

An Urban Sclerosis between the Hegemony of the Past and the Legitimacy of the Innovation

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ABSTRACT:

Nowadays, the incompatibility between grafts that must be fixed to the former tissues drives them to crumble off in an edifying way and convey spiritually a rupture feeling in search of novelty. And simultaneously, a feeling which is similar to urban Alzheimer motivates our investigation to analyze first the ephemeral dimension of the building and then to be capable of determining accurately these substitution transplants by giving to the latter a better capacity of regeneration. This will make them able of reprinting the authentic DNA, the genetic heritage of our cities.

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INTRODUCTION

Whatever is the issue addressed during a town planning project -related study, the scientists in the field realize that a theoretical model (utopian) is a must to start the study which makes it vulnerable to contradiction.

With the growing population there is no need to try to assess the extent of the phenomenon linked to flush tide caused by the spiraling concrete progress, but to invent new approaches that force individuals to change their relationship to space by a more respectful attachment places and their history

Indeed today's cities are experiencing tremendous growth which has to be restrained urgently: remake the city on the city without consuming new land seems to be the most appropriate alternative. Theoretically to stop remaking the city outside the city seems to be the most appropriate solution except when having to intervene on an old tissue steeped in history so many parameters are involved. With time some parts of its ancient tissues deteriorate and reach a state of disrepair that imposes to the city a rebuilding cycle that lasts centuries, thus, confirming to some extent the vision of Lewis & Mumford, Mac Kenzic, and F Godard. Either in more

relevant words if a resemblance is attempted between the life cycle of the city and the course of human existence it appears that this cycle is then as interrupt time corresponding to periods from death to rebirth, from cradle to grave, deployed in different phases of building, construction, implementation, degradation, deletion, alteration, destruction.

In other words, it can be said that urban decay mentioned above is similar to a normal phenomenon which is a part of a natural life cycle of the city but not as an almost recent calamity, exclusive to our time otherwise said

«The most peaceful development of any city involves demolition and replacement of buildings» (Freud, 1989). Then this makes the usage of a new graft compulsory in any involvement by demolition and implementation process.

However grafting new pieces in disconnection or mismatched with the old fabric (the receiving body) results in a tear in this system and therefore their inability to develop a joint tissue. Consequently, this leads to generate sometimes a set of disparate and even conflicting fabrics and resulting in an urban system dysfunction: all rejection signs are so manifest, the town is ill, the

pathology is indeed an urban sclerosis and the cure should be free of any form of redundancy (destruction / reconstruction evil thought and repetition), that will require cost and therefore more time.

1- The cyclical demolition

The demolition that is natural, accidental, mechanical or military is assumed to have a negative connotation but it often becomes a compulsory act. According to F.Choay and all, societies have always been demolished "*conscientiously and without qualms ... through obsolescence, worthlessness, by failure and inadequacy and more positively this time because of modernization*» (Choay 1996). In our point of view, it is useful to see that occasionally a very expensive demolition required by all these facts can be a good solution when aiming to regenerate a run-down urban fabric.

The cyclic regeneration of the city process performed through an "ordinary" (Pinon, 2008) destruction is not dramatic.

On the contrary, this becomes dramatic when the elite in control claims the building of the city because of his lack of expertise, citizens must first demolish with impunity regardless of the sensitivity of indigenous heritage and their consciences.

However any destruction / rebuilding operation that is poorly thought and buries the historic potential would have a negative impact: in the eyes of experts, programming a demolition as an obedience act to the well-being and progress instruments is like a deadly disease that mines historical site or weakens the immune capacities. It is worthy to emphasize that Vincent Veschambre considers this act as a "traces eraser» and "a memory denial," and the decided demolition is an «heritage upside" (Veschambre, 2008). Thus, conceiving the death as an act of negation, similar to a symbolic violence.

2- The ephemeral dimension of the building.

This is what has been in mind of Françoise Choay in 1992 as declared in his book 'The Allegory of the Heritage', stressing the inevitable inclusion of the built environment in a "creation / destruction universal cycle" (Choay 1996). Then, this prompts us also to think about our ephemeral dimension that is so well described by Diderot: "The ideas which the ruins awake in me are great. Everything is destroyed, everything perishes, and everything passes. Only the world remains. Only time that lasts. What this world is old! I walk between two eternities. From somewhere I cast my eyes; the objects around announce to me an end, and resign myself to that which awaits me" (Diderot, 1818). So we cannot sanctify a frame because everything is ephemeral. This vision is also supported by a Holy Quran verse which states in matter that «*The image of life here is nothing other than*

water, that we descended from heaven and to which mingled vegetation of the earth that people eat, as well as flocks, until earth donned his dress and embellished and its people thought that it was at their disposal, now Our stop came by night or by day and We made a mowed field as if the day she wore nothing at all. Thus we develop in detail the verses for a people who meditate». Chapter 10 - Verse 24.

3- After demolition:

Despite all forms and connotations coming from demolition (cyclic or programmed) that we admit and all the built environment that instills a fleeting dimension and the two contrasting visions related to the demolition, we are conducted to think about the post - demolition aiming hence to seek a balance between a too absent past, a too perpetual present and an uncertain future between the hegemony of the past and a legitimacy of the innovation. Hence the idea to seek a lower compromise cost that resembles to a true scientific innovation compatible to new technological and social changes that meet the author desire who would like to see his work lasting forever while ensuring in the substrates history sustainability.

Henceforth , searching the elements of the new substitute graft to allow a self-generating in time, to regenerate the old existing fabric that assure the sustainability of evanescence , to let showing through bedrock and finally to ensure the continuum without producing a tear would be our problematic issue.

A) The graft in the living world - an inspiration

To the given major issue produced by the architecture evolution in a society with increasing demand of the preservation of any history object, the field scientists are then constantly facing to a true dilemma: compacting tissue urban on one hand and preventing its spread on the other hand while preserving historical sites.

By the light of the above, it is useful to say that the concept of transplantation remains the best solutions and our attention is paid, quite rightly, to that practiced very skillfully in the plant world and also in the human surgery field. Indeed a fruit tree that has undergone a suitable graft in the trunk can produce two different fruits, 'One which is ancient ensures durability of the original mission of the tree and the other is pleasant to drink because of its taste which is new. As for the transplant in human surgery, it aims first to preserve the patient's genetic heritage by extending its duration of life and then to allow him to procreate offspring useful to the society.

These two examples, as part of our daily lives, require the architect to adopt from now the dual attitude: connect the ancient and the new while respecting the boundaries imposed by the architecture of the contemporary world.

B) The graft in the inanimate world:

We imagine the new graft as a dialogue interface between heritage and contemporary project that make readable the lives of successive builds. This consists of adding several layers of architectures which is undoubtedly a daunting task. Thus, one must ensure from the beginning the graft acceptance that follow inevitably the three steps:

1- Visa compliance for heritage protection:

Any intelligent project author must be guided by the double vision: public utility / history. In other words all posterity candidate project must include in its structure a "plugin" that guaranteed the continuity of the substrate history, is a compliance visa, essential element for the heritage survival in both tradition and modernity. Anne-Françoise Boy concluded in 2002 that "Demolition needs history." In fact, the graft consists through a harmless mutation and emotionless of tolerating the destruction while preserving the history linked to the site. In this vision, that can be extrapolated to the human body: the surgeon must take into account, for the transplant success the compatibility of the body of concern and blood grouping in which it immerses. This is to minimize the risk of graft rejection.

The scientific comity of architects is objectively stopped by civil society to change the vision and adopt a new strategy in order to preserve the building history while preparing for better contemporary projection.

However restore *stricto-sensu* the historical substratum when it's related to the settling of colonial occupations which resulted in a certain anarchy resulting partly by an identity crisis and also to the appearance of a passion driven by a perpetual search of its identity that remains without actual outcome.

The result we obtain points out that the initial identity is buried under several layers heterogeneous and therefore it is very difficult to read and to understand. Consequently, this leads us to pronounce that recovering the original culture is utopian.

This vision can be illustrated rightly by an optical phenomenon: one should imagine, for example, a light beam that tries to cross a heterogeneous fluids superposition (with different density) in a container. The result, as expected, is conform to the intuition: the straight beam from sudden break in the crossing of each layer. So for this light flux can recover its original substance it needs a lot of energy and memory and a perfect reflection at the bottom of the container. It comes to Einstein relativity to going back in time.

2- Participation / consultation / consensus:

A simple opinion poll proves for sure that heritage preservation makes a consensus. We would like that reference time points to be saved for witness, that is to say, all the ruins are left as telltale traces of life of

different eras, in other words a desire to take into consideration the experience, the memory, the intellectual effort and the respect to those who have constructed the heritage. So any work performed on the urban is doomed to failure if there would not be a commitment and a real compromise of stakeholders considered as receivers that have the ability to accept or to reject any implementation of a new graft in an existing fabric.

Reincarnation values

Society as we imagine should enjoy a minimum wage of culture which makes it able to see inculcating the respect of all building full of history and bringing up future generations in the same perspective as to accustom them to the knowledge and recognition of their heritage history with a broad mind and tolerance. The school and the men of religion are called in turn to use better teaching for a better reincarnation of its values

3- The technical issues of graft futuristic vision:

a- An embedded architecture with variable geometry: In our point of view a building can not be regarded as a static object. Henceforth, where it is located it evolves changes and transforms its metamorphosis constantly to ensure continuity of occupation and multifunctional uses. Then the challenge is to manage in a proper manner these changes to enable the built to progress in time by dispensing it from any stereotyped form which consists of tolerating to it a change of form without being disfigured. Thus any architectural work created on a substrate would be modulated, flexible or interchangeable willingly when it comes to facing an urban decay threat. It is a strategy that should enable practitioners to update their knowledge made through a space-time vision. The action to take then is to make the necessary adjustments to the noble parts of the building to preserve its originality on one hand and to make it compatible with the social and technological change on the other hand.

This concept is not utopian and can limit the action "raze to do better," though its implementation requires appropriate simulation by a computer-aided design for creating complex shapes with simple codes.

b- Foster self - regeneration through materials engineering: Any living system left to itself is self-repairing and returns spontaneously to the equilibrium state in absence of disturbance through a series of processes. It led us to think about the possibility of integrating this capacity for self-regeneration on inert body when the damage occurs, or the idea that integration of nano-structured living matter can raise this capacity to regenerate itself. The graft must bear in itself an adaptive immunity allowing it to strengthen its regenerative capacity. Our vision is then in agreement with the idea

that “Urban regeneration considers outskirts of the city and its pieces degraded as dead tissue or swarming repair cells that should not wait someone else to intervene from outside, but draw the regeneration to force its own entrails and use its mobilizing domestic energy” (Berezowska-Azzag, 2003).

This phenomenon is visible in the world of salamanders that are able to push again their members after injury. Scientists have concluded that at the level of their organisms, adult cells are mysteriously reprogrammed. This means that, for possible regeneration, adult cells that form a member, such as muscle cells, for example, must lose their original identity. Thereafter, they proliferate in order to produce new cells that contribute to the development of a new structure allowing to the latter the regenerative potential enhancement.

c- Create the comprehensive regeneration of the existing urban fabric rundown: It makes more sense to think of the city as an interconnected mesh fabric rather an assemblage of disconnected pieces and uncorrelated and that the graft implantation should initiate a full refresh on a dilapidated urban fabric by strengthening the immune system, (shuttering effect like industrial complex process controlled by computer whose tasks are performed either simultaneously or successively). This phenomenon both stimulating and intelligent aims to regenerate this mesh economically and socially.

d- Mesh interconnected to ensure the continuum and reflected bedrock (memory storage) after demolition: We can talk somehow about multiform mesh that would be a juxtaposition leaving legible both merits of the new building and the history of the substrates. The transplant would be a mesh that contains public buildings and open spaces with historical landmarks. Citizen will have the modernism and the historical.

The transplant possesses evolutionary function that translate the present with precision and harmony and this takes in its dynamic the past to better prepare the society to look ahead to the future. We can then talk about the concept of diluted mesh without any single manner, and that tolerates cohabitation and coexistence of old and new. In many circumstances it was given to us to see that to demolish means to remove a work even symbolically, by taking away its dual memory. The transplant, as opposed to the act of demolition, means somehow, to renovate the work in a proper manner and respect their right of keeping at least part of its dignity linked to its history. This is a precaution that should take charge of the project when the act of demolition is dictated by social or political reasons. One may say that the graft would be “A present representation of an absent thing» (Ricoeur, 2000). The example of the historic wall that separated into two parts the city of Berlin for decades with its population remains persistent for a long time in human consciousness through the vestiges despite its demolition.

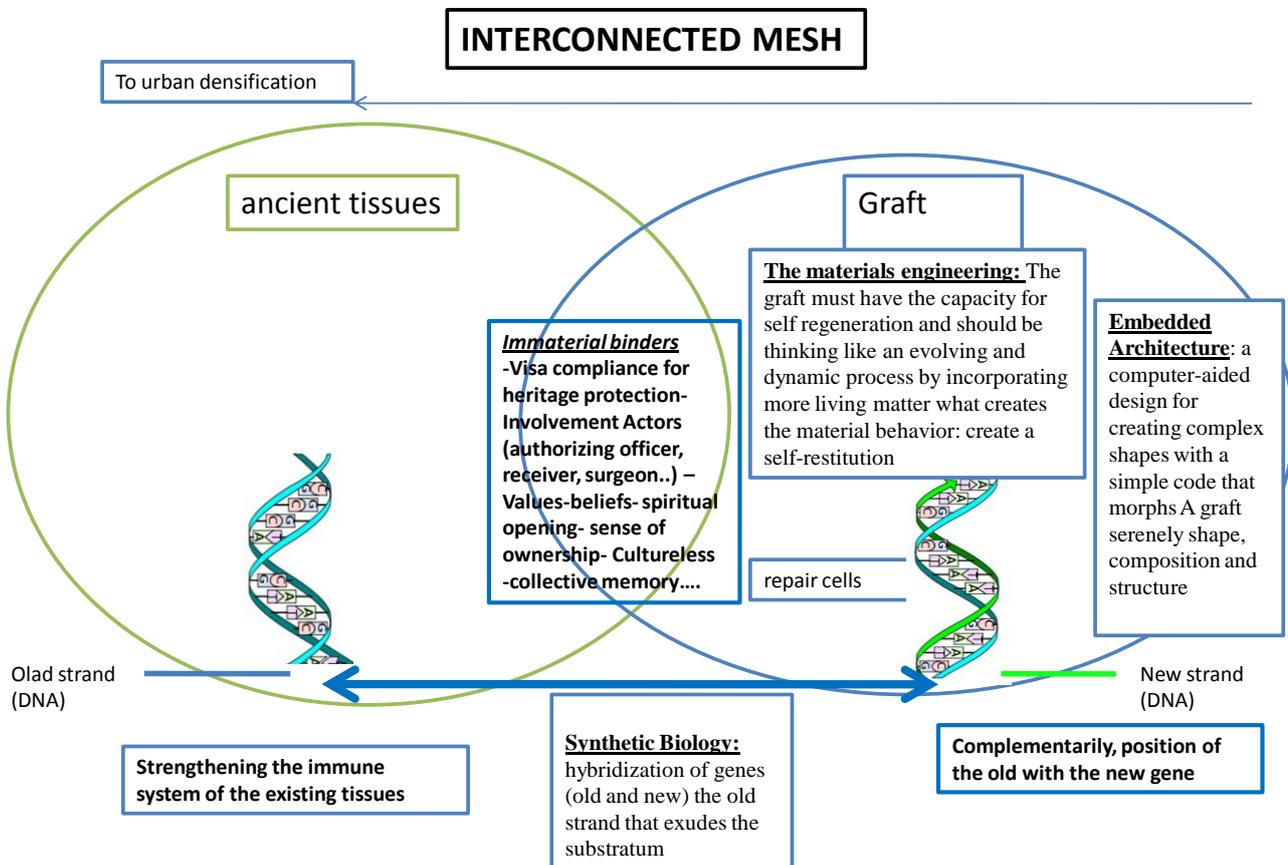


Figure 1. Interconnected Mesh. Source: author

Registry instance on a place of worship with preservation of monotheism:

As an example we quote is the case of the Orthodox Church converted into a mosque at Setif town in Algeria. In this precise case, the clogging was simply to hide the signs of the Christian faith in order to substitute them by those dictated by the Muslim faith. Thus cloning we imagine in this place of worship is transparent and involves maintaining monotheism initiated by Abraham and also with another human presence. Thus concealing the signs did not change the vocation of this place where only God is requested.

Thus transforming this place of worship is made in respect of professional ethics which is a kind of paying homage to the early Christians builders. The graft becomes the amalgam that constitutes a bridge of dialogue between civilizations.

In other words cloning preserves the identity of the place. We must say that the transplant is respectable only if the decision is made wisely and responsibly.

CONCLUSION

In light of the foregoing, transplantation is a suitable technique for urban renewal because it contains the substance that makes possible the urban diversity in all its aspects while avoiding any kind of seductive makeup at the moment but ephemeral and harmful during the time.

If humanity is aware of protecting the planet in order to be free from fossil fuels and to return to renewable energy, it should also stop urban decay and promote sustainable urban development. Hence, it is given the idea of another summit like Kyoto or Copenhagen conference to adopt an urban planning policy of the future and prevent the world from sinking into the hollow of the sinusoid

Competing interests

The authors declare that they have no competing interests.

REFERENCES

- Berezowska-Azzag E (2006). Régénération urbaine, moteur de développement durable, in Actes du séminaire international « Renouveau urbain, densification et intégration métropolitaine », AIMOI Cergy-Pontoise 2006
- Chaline C (1999). Régénération urbaine, Que sais-je?, PUF, Paris.
- Choay F (1992). *L'allégorie du patrimoine*, Paris, Seuil,
- Choay F (1996). De la démolition », in Bruno Fortier (dir.), *Métamorphoses parisiennes*, Paris, Pavillon de l'Arsenal, p.13.
- Cote M (1993). L'Algérie ou l'espace retourné, Media-Plus, Alger
- Diderot (1818). Salon de 1767, *Œuvres complètes de Diderot, Salons d'expositions de 1765 à 1767*, Tome quatrième, 1ère partie, Paris, Chez A.Belin, 1818, p.355.
- Ewa Berezowska-Azzag, *renouveau ou régénération urbaine : débat contradictoire ?*, « stratégies pour un développement durable locale », p 81, 2003
- Freud S (1989). *Malaise dans la civilisation*, PUF, 1989, 11e édition, p.14.
- Garçon A-F et al. (2002). (dir.), « Démolition, disparition, déconstruction », *Documents pour l'histoire des techniques*, cahier n°11, CNAM/EHESS.
- Lynch K (1976). *L'image de la cité*, dunod, Paris.
- Merlin. P. and Choay F (1988). Dictionnaire de l'urbanisme et l'aménagement, PUF, France,
- Noberg-Schulz Ch (1997). *l'art du lieu* », le Moniteur, Paris.
- Pinon P (2011). *Paris détruit. Du vandalisme architectural aux grandes opérations d'urbanisme*, Paris, Parigramme,
- Régénération urbaine en Europe (2002). *Urbanisme n°16* Hors série.
- Ricoeur P (2000). *La mémoire, l'histoire, l'oubli*.
- Veschambre V (2008). *Traces et mémoires urbaines. Enjeux sociaux de la patrimonialisation et de la démolition*, Presses universitaires de Rennes, p.91.