Russafa. Later the city grew, demolishing its walls and growing towards the South, with the first extensions of the city that incorporated the villages of Patraix and Russafa as part of the city.
Much later, this dense city grew, and with the First Plan of General Ordination of 1946, the incorporation of the nearest villages, but even outside the city yet, was planned so that they could be part of it. It was the towns of Campanar, Benicalap, Benimaclet or the Cabañal that were incorporated as neighborhoods to the city. Therefore, this growth was projected towards the North of the city and making different kind of zones the empty areas that united the city already built with these old towns by means of a structure of buildings with different functions that will help in good functioning of these new zones. In these new areas of union, I take advantage of putting many public buildings such as hospitals or shopping centers to exercise as a focus of attention to these new areas of the city.

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3 Blog Cartographic Institute Valencia
As time went by the city began to grow more and more, to the point at which the incorporation into the city of much more distant settlements. This was done through a dense infrastructure, in which the city joins with all these remote villages in the form of a radio-centred spatial growth. With six axes, by way of arms and 5 rings of circulation, by means of an infrastructure of roads and new buildings, but which as is normal, it was done by removing land from the orchard, dedicated to the cultivation and production of vegetables, and build in it.

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The consolidation of this radio-centric growth with its six axes of union has been getting stronger and stronger. And its morphology is already fully rooted and internalized in the functioning of the city. Because its growth arises from the dense center of the city and expands as fingers, giving it a hand-shaped wrapped in green, such as fields of orchard or parks as is the case of Albufera to the South-East or the river park of the Turia river to the North-West.

In the green or empty areas that surround the city and are closest to the city, it is intended that the city can continue to grow or change its use, which, now, is mostly farmland as an orchard.

Therefore, these will be the spaces that we will later analyse and categorize, more exhaustively for later make a comparation and propose the best treatment for this growth to take place without destroying the consolidated morphology of the city.

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5 Map made by myself from an aerial photo of Valencia.
2.2 Urban development in Athens

The growth of Athens during the last decades has not led to exactly planned growth, quite the contrary. It has been allowed to urbanize in a very little controlled way without controlling a lot of urbanization coefficient or heights in its buildings. Only a very generic urban plan was organized, as a template with the general road roads of the city and with a zoning for uses of their deafferents areas.

On the other hand, the growth of Athens has been increasing exponentially in the last decades, where due to the geographical situation in which it is located, it has already run out of space in its interior to grow. This is because Athens is in the valley of a set of mountains that limit the city, and the city has already grown so much that it has already surpassed this natural border and continues to grow in the most remote areas passing the mountains. The growth and the percentage of soil built in the most central area is so great that Athens is one of the densest cities in Europe.

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*Urban Growth Prediction in Athens, Greece, Using Artificial Neural Networks*

2.3 Areas of the city where it is expected to continue growing

In these areas of near expansion, the great majority of land is dedicated to agriculture, but it is also mixed with other types of urban tissues. On the one hand, it can also have another function, and be dedicated to the production and manufacture of materials. As for example that there are industrial estates with industrial warehouses, where work factories of production of tertiary products or simply serve as department stores. On the other hand, there may be urban tissues of a rural houses, such as small towns that do not become towns, but groups of houses with a common organizational relationship. Who are in these areas, but lack a good connection to the city and are a little isolated in a sea of orchard and industrial estates.

Given the expected growth of the city, five areas of this green and empty space are suggested, for growth in areas closer to the city. Two to South and North of the zone more to the West of the city, which are big zones of orchard between populations of the city. Two more areas to the south and north, and these have much smaller dimensions and easy to urbanize, which would serve to connect populations of the city that are separated but just for a few meters. And finally an area even more central than the others, near the port and in the East of the city, which is expected to grow and urbanization closer than the others.

* Map made by myself from an aerial photo of Valencia.
The case of Athens is very different from that of Valencia since, being delimited and enclosed between the mountains that surround it, it has no concrete way to continue growing. But, on the other hand, it happens that the growth of Athens has been so fast and dense that as it has grown it has swallowed and become part of the center city, areas with primary uses, such as factories or industrial estates. And this type of zones usually tend to being in the peripheries of cities, but in case of Athens is located in a fairly central place of the city, making as a kind of barrier between different neighborhoods that surround these areas.

In this area, where industrial estates and factories predominate, it is located in the eastern and South part of the city center, between Pirearus and Athenas Center. Specifically, in Tavros neighborhood and surrounded by the closest neighborhoods, at South and North, Kallithea and Neo Egaleo neighborhoods.

9 Map made by myself from an aerial photo of Athens
3. Analysis of the new of growing

3.1 Characteristics of the new growth areas

In all these growth zones, several characteristics can be distinguished due to both, content that they have and his own environment. Since they can be large extensions of orchard, or be combined with industrial zones, or on the contrary, be small areas with a mixture of orchard and industry with easy rehabilitation for the few square meters that form it.

In the zone of future growth to the North-West of the city, between the districts of Campanar and Mislata. One of the largest plots and in good productive health of Valencian orchards where is found a cultivation of vegetables. In this area during the last decades there has been an important urban growth, both residential and large public buildings. Like the new zoo in the city or a large park of Capsalera at the beginning of the Turia river. Due to this and the prosperous operation of its orchards isn’t expected to transform its landscape in next years.

10 Aerial photo of Valencia
In the case of the Southwest plot, it is also characterized by having a large plot of orchard, but at the same time, there is a zone of contention between the districts of Xirivella and Alacuas in which there is an industrial estate with many industrial buildings with small and large factories. This area has expectations to change its use and have an urbanization more in line where its location, since it now functions as a small dividing barrier between the two districts and must be renewed so that it serves as a connection and not as a separation.

In the case of the South plot, something very different happens since it is a fairly small area, since it is limited by a large highway in the North and the East, and by quite dense districts to the West and to the South. Surrounded by the districts of Sedavi and La Torre, it is a rather small plot where orchard plots, an industrial estate and a small town called Forn D'Alsedo coexist. In this area a future growth is expected along with a great renovation of the orchard and industry spaces to give cohesion and connection to all these districts that for now operate separately and a in little isolated in the case of Forn D'Alsedo.

\[11\] Map made by myself from an aerial photo of Xirivella and Alacuas (Valencia).
On the other hand, in the plot of the north of the city the problem is to join two quite dense districts separated by a highway and a few small fields of orchard. Therefore, it would be possible to change it with a quick rehabilitation and not very expensive, to make a connection and cohesion zone between the neighbouring districts of Benimaclet and Alboraya, in this superstructure called "City of Valencia".

12 Map made by myself from an aerial photo of Sedavi, la Torre and Forn d'Alsedo (Valencia).
13 Map made by myself from an aerial photo of Benimaclet and Alboraya (Valencia).
The last plot to analyse, is the one that is closest to the city center, it is also located in a quite characteristic and important environment since it is in one of the areas where more money has been invested for its growth. Since in the last 25 years in this area has been built the City of Arts and Sciences of Valencia, the Oceanographic and the City of Justice of Valencia, where the courts of the city are located, a part of many sports facilities and several residential areas. All these buildings, of great importance in the city is in the side of the city without connection, or continuation, or cohesion with those in the environment that surrounds it in the South. Therefore, the intention and growth expectations for this area are very important and the closest in the time.

In addition to be a plot for the cultivation of the orchard, there are also a lot of small towns scattered around the plot and areas used by factories or large storehouses. But, on the other hand, it also has the problem of being an area of separation between several important districts of the city since on its east side, is the district of Nazareth that historically was a fishing village and now is sandwiched between the nothingness of the Orchard and a wall to the sea as is the Port of Valencia. For all this, is one of the zones most in need of a major change and renovation, to be able to unburden the district of Nazareth and give an outlet and continuation to the city by one of the areas that more importance has taken in the city in the last decades.

\[14\] Map made by myself from an aerial photo of La Punta (Valencia).
In the case that I am analysing, of zones of growth and renovation, in the city of Athens, we can observe that in a zone quite small space, in comparison to the size of all Athens. Where is concentrated many groups of buildings dedicated to the manufacture and production of objects, forming a large network or neighbourhood of a specific use, production. They are factories, workshops, warehouses or stores that sell in bulk. To all this, the fact that this area is located in a part of the city quite close to the city center and being an important area of passage between the center and the port, in the district of Pireaus.

On the other hand, this area of the city is already trying to make a renovation with the transformation of small sectors of the district and incorporating large public buildings, such as universities, schools, theatres or hospitals. For example, the neighborhood of Kerameikos was previously full of factories and industry and the area has been renovated and has other uses. And even factory buildings have been rehabilitated to find another type of interactions, such as the Technopolis Cultural Center. Also, the incorporation of educational center such as the University of Fine Arts of Athens in the neighborhood of Kallithea, all of this to be the starting point for the regeneration of these new areas to change.

15 Map made by myself from an aerial photo of the industrial areas of Tavros (Athens).
3.2 Landscape and their relationship with the environment

These are the landscapes of the areas in which the growth of the city is intended to do it. Where you can find crops, traditional house of the orchard and the city in the background.

A typological series, which at first, are difficult to combine, but have already been cohabiting for a long time and are strongly rooted in these landscapes, the culture and behaviour of the people.

16 photo made by myself
17 photo made by myself
In this landscape you can also see more relevant features, such as wide and clear views due to the low height of the buildings and how wide you are the garden.

Areas where there is still not much variety, very different things persist, where cohabitants, farmers, clerks, peasants and townspeople live together. Places that scarce meters you pass from the absolute tranquillity the vegetable garden to the noise of the industrial polygons. All this, with the untiring fund of a great city that is done.
4. Comparation with the growth areas of Athens

To make a good and brief comparison of these cities we must understand that they are very different from each other. Both by size and by type and by according to their needs. Since Athens is the capital of Greece, in just there are few cosmopolites nuclei and without a doubt Athens is the biggest by far. On the other hand, Valencia is not the capital of Spain, much less the largest city or cosmopolitan city. Therefore, both the goal of its growth and its way is not the same.

On the one hand, Valencia is trying to define its borders and finish off the edges of the city, with a shape that has been shaped for a long time, where only the remains of renovating or changing the uses of residual spaces that have been left without any concern, and now want to consolidate this characteristic of a unitary spot of urban tissue in the form of tentacles surrounded by orchards of vegetable.

On the other hand, Athens is a very old city with a lot of history that despite its changes over centuries and centuries has always been the epicenter of all. Hence, it must be a city so big and so dense. In which parts of the center has fallen into disuse, since it clashes with what surrounds it, and is that in just a few decades that can be understood as the outskirts of the city have become part of the city and are even in a central point of the city. Hence, the needs of Athens are more about redistribution and reorganize what they have before continuing to grow as it has grown, and much during the last times.

21 Map made by myself from an aerial photo of Athens and Valencia.
5. Conclusions

5.1 Proposals

For the regeneration and renovation of an area of the city with many industrial estates such as Athens, it is not necessary to destroy all existing and rebuild from scratch. The preservation of interesting buildings or architectural complexes is very important, since much of that architecture is part of the history and culture of that place, a landscape that has been there for a long time and can be respected and preserved to a certain extent, until even highlight it in the new neighborhoods and the uses that will be given to the neighborhood.

It is very important the relevance of the landscape that has existed until now and the new one that is going to be given, since between them there will always be periods of transit of the previous and the new.

And this type of intervention can work very well during these intermediate times. In addition to demonstrating a character and an essence of what was and what was done, so that future generations relate it and also appreciate it.
In the case that the landscape is much more natural, or at least green, as is the case of Valencia. That they are lands destined for the cultivation, like orchard. They have to be preserved and given a more urban treatment instead of leaving it wild and eliminate it. This can be done as a park and give a playful function too. In which all citizens are involved and are part of it.

5.2 Reflexion

As a way to conclude this essay I would like to reinforce the idea already given in the previous section. The one of considering the current landscape, in the places that are proposed to it changes, due to the growth of the city, like part of the landscape of which it will be in the future. Because although they are incomplete, conflictive areas and need to renew, it does not mean that they are not part of the landscape done.

As is well known, the urban changes are very slow and laborious, therefore, if we want to transform an area, we can not think that, from one day to the next one, it will be totally different. On the contrary, it is a slow process, which involves many intermediate periods and during those intermediate periods, it is with this landscape that we have to play and know how to take advantage of. In addition to reinforcing the identity of the place itself as well as respecting what has happened in it and the people who have spent in it.
6. Bibliography

* https://www.accioecologista-agro.org/IMG/pdf/VP-DOCUMENTO_SINTESIS.pdf

* http://www.elmundo.es/comunidad-valenciana/2016/09/28/57eaa40eca4741ef748b469c.html

* https://www.20minutos.es/noticia/2849118/0/plan-urbano/huerta-litoral/valencia/

* https://blog.anida.es/valencia-se-prepara-para-un-futuro-con-un-millon-de-habitantes/

* http://valenciaplaza.com/el-ayuntamiento-acota-a-dos-zonas-la-expansion-de-valencia-la-punta-y-benimamet

* https://gvacartografic.wordpress.com/tag/mapas-antiguos-valencia/

* https://www.mvrdv.nl/

* http://afasiaarchzine.com/2016/06/ciclica-cavaa/

* www.google.gr/maps

* The greek urban block since the establishment of the greek state in 19th century – a chronicle about morphology and urban form

* Past, present and future: expansion with (and without) growth in urban systems under a structural crisis


* Kourliouros, e. (1997). planning industrial location in greater Athens

* Urban Growth Prediction in Athens, Greece, Using Artificial Neural Networks