INTRO

The hybridization is not a brand new thematic, however it seems that this topic in the last decades, may be centuries, it did not had a serious importance in the architecture and urbanism, the typologies were severe, separating every program from each other. Still, along the history there are some interesting examples of hybridization. High cultures, with developed cities apparently have seen that in some spaces or areas can many things simultaneously happen, and this simultaneous action can be kept with buildings that allow this hybrid all time.

In the 5th century B.C. the Greek culture created a long and narrow place called Stoa, a hybrid and protected place that surrounds the Agora, giving it limits and making an inner border between living areas and public areas. This place, architectural speaking a type of Colonnade, served also as meeting point, as school, market (bazar), gallery and games/playing hall (1).

A place like this is built, exists physically for everyone, but is not well defined in its use, and that gives the main characteristic to the Stoa: everyone could find a place for himself there. This undefinable or flexibility in the use of the building make this space a proto-hybrid building.

The borders apparently had been always attractive for the people in the cities. The supposition that the people prefer to stay at the borders, has of course, positive as well as negative consequences. Positive is the fact that the borders and margins are lightly or even without any regulation, that means, there is some freedom for living, the “normal” costs of living -taxes, rent, etc.- are very low or just inexistent, and for the low-mid and low class group that is an important argument. Negative, on the other hand, is the situation of infrastructure and public image, this places seem to be forgotten, made for staying just a short time, or even for never staying there.

The greeks had tried centuries ago to build this borders, of course, the scale has not comparison with the actual city scale. However, for an ancient greek a city with 50.000 inhabitants was actually a mega-city, then the question is: how is it nowadays? In the architecture, the new buildings take this hybridization to give shape to new typologies, but going to the city, are there new and maybe unexplored places in the city with hybridization possibilities? which places are nowadays better to hybridize allowing the sports or the playing be part of it?

THE CITY

Over the last centuries the cities have been developed in a continuous way, for example, since the invention of the gunpowder in the A.D. 850 and the canyon by 1350 the city walls were suddenly disappearing, because they were not efficient against attacks anymore, until were not useful anymore. The industrial revolution, between the 18th and 19th centuries, produced a great migration from the fields to the city seeking new work opportunities, from the in 1750 about 7% of people that lived in urban areas, in 1850 this percent had risen about 20%, in this time came the first questions about life standards, and were the incubation for many political views that in the present are still valid, like the communism and capitalism. Then, thanks the electricity was possible for the people to have more activity hours everyday, the dark of the night was not anymore an obstacle to keep in activity. And then, many decades later, since the production of the Ford T in the twenties, the massification of the car made it available for everyone. This last mentioned
change made possible to live far away from the city; you come in the city with your car to work and then you drive back home to the suburbs or outside the city, the urban highways arrange this way of life making it easy and practicable. This revolutionary communication way were a success, and was implanted around the world, caring with them two new problems that appeared with the construction of big urban highways:

- The cities grew faster to the outside, this way the suburbs begun to appear like satellites around the city, almost without any control.

- The highways crossed the city in every directions, making along the city divisions and cuts. This situation helped to let around the highways a considerable quantity of new empty places in the city, or empty spots. Just like at the old city walls of the Classical and Middle Age, in which there were inhabited margins at disposition for the people. That does not mean that the city had a deterioration that still remains in the present, in fact, these big highways represent a great opportunity to innovate in our cities.

In the present, in almost every part of the world the cities are growing faster than ever, the rural migration to the city is still massive around the world, actually it is thought that at the year 2060 60% of the world population will live in cities (1), that means, that an important part of this new citizens must or will live in this margins or residual spaces in the city, such as near urban highways or near train lines, with a lack in infrastructure as well as with a lack in green areas. This areas, most of them low valued areas, grown as informal settlements or low-income social housing. In the big cities these areas have a high population, and they have issues like insecurity, poverty and social vulnerability. In cities like Mumbai (13,9 Millions of inhabitants), Mexico city (8,8 millions), Tokyo (8,9 millions) or Cairo (7,9 millions), as well as many others, the population density is high, but the resources of this big cities supports a constant migration to the city, the problem is that the free well-planned space in the city is most of the times too expensive or too hard to afford it, and to live in/at this inner borders seems the only solution for many people, often for the not-accommodate class.

ACTUAL CASES

Actually there are some projects around the world that revitalize city areas with a leisure program, but most of them are in the essential meaning of the word rather a reutilization of space than a hybridization. Anyway, there are some remarkable examples that can fit along this idea of Play City, because they take left spaces in high density areas and are reused for the good of the city and the citizen.

The new Highline Park in New York, designed by Diller, Scofidio & Renfro, reuses an elevated old freight rail line, in operation until 1980, to transform it into a lineal park that crosses part of Manhattan in New York City. The project is actually a big success, in a dense and cultural city like New York this park have a great audience (3). It is remarkable how this elevated park gives a new air to the city, with well designed gardens and rest areas. However, the Highline Park is not available and thought for playing and for sports. This way, such a park in an urban margin would have not any success, first of all, because of the maintenance costs, and second, if a place have not any use for everybody, remains a margin. The Highline, on the other hand is a park, where events can be organized, and people can take a walk and enjoy the views of the city. (Picture 2)

Interesting is also the famous program Favela-Barrio in Rio de Janeiro, Brazil, of the architect Jorge Jáuregui and team. Where in the high-density Brazilian Favelas (big poor
neighborhoods in Rio de Janeiro and the rest of Brazil) they design projects from different scales with the purpose to eradicate social issues or social dangerous places, they make buildings pro the community, and, through its universal use, they transform urban areas like access points to the Favelas, as well as spaces like public stairs, free spots or old abandoned buildings in social regenerative places like community centers, parks, housing or renovation of sports fields. Always respecting the internal codes of this social complex places, the goal is through architecture and urbanism to make real sustainable living, considering every factors like common memories, identity, localization, accessibility, identification between public and private, etc. to give some new air, to create a harmony in this crowded and for many people inaccessible neighborhoods, through places that emphasize the collective memory between the people in this brazilian favelas. (2)

PLAY CITY

Analyzing both mentioned cases they confirm that sports have been always a catalysis in the population, because join the people despite any religion or political influence, activate the collective memory through community activities, in times of continuous stress makes people active, physically and mental, making the population healthier and, maybe the most important factor, gives hope for many that do not have any; using the free time in sports can be the motor of having a healthy life, away from dangers like drugs, alcoholism or violence.

Almost all type of sports (recreational, not the professional one) do not need a quiet and silent place, a group can play together in a quietly silent area as well as in a loud and crowded place. The sports or games fields not need to be made of grass, can be made in different low-maintenance and low-cost materials like asphalt, hard surfaces or artificial grass.

Team sports like football are according to FIFA played by around 270 millions of players; cricket, volleyball, basketball or athletics are also team sports with many players in different countries around the world. There is also another group of sport, the games, like child games or even community games that are played by almost everybody around the world and they need also an according place to play.

Every urban highway in the world must have, or should have, one or more crossing bridges or a crossing street under the (in this case elevated) highway, that communicates the two separated areas, each area at each side of the highway or train line. Most of this bridges and crossings are just a fulfill of the equipment regulations, and most of the times the function of this crossings are inefficient, because they are situated in inconvenient places, are not friendly for the user as well as not safe for them. To cross one of this bridges seem to be rather an obligation than something that someone can like to do it, in difference to a promenade, a park, or a hybridize bridge, for example the Ponte Vecchio in Florence.

The chance to hybridize sports places with transport/circulation areas, areas that are actually useful and necessary but also divides the city in two parts, seems to be possible. Instead of to avoid this circulation strips it is better to use this spaces for the well of the community. Making this true could exist a continuous urban connection in the shape of sports and leisure areas between this two disconnected places in the city, as a result, the place can be a polyvalent one, as transit area, as connection and as a permanent new public space for the community who lives in that area.

A football field, that allows 22 people playing, is between 45-90m width and 90-120m length. If you take a 45x90-meters football field it is possible to fit this field across the highway, just like for example the wild animalcrossings bridges in Scandinavia or North
America, this way it could be a park and also a sports field. However, this means a high investment, the real chance to make some place come true is to make it simultaneously when the highway is getting built, or even to use the geographical situation in the highway, for example if the highway is open, but under the ground level. On the other hand, a 10-people football field is played on a 40x20m field, and allows to play also another sports like basketball, volleyball, etc. If a highway with two lines in each direction has an average width of 20m this sport area fits perfectly, and can be repeatedly organized at the highway, it is possible to build it over a highway, like a bridge, or use the space left-overs under or around the way. This is also at a train line possible, the width of the lines is less than a highway, but there is also possible to build under or over the train line a sports field-crossing way.

Another common element in the urban highways are the connections between ways. The entrances to the highways, for example in “clover” shape, have in average a radius of 35~40m, making a diameter of 70~80 meters. A 40x20 sports field could without any complication fit in this left area, often used as a wild garden. Borders, entrances and tops of urban highways and trains can hybridize into a infrastructure/transportation - sports/leisure/green areas, with the following advantages for the city:
- With both sides well connected with open areas it is possible to avoid conflictive areas where violence and a probably ghettization can appear easily. The place as an urban margin would disappear.
- The highways or train lines keep safe for the drivers as well as keep safe and silent to the people who live next to them, as a protection-inhabited border.
- By giving better living standards around the highway, the place will belong to the city, creating a collective memory.
- This hybridization should give a new value (not just economical but ethical) to the places at highways and surroundings.

CONCLUSION

The urban highways and train lines are exploding in quantity, new developed or in-developing countries like China, Brazil, India, Mexico, etc. have seen how in the last 20 years new kilometers of urban highways were built across the cities. As an element in constant development it is important to take care more than in the engineering of this places, because they are most of the times in complex situations situated, like inhabited areas in the near, and in the future it seems that more people than in the present will live there, and in this sense this fantastic work of engineering must became also a work of architecture, urbanism and sociology.

A hybridization of this inner urban margins seems a huge chance to make better and healthier cities for all, mixing unwanted places like highway or train lines borders with necessary and wanted places like sports areas or leisure areas.
The result of this could be a city full of play and sports areas - Play City- that everyone can enjoy, no matter where do you live.

It seems possible to transform/hybridize areas of urban highways and urban trains into circulation, housing and sports areas, and to create, just like 2500 years ago, a constructed and inhabited inner border between living and public, made for festivities and for playing, that regenerates the forgotten and undesirable spots in the city. Both programs can work together, giving solutions to problems like design of future ways, maintenance of
borders utilization of left spaces, regeneration of neighborhoods.

The human being is a *homo ludens*, and according to this statement to the basic human needs belong the playing, the sports, as a shared preparation to the serious work, as well as a relaxation from the worked time. (5) Like the Romans said: “mens sana in corpore sana”.

In the future development plans in the cities must be considered such spaces, because topics like urban health and cohesion are important, almost crucial, for the future of high-density cities.

Sustainable design begins with the user and his surroundings, to include trees or solar panels in the designs it is just a little part of the whole sustainable concept, an important part of that concept is the social one, that the people by good planning can enjoy a full and plenty life, with elements that can make their life better and healthier, and the same to the life of their children and the future generations, no matter where they live.

*Pictures:*

(1) Buenos Aires. View from an elevated urban highway. Informal settlement & downtown. Photography from Author

(2) New York. Skyline. Diller Scofidio & Renfro architects. A great boulevard over the city. The air that need a dense city like New York. Photo from the Author

(3) Urban Highway in Cairo, with informal settlements behind and a left-over place between living and highway. The highway divide the city area in two pieces. In this case, the crossing/sports field should be over the highway. Photo from the author

*Notes:*


(2) [http://www.jauregui.arq.br/crecimiento.html](http://www.jauregui.arq.br/crecimiento.html)

(3) [http://www.thehighline.org/about/park-information](http://www.thehighline.org/about/park-information)


*References:*


(1) **Buenos Aires. View from an urban highway. Informal settlement & downtown.**
*Photography from Author*
(2) New York. Skyline. Diller Scofidio & Renfro architects. Photo from the Author

(3) Urban Highway in Cairo, with informal settlements behind. Photo from the author