SILENT MUTATIONS IN DESINDUSTRIAL AREAS

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Abstract

Locally, on the outskirts or into the European cities, the productive activity has filed over time a series of buildings and complexes consisting of open and closed spaces, that are repeated with more or less frequency. Within an overall view, these objects, often disused, originate a kind of landscape of ruins whose spatial sequences characterize entire sectors by rhythms based on vanished requirements. In these areas, when not subjected to replacement based urban transformation processes, the absence of function has triggered spontaneous, silent, microscopic mutations, sporadically recorded by official data, which expresses a demand of latent city and set up innovative types of collective spaces.

As through a process of metabolism, the set of small transformations change the meaning and the behavior of the entire sector offering scenarios that find compromises between apparently not reducible pairs: security/permeability, shape/use, private/ collective.

The district of Gianturco, located in eastern Naples, offers itself for size/location/history as an ideal case study. Known for being home of important companies now abandoned, this area is currently place of productive activities related to the high-tech sector that stimulate significant upgrades for what concerns the use of the space. Learning from Gianturco means to seek an interpretation that identifies the genetic code of the transformations in act.

It means at the same time to verify the opportunities and the effectiveness of the methods of relief/ return and update/communication of what exists/happens and think about the meaning, roles, opportunities of the project.

Keywords: mutations, souk, accumulation, redrafting, update

1. THE LEFT LANDSCAPE

The productive complexes which over time have settled on our territories, may in effect be considered as ruins to go through. Resources to experience and sort out.

With the term *left landscape* it is meant a defined landscape consisting of urban structures that have recorded (and continue to do so) mutations in productive activity. The buildings and complexes made of buildings and open spaces, that live within it, owe their specific configuration to a rational use of the space, determined by the needs of production; a need that determines the singular aggregation between buildings as well as their link with the city. The variety of space types designated to production can be traced on the one hand to variations in the market that, with the passing of time, impose different organisational models, and on the other to organizational peculiarities of specific contexts that remain constant over time (Lanzani, A. 2003). It is however possible, from the standpoint of evolutionary processes, to synthetically distinguish seven models:

Preindustrial (referring to the British textile sector XVIII century) – characterised by an organisation centred on cells scattered across the district, in which the workplace corresponded with the home.

First industrial revolution (XVIII-XIX century)– the organization consisted in aggregating cells similar to artisan workshops of the preindustrial era; the buildings were frequently multi story; the location was dictated by the proximity to energy sources and the availability of raw materials.

Second industrial revolution (up to the years between the great wars)– it is a system in which the typological organisation is largely the same; the space is slightly uninfluenced by machinery; the location changes depending on transport infrastructures and commercial outlets.

The "Ford modelled" factory (1930s)- characterised by large open and covered spaces, necessary to house equipment and production lines, mostly linear in layout and planned to ease the flow of raw materials, energies and partly finished products. A model in which the necessity of large spaces destined to raw material storage, semi finished and end-products takes shape. Furthermore, it introduces the separation of management and control spaces.

The just in time factory: a 1930s model as well, it is organised in productive cells, each specialised in the production of a particular kind of components, assembled later in the storage area. It is the first configuration of the Pull organisational model that allows the reduction of the materials' movements inside the plant. A visible consequence, in spatial terms, consists in the disappearance of the large storage areas in favour of a denser use of the space;

The dispersed factory. The organisational model does not vary and refers to the ford modelled factory method (Push) or to the just in time (Pull) but the units of the cycle are dispersed across the land without borders: the distribution of information systems allows the decentralisation of productive activities to reduce the scale economies. The development is based upon the increase of knowledge and information. The research centres become focal points of the economic transformation, as well as the social and regional one, because they distribute innovations that concern all the productive cycle (Coppola xxxx). The productive unit is an incredibly small place compared to the ford modelled factory, that can be placed anywhere.

The last decades in Europe show the persistence of small and medium businesses tied to traditional sectors as agroindustrial or high quality textile industry (which refer to the models 1/5/6) and the rise, in general in Western countries, of the production of "high surplus value". This type of activity takes shape in two main settlement systems apparently antithetical: the first refers to the concept of the campus, with specific reference to the university settlements in North America, the second refers to the artistic districts and uses, reorganizing them, spaces that are available in the surroundings or inside the city. The left- landscape proves to be a rich ground of research where space is left to the "demand of city" to be freely formulated.

2. THE CASE STUDY OF GIANTURCO.

The Neapolitan district of Gianturco, offers an extensive collection of workspaces, that for accumulation over time, have saturated the area. The commonplace and the official data tell about an abandoned and static area.

Gianturco is in fact a left-landscape under reorganization, because of the settlement of production activities related to the high-tech sector, associated with the "High-Tech East Naples Centre". The proper and constant updating of the companies, dictated by the market requirements, implies continuous modifications of the spaces. Comparing the state of firms in two separate moments allows the determination of the type of mutations enacted, regarding density variations and change of use within the individual blocks. The comparison is possible by matching data from the 2005 report for the municipality of Naples with the survey data from 2009-2010. The presence of essentially productive firms can be confirmed, either if it's involved in the production of material goods or not material goods. Above all an increased variety of activities is detected and the proliferation of tertiary functions within the enclosure. The traditional production areas (warehouses) and management (office blocks) are supplemented or substituted by laboratories, professional studies but also classrooms for training courses, conference halls and meeting rooms; that means it is beginning to become a feature within the blocks, a space dedicated to meetings and reception, composed of open and covered spaces, that start to develop starting from the porter's lodge. These spaces build up an urban sequence that leads from the public road to the innermost places of the enclosures: these are semi public (or semi private) spaces that that act as intermediary between what is inside and out. The changes enabled by the establishment of productive activities with high added value, through these "interzones", cause repercussions in the surrounding urban area.

- From the point of view of those working in the firm, it can be said that these spaces, by their nature of collective spaces, bring the noise of the city inside the enclosures.
- From the point of view of the city inhabitants: it can be said that the streets of the industrial sectors, up to now considered blind corridors for the limited number of access points, are in reality drawers that guard treasures inside that can be used.

The update of the blocks of the left landscape, documented by maps and statistical data pave the way to new opportunities for establishing, through the project, new relationships. These are expressed in richest and more complex sequences inside/ out, determined mainly by the need to create a dialogue between activities and needs once independent and introverted.

3. INTERZONE

It is possible to mark just the layer of public and semi-public space in the area of Gianturco, using the idea expressed from the well known *Nolli map*. The layer selects and puts together the noisy texture

of the street activity, porter's lodges, internal paths, enclosed courtyards, hotel space, elevation structures, the accessible view points and explicit the presence and size of the interzones which act as a filter between the public spaces of the city and the private ones of the companies.

To better understand the characteristics of this layer/ system we can borrow the Souk of Damascus, which represents an archetype. Compared to other souks, it is distinctive because it has been superimposed on the ippodamian plan of the Hellenistic city (Benevolo 2006). The latter can be likened to a left space for its rational use of space. The souk is made up of noisy roads of a commercial nature that conceal productive activities and also hotel structures (menagerie caravans), meeting spaces (mosques), education centres (Quranic schools), relaxation and socialisation structures (public baths). The overlapping of the plans of the medieval souk and the Hellenistic city (Benevolo 2006), shows how the commercial fabric has insinuated itself in the regular weave, sometimes confirming others suppressing the ancient plot. There are also some diagonal paths compared to the rigid roman grid that suggest the necessity of new types of links. The installation of the religious structures (Mosques, Koranic schools) of a typically introverted character, on spaces that before were public squares highlights the real and potential role of the internal space in the construction of public life. Besim S. Hakim, in his representation of the Medina of Tunis, chose to draw only public and semi-public elements. From his map it is revealed the connective and structuring role that the souks have.

This notation, transferred to our left-landscape can account for how the layer Nolli, as it is defined, has the potential of ordering element in the re-organization of the existing fabric. The spaces of the layer Nolli are not usable all at the same time. The size of this layer varies throughout the day and also depending on the days. The components of the layer, can be listed and ranked according to their degree of permeability and according to the specific function that they perform, beyond the one of the more general interchange. The defined layer highlights a contextual system for the fact that it is closely related to the context, or better, it depends on it.

- the companies are not isles totally enclosed in an area which in turn is not an autonomous insula;
- the vectors that connect the insulae intersect in the contemporary collective space, as it represents and is adherent to our time.

The concatenation of spaces it records is indeed the synthesis (or the mirror) of a way of working that grasped virtual era advantages and is capable of combining them with physical world advantages. The network office envisioned by Frank Duffy in his recent book as The appropriate response to the demands of ours increasingly mobile knowledge economy because they will combine the potential of virtuality and the power of physically (Duffy 2008), seems to occur in the productive reorganized realities as networked enterprises able to combine the necessity of constant and steady updating, information security and confidentiality (exceptionally significant to Air Force for example) and of connections with realities, no matter how far, to insure work orders – and with them the ability to be anywhere, and flexible anywhere, along with the creative drive guaranteed by the physical world through its spaces, even the non-formal ones. Invisibility, networking, mobility, intangibility – the very strength of high-tech firms – combine and find nourishment right in the territoriality, stability, visibility, tangibility assured by the context (Duffy 2008).

The place where these systems meet is not an abstract one but is the collective space. The places forming the layer are nothing else than the spaces managing the concurrent presence of two otherwise independent worlds (the virtual and the real one), and legitimating their simultaneous occurrence. It's the places filtering the chances of physical access to the precincts as well as to the

information. In an industrial area processing a re-organization, the collective space as defined is a mutable system. Its mapping changes during day hours, depending on the day, since many of its components are usable on a fixed-term basis by people selected a different way each time. The collective space underlines a potentiality that is not fully used and together is an indicator of development that offers a glimpse of scenarios in which different uses alternate in the 24hrs but also different users. The conference rooms can accommodate evening performances open to a wide audience, libraries open their doors to schools, courtyards for the running of vehicles and the loading and unloading of goods give way to markets, the terraces provide the landscape for cocktails bars, homes host hotel rooms... .

Can we try to draw a map of this changeable interface/ system? The apparently secondary problem, such as the representation of a system of interzone, expresses clearly the theme of the relief of existing opportunities and their revelation. Knowing what there is to put resources into system, locate places, buildings where you can operate and change with little; build a map to figure out which are the points where you can and must thread the needles: the relief/reveal by the technicians becomes a challenge - against the staticity of the traditional recording instruments - for the construction of a heritage to offer including customer who must be informed in order to find a purposeful role.

4. ACCUMULATION

Ended the era of extensive urban transformations, the regeneration of the city and of the structure of its public space, occurs by accumulation of small actions.

Recalling what Koh Kitaima writes about Tokyo (Kitaima 2010), the set of small transformations has the potential to create change in the city through the quiet accumulation of urban elements rooted in daily life. The spontaneous reorganization of production facilities almost in disuse or totally abandoned is a phenomenon that spans the globe, right where the interruption of formal use has allowed the demands of the city to be freely formulated. The hi-tech clusters, and generally all the ativities of high added value, functioning as circuits that reproduce the connections typical to the creative industry, leads the investigation into which physical transformations of urban environments have most encouraged artists (creative excellence) to settle down, attracted by what was available in these areas.

On the same parallel of the previously discussed Gianturco district in Naples, are in the process of spontaneous reorganization the brownfields of Red Hook in New York and the area of the '798 Art District in Beijing.

In Red Hook, two conflicting necessities cause “egocentric” spaces to constantly strive to connect with the outside world and network according to the HI-SUK modality. The first regards the motivations that have attracted artists to Red Hook and that is the availability of a cheap, suggestive and scarcely foreseeable Piranesian landscape, translating is a distinctive attention in the planning of the elemnts that manage the views (windows, terraces and annexed staircases or section planes…)The second regards the typically commercial necessities of agreeable, comfortable, signposted routes that distribute visitors arriving from the ferry boats to the various commercial or restorative areas. This requirement has probably guided the most visible transformations and those regarding the re-birth of the waterfront that greets the Statue of Liberty, by means of a debated landscaping project that uses traces of the industrial past refining it with plants and flowers.

The area on which the most celebrated of the chinese artistic district 768 Art District is built, had previously been the site of an electronics industrial installation, built in the second half of the last

century, and at the time outside the city. The access to the district is free. The rooms of the refurbished factory give in to the taste of western expositions, a minimalistic taste, with great ostentation of white and steel in the interiors, and great use of graphics: the writing becomes a sign of personalization more than the works on show and even more than the products being sold. Sometimes the signs are separated from the buildings and occupy the space of pathways. These are sometimes raised, and are paved with soft materials (wood) and are decorated with trees. There are many works in progress and it is interesting to note that their fence often occupies space in front of the facades of ancient buildings. It is possible to observe and collect the many declinations of the "threshold". The passage between the inside (privatized) and the outside (public), is never accidental and is frequently an occasion to absorb the functions that are absent in the old premises: bars, toilets, the places of exchange between the outside and the inside are the thresholds.

The change-prompting factors are not robthresholdotic objects intended for a specific function (as fourth-generation dwellings in Tokyo) and built from zero, but bodies, which, added to others already there, consent to use them in a different way. They are but minor elements requiring minor interventions and dealing with actual solid bodies. They don't belong to viral bodies that, despite being additions, enlarge existing functions or add an autonomous other one. Rather than bodies, they are in fact exchangers: urban places that allow to the collective space to work as an interface, as a link. By looking at Gianturco, one may consider this potentiality is yet either unexpressed or addressed with little awareness. The commercial needs of Red Hook in New York or 768 Art District in Beijing, instead, have matured new typologies for ancient uses: the threshold, the stairs, the panoramic viewpoint.

The threshold as place that runs the relation between outdoors and indoors, private place for public use that manages the incoming and outcoming stream of information, spaces of connection between two worlds.

The threshold, attains the rank of an interface by losing that of limit. It expands and from line becomes plan, often volume going to be added to the existing one. It is realized with minor interventions, taking on three kinds of faces: Porter's-lodge threshold: security; Shop-window threshold: sale, the threshold develops into a shop window and it assumes the aspect of a showroom when it manages the access to some galleries selling their goods; Cafeteria threshold: reception. It is worth to note that many of these thresholds are designed ostensibly to stay for more than that to pass. The idea is that the space can connect with a distant world that does not necessarily have to be driven physically but just seen, smelled from the threshold.

The elements of distribution in the new generation production plants connect the activities between them, allowing the exchange of information, and offering an easy georeferencing. The pathway assumes the characteristics of a vector handling information through marker signs that solidify to become barriers or seats, and through the use of pavements suggesting preferred routes. It often uses (as in the case of the panoramic promenade of Red Hook), the pathway uses and recovers existing materials and planned routes, helping to transmit local past history; or it draws up new paths by establishing new relations between existing objects. The element of connection that mainly gains dignity of project is the staircase. Subject in the ancient warehouses to be simply a service element, it allows to inhabit large industrial buildings divided in several horizontal stories, or to disengage walkways previously subject to other routes. The staircase serves like once its social role and is often a sitting spot, backdrop, scenic design...Favored destination for the occasional visitor and rest area for the workers, the panoramic viewpoint connects places usually conceived a panoramic viewpoints withdrawn from the surrounding city. Either the panoramic viewpoint has one of its dimensions prevailing on the other (when tangent to a pathway), or it can have a definite and circumscribed

shape (i.e. terraces). Its peculiarity within the re-organized productive sectors is to propose a “new”, atypical view by showing known places from unusual standpoints and often objects unrelated to romantic panoramas. In this way it spawns new configurable relations. The panoramic viewpoint of these newborn or born again workspaces can be said to act as one of Matta Clark’s section.

To the interface elements is assigned the task of change, and it is on these that the attention of the customer focuses on. The design of the public space, therefore, concerns the interzones, which are displayed through processing minimal operations of transformation of the existing.

5. CONCLUSIONS

Since the 90s, the proliferation of images of light, transparent, iridescent architectures, often elusive in their spatiality, has invaded the stage of the project. This trend has been fed on the one hand by the undeniable fascination aroused by the *liquid modernity* (Bauman 2003), the potential of the virtual kind in general, and the confidence (perhaps naive) in an era in which the physical space would gradually lost importance (De Kerckhowe, 2003); on the other by the continuous development of material technologies that give a glimpse of architectural solutions once unexpected, so that the fluidity and liquidity have become paradoxically constructible.

In recent years, the urgent need to give concrete answers to the environment and energy emergency, and the advent of an economic crisis unexpected and unknown to the younger generations, have shifted the focus on practical needs. (Nicolin 2012)

The production of images that call for the construction of new and expensive buildings appeared suddenly inflated and not very useful as it is instead becoming more valuable the ability to process data to construct scenarios at an urban or even territorial scale.

After the phase of geography denial (Farinelli 2003), in our cities where the urban plannigs seem to have the sole task of containing disasters, rather than to propose and construct ideas of city, the continuous recording of what happens, the updating and the construction of maps that are able to return phenomena and trends in act, whether they are visible and noisy or hidden and silent, seems ever more important.

The role of the architect-acupuncturist, intended as the one who knows how to read a body and identify the points where to thread the needle is essential so that we can finally open a new era of dialogue without fears and without reservation with private investors that need to be given the opportunity to regain their proper role of customer.

A new awareness is required at the scale of architectural design. The latter is expressed not only in the ability to interpret needs but also to provide solutions that involve the minor possible operations. Sustainability, waved until a few years ago, as a flag from those who thought to solve critical environmental issues with an expensive and not always feasible brush of green on the rooftops, regains for necessity the other two dimensions, the social and the economic one. It is in order to rebalance the Vitruvian triangle (Firmitas, Venustas, Utilitas) that the efforts must be directed and the achievements gained in the recent years not only field of technology and science of construction, but also of information technology: the communicative capacity of producing images even in real time motion, should not be demonized but redirected in order to create a fruitful dialogue that is not limited to vain architects’ conventions but keen on buyers and users. And the use of parametric programs that introject in the project also climatic and environmental factors must be optimized and widespread.

In a context seemingly gray and static and hopeless, paradoxically, the architect can find again the social role of whom interpret a question and provides a solution.

The settlement of the workplaces into the territory, the revaluation of the physical proximity, density, intersections; the unequivocal demand of the city that the contemporary way of producing researches and expresses, invokes the architect to its original task of designing, suggesting, establishing relationships.

REFERENCES

Bauman Z., *Modernità liquida*, Laterza, Bari, 2003

Benevolo L., *Storia delle città, la città antica*, editori Laterza, Bari, 2006

De Kerckhove D., *La conquista del tempo*: Società e democrazia nell'era della rete, Editori Riuniti, Roma 2003

Duffy F., *Work and the city*, the edge futures, black doc publishing, London 2008

Farinelli F., *Geografia, un'introduzione ai modelli del mondo*, Einaudi, Torino, 2003

Kitayama K, Tsukamoto Y, Nischizawa R., *Tokyo Metabolizing*, TOTO publishing, Japan 2010

Lanzani A., *I paesaggi italiani*, Meltemi editore, Roma, 2003

Nicolin P., L'approccio delle capability applicato all'architettura, in AAVV Lotus 151, 2013

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All along busy in the study of urban architecture, her interests are centred around the transition elements that change the path from architectural artefact to the urban environment and landscape.

The close relationship between the architectural typology and the urban morphology and the slow adaptations of shape to the different uses that occur over time, have been subject of interest for discussions and pieces of writing.

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