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Vacant Urban Spaces: Definitions, Challenges and Perspectives in Urban Regeneration

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Abstract:

Through the dynamic process of cities evolution, vacant spaces tend to appear. Certainly, empty and abandoned lots in a dense urban fabric could persist for numerous reasons. This phenomenon could be perceived from different perspectives from urbanists, and landscapers to architects, geographers, environmentalists and sociologists. Multiple data, parameters and definitions are in play. This multidisciplinary produces an issue of terminology in the scientific body related to urbanism and landscape architecture. More academic clarity is needed to have more efficiency concerning the perspectives of vacant spaces. This paper is presenting a scope of definitions of urban vacant spaces. It is based on the works of Roger Trancik, Merten Neefs among other researchers. This literature review aims to discern these definitions, in the process of establishing the role of the vacant urban spaces as a sustainable way of urban regeneration, illustrated by some examples showing considerable transformations of unused empty areas.

Keywords: Vacant Space; Urbanism, Definitions; Interdisciplinarity; Urban Regeneration.

1. Introduction

Re-using empty urban spaces is an emerging debate within the landscapers and urbanists communities. Several examples such as urban farms, parklets, and temporary use have been attracting more attention and establishing new paradigms for the urban space. Academics and practitioners are getting more involved in the thinking process, planning, design, and building these types of projects, developing the scientific body.

In the meantime, the variety of projects strewn all over the world has obstructed the landscapers and city planners' capacity to adapt and keep up with these trends. This paper tries to investigate different references, evaluate and set different characteristics of reused urban places based on different precedents. Then, looking at a range of projects, it becomes easier to find out factors that facilitate understanding and typifying. This research will try to guide landscapers, architects and city planners toward a thorough understanding of the phenomena of urban vacancy and urban recycling.

2. Literature review / Typology

The literature review is the foundation of this paper. It provides enough background and context to establish a more clearly defined vocabulary. This is especially crucial to the landscape architecture and urban fields because this type of issues is complex for it is extremely multidisciplinary. The language surrounding vacant urban spaces lacks precision and clarity. The variety of terms and definitions makes urban reuse projects difficult to analyze. Having a sort of conventional academic jargon will pave the road for more concluding scientific debates and deeper reflections about urban vacancy and urban regeneration issues. Throughout the literature, terms like vacant lot, empty land and unused urban space seem to be mentioned interchangeably. Thanks to the review, it would be possible to "chart out areas requiring reflection or research, direct the education of landscape architects towards distinction in specific skills, and make professionals more effective players [...]" (Crewe and Forsyth 2003, 49).

Since the definers are various, this first part of the paper is presenting a method for setting a agreeable definition and typology, as well as an overview of the different definitions and classifications of "urban vacant spaces" according to different researchers and practitioners from different fields related to this phenomenon.

2.1 How to define? Who defines?

As it was previously mentioned, the urban vacancy is seen through the lenses of different disciplines from urban design and landscape architecture to sociology, business and management strategies, real estate and policy making. That multiplicity suggests necessarily a considerable divergence when it comes to attributing a definition to certain terms especially the notions in question.

"Vacant-urban-space" is a composed term. Decomposing it, as a first step, will be the key to a better understanding. The essence of this complex term is the noun part: "space". It is also a quite general notion with physical, philosophical and architectural connotations. However, "space" can be simplified into a mathematical volume, an three-dimensional physical entity. The first qualifier of the space in question is "urban". A relatively clearer adjective that means related to the city as opposed to "rural". Since the city is composed of built and non-built parts, the "urban space" term suggests the idea of an open-to-sky space, the outdoor part of the city plan that could be public, semi-public and private. The second adjective is "vacant". Again, another vague term with different vocations such as from the material void, the architectural/urban void, the feeling of void... This word is always expressing the lack of something. In the case of "vacant urban space", we can understand it as the lack of physical entity like a human-made structure, a natural element or

both. As it could refer to the lack of the functionality of the space regardless of its physical existence, it could also mean the lack of users or activities despite the presence of an assigned function and a material space.

This attempt to frame the definition domain by decomposing opens the possibilities to see some points where academics could find a common ground and discuss a certain typology. Yet, leaning on a scientific background seems inevitable in order to found and guide the process.

2.2 Definitions from references

One of the research works that has been done in this field is a meticulous bibliographic analysis established by a team of researchers in urban and regional science, urban planning and political science and management. It detects, on a timeline starting from the sixties until 2010's, multiple definitions for "vacant urban land", based on academic references and professionals (Newman et al. 2016). This chronologic approach can help the reader to see clearly the evolution of the definition process. Since we are before a broad notion, "Vacant urban space" was termed diversely, such as "Lost space", "Urban void" (Roger Trancik, 1986), "Terrain vague" (Solà-Morales, 1996), "Cracks in the city" (Loukaitou-Sideris, 1996). It is usually described as under-utilized or unutilized lot including bare soil, semi-wild natural state, unkempt land, empty structures, brownfields, socially and economically inactive or marginal land (Pagano & Bowman, 2000). Raymond M. Northam, author of "Urban geography" cites this following expression: "Remnant parcels, parcels with physical limitations, parcels held for speculation, institutional reserve parcels, corporate reserve parcels." (1971). American architect and landscaper Roger Trancik mentioned different features in his book "Finding Lost Space" such as leftover unstructured landscape, unused plazas and parking lots (away from flow and activity), abandoned waterfronts and train yards, vacated military sites and industrial complexes, remnants of urban renewals, residual areas in between districts and blocks, deteriorated parks etc. He gave a general definition from an architectural and urban focus. "Generally speaking, lost spaces are the undesirable urban areas that are in need of redesign—anti-spaces, making no positive contribution to the surroundings or users. They are ill-defined, without measurable boundaries, and fail to connect elements in a coherent way" (Trancik, 1986)

Three principal aspects describe the so-called lost spaces: first, the fact that they are unwanted and unplanned, which is clear in the vocabulary utilized: "leftover, residual, remnant...", focusing on the aspect of neglect and rejection. Secondly, they have negative urban impact, or at least no positive input binding the surrounding elements or sustaining the urban network, especially in the case of assigned but unsuccessful function. These spaces have failed the users as the author is emphasizing the character of abandon, vacancy deterioration and decay. Finally, they have no clear limits and they are unexpected for many reasons related to regulations, legal issues, ownership conflicts or faulty planning. Lost spaces are considered as a symptom of urban degeneration. According to French senior researcher of Jacques Baudry, it is "the less intensive pattern in land use or managing of the soil such that the soil is left to its own spontaneous dynamics" (Baudry, 1991). Urbanists Michael Davidson and Fay Dolnick mentioned it in *A Planners Dictionary* as "lands or buildings that are not actively used for any purpose" and "a lot or parcel of land with no constructed improvements" (Davidson and Dolnick, 2004). The city of New York (2010) defines it by "land which no lawful structure exists and which is not otherwise being used for any purpose for which it may lawfully be used". Associate professors in University of Colorado Jeremy Németh and Joen Langhorst (2014) considered these definitions "underutilized parcels or lots that function below their functional or capital producing capacity", "land where no structure exists where humans do not currently use the property" and « an unoccupied structure for 60 or 120 days or longer".

We can observe clear similarities concerning the whole concept. Features like emptiness, un-use, decay and the lack of purpose and added value are obviously recurrent and highlighted despite the difference of the defining source. Thus, a general definition of vacant urban spaces in this study could be considered as following: "empty, unkempt parcels, with or without clear boundaries, accessible to the public, yet economically and socially passive and making a disruptive void in the urban tissue." To sum it up, the mostly negative markers suggest that according to the authors' field (urban and political science and management) vacant spaces should not be let as they are. However, it is important to note, that the analyzed research concentrated on American cities and intended to discover the relationship between the changing rate of urban vacant land of a given city and its relationship to economic factors, city policy and population movements. However, definitions are slightly changing every time, correlated with the development of scientific research. Definers from multiple backgrounds could not easily agree on the same definition due to the factors studied in their fields. The authentic perspective of each definition is essential for the classification. It gives a scientific framework for organized typology settings in order to decrease the ambiguity related to the terminology and deal methodically with this urban issue. The parameters are diverse including the physical manifestation (parcel, structure, physically limited, bare land, razed, vegetated, polluted, destroyed land, land with urban furniture, vacant building), the legal situation (no lawful structure, policy aided, converted land, publicly-owned or privately-owned, institutional reserve, held for speculation), the economic value (below capital-producing capacity, not actively used), and even the history (cause of vacancy recently cleared, once had a structure, succession converted). (Newman et al. 2016).

Roger Trancik focused on a different aspect of urban void which is the “designed void”, in contrast with “urban solids”: the buildings and infrastructures of the city. He marked the importance of these elements of the urban landscape and draw attention to the risk of neglecting them and turning into the lost spaces. In that case, especially for the public ones, they would go under three main categories: planning voids created due to the faulty planning process, functional voids created due to underutilization or dysfunction, and geographical voids caused due to a specific geographical feature (hill, canyon, riverside...) or a natural disaster.

In his article entitled “Vacant Urban Land in the American City” (1971), Raymond Northam has determined five types of vacant land, citing “irregular shaped or small sized left-over parcels”, lots that are physically “unfit for development” for topographic or natural causes (steep slopes and flood hazards), “corporate reserve parcels for future expansion”, “transitional land for speculations”, and finally parcels in “institutional reserve” for future development.

This diversity creates options for classification based on these parameters. Each one has got significant characteristics such as:

- Land morphology: bare/vegetated, empty/with architectural structure, vacant structure/destroyed.
- Land use: abandoned/wasteland/trash dump
- Cause of vacancy: faulty planning/stopped function/geographical issue
- History: previous function / cause and time of abandonment.
- Legal situation: Public ownership/private reserve parcel/transitional situation
- Impact: health hazards / social discomfort / environmental abuse.

After referring to multiple researchers and professionals’ definitions, the common and iterative factors would be the core of what we can admit as a broadly accepted general definition. The different elements according to each definer/field would be the foundation of an analytical matrix that allows us to organize vacant urban spaces into typologies. This paper will focus on public or quasi-public urban spaces. This excludes the cases of private gardens because they do not share the contextual framework with the public areas and they would require another study, more specific and accurate. Thus, as an operational definition of “Vacant Urban Space” we can consider the following: “A demarcated parcel located in an urban context, empty or/and containing a vacant structure, can be accessible to the public yet economically, ecologically and socially passive, in a state of dysfunction or hosting undesired activities”

2.3 Classification approach

If we focus on the singularity of every discipline to underline the differences in the definitions, we can admit there are an infinite number of factors. This panorama of factors among many others, creating various classification options, complicates the mission of establishing a typology. Each parameter is important from its own perspective, but a well justified decision should be made. Since it is impossible to take every factor into a huge matrix, going back to the essential aim is what would shed more light on what criteria should we consider to make an efficient choice. The core of the study is the re-use of the vacant urban space. Hence, the criteria of the selection should go in the same direction. A direction that, in this case, would be open to the idea of space recycling and the perspective of urban regeneration. We can observe in the work of Raymond Northam, five types mentioned above. Those types that can be reduced to two major categories: the land morphology including the left-over parcels and lands unfit for development on one hand, and the legal status/ownership including “corporate reserve parcels”, “transitional land for speculations”, and “institutional reserve” on the other hand. It may seem at first that this classification does not cover a lot of parameters. In fact, the key for a new usage of the urban vacant space is its capacity to host a new activity, which is conditioned by the natural compatibility of the site (size, shape, location, topography, and geography) as well as the current set of laws that administrate it. Added to the pragmatic future-facing perspective of these two parameters serving the purpose of studying this urban phenomenon, they do also present some insights about the rest of all important factors. The history, the previous an actual land use, the biodiversity, the economical and social impact are all connected to the present state of the land, which broaden the focus and help us understand more the case seeing a bigger picture.

3. Method and framework

The analysis of these cases is going to start with a brief description to the site and its new function. Then, in order to understand the context of the new use of the parcel, it will be based on the factors chosen in the previous chapter.

- Natural compatibility: focusing on the scale (site scale / block scale / district scale/ city scale), the shape (regular shaped / unusual shape), the topography (flat / slope) and the land cover (soil / vegetation / pavement / furniture / built structure / mixed)
- Legal status: focusing on the power relationship being the connection existing between the new function creator and the site owner. This relationship may be more complicated than a standard contract or an official agreement. The four types of power relationships are those where the project holder (new function creator) have no site rights (no legal ownership or communication with the property owners), appropriated site rights

(project creators are using sites legally but not in a traditional sense, no substantial contact with site owners), collaborative rights (both parts are working together), and full site rights (both parts are the same entity).

4. Precedents analysis

The study cases were selected based on several criteria. First, they should fit the operational definition set for the vacant urban spaces. Second, the cases had to be accessible to the public in order to give them a similar framework as they must also be in an urban setting. Added to that, the selected projects should be documented thoroughly. Finally, the quantity and quality of existing data are crucial. The lack of access to information has always been a limiting factor.

4.1 Prinzessinnengärten (Berlin)

The Prinzessinnengärten (Princess Garden) is an urban garden in Berlin Kreuzberg. The “Nomadisch Grün” (Nomadic Green) association launched *Prinzessinnengärten* as a pilot project in the summer of 2009 near to the U-Bahn station at Moritzplatz in Berlin Kreuzberg, a site which had been a wasteland for over half a century. Close to the traces of the wall that once divided the city and on the side of a busy roundabout, the parcel had an easy access attracting the locals and the visitors.

The idea of creating a green space in the heart of the city came from a trip that one of the founders has made to Cuba, where he saw similar spaces where people would gather to work, learn and relax. Facing the concrete, pollution and urban density, health, sustainability and social connection are the main values of the urban garden and the axis of impact aimed by the managers of the project. Using the green space for the production of fresh and organic food would lead to an increased biological diversity and less CO₂ emission. It also enhances/creates the sense of community and the exchange of knowledge between the locals. “They would be a kind of miniature utopia, a place where a new style of urban living can emerge, where people can work together, relax, communicate and enjoy locally produced vegetables.”



Figure 20. Creating a garden on a paved area (source: www.prinzessinnengarten.net)

Natural compatibility

This site is considered as a district scale as it is s about the size of 6000m². Besides the flat topography, the irregular shape of the land was not a disadvantage with its wide angles easy to design. The site was mainly paved (with some spots left for trees), since a shop was once raised in the center of the parcel. Along with friends, activists and neighbors, the group cleared away rubbish, built transportable organic vegetable plots and reaped the first fruits of their labor.



Figure 21. The transformation of Moritzplatz between 2006/2012 (source: www.prinzessinnengarten.net)

Legal status

The municipality of Berlin leased the site to Nomadic green from 2009. So from a power relationship perspective, the association has appropriated site rights. The contract is renewed annually but with no guarantee since the municipality kept the possibility of selling the property at any time as a clause in the contract. Therefore, the urban activists had an endless repetitive obligation to earn the right to pursue their activities by showing its importance and impact. Some of those problems were settled thanks to petitions signed by the citizens of Kreuzberg, and hosting workshops organized on a European level.

4.2 Tempelhofer Feld (Berlin)

The ancient airport witnessed the dramatic events of the Second World War as it was massively used for military practices. The Tempelhof airport was closed based on the result of a referendum concerning its future in 2008. Shortly after the closure of the airport, a demonstration was organised at the site on 20th June, against the plans of luxury apartments in the areas of Neuköln and Tempelhof, and it was clear for the authorities that the public wanted the site to be open for all. After a year of negotiations, a compromise was found and the airport gates were opened in May 2010 as a recreational area, under the name “Tempelhofer Freiheit” (Tempelhof’s Freedom). Receiving 235,000 visitors on its opening weekends, Tempelhofer Park is considered as Berlin's largest city park. It hosts several activities such as pique-niques, playgrounds, sports fields, art exhibitions, startups, fairs, festivals, urban farming...

Natural compatibility

With a global surface of 355 hectares, this site is considered as a city scale as it links two distant districts: Tempelhof and Neuköln. It covered the whole site of the former airport, including its built structures. The site presents then different types of spaces: open air, semi open, closed spaces, paved areas, grassy playgrounds... This characteristic made is attractive to many kinds of indoor and outdoor activities.

Legal status

It is a full site rights situation since the municipality of Berlin owns the site and buildings of the former airport. In the same time it transformed it into that leisure space and funded some of the initiative that it hosts. Referendums and surveys had been established and done throughout the years in order to have a general idea about the level of satisfaction and trying to improve the services offered and optimize the functioning of the park.

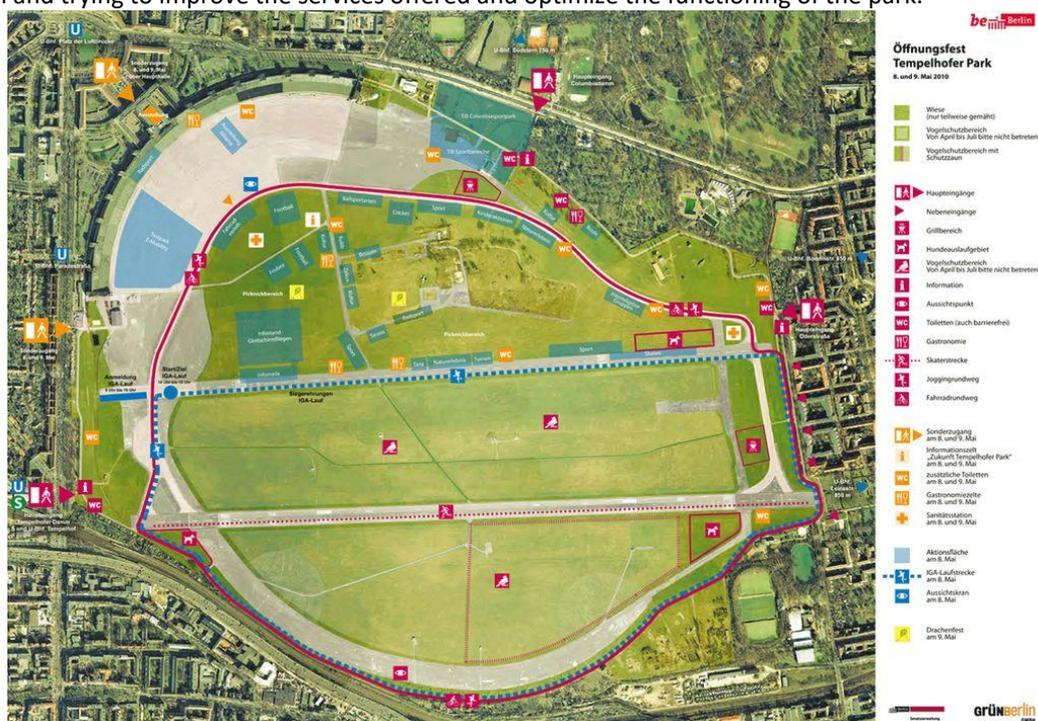


Figure 22. Masterplan of Tempelhof Park, Berlin (source: Alpha Quadrant).

4.3 Les Grands Voisins (Paris)

The premises of the old Saint-Vincent de Paul hospital in the 14th district in the center of Paris were locked down after totally relocating the departments to other hospitals in 2011. The municipality was planning an eco-neighborhood for that site and the transformation was meant to start in 2018. During this gap, the French association “Aurore” took the opportunity to use the vacancy due to the transitional phase for accommodating disadvantaged people, and then thought of mixing functions and involving two more associations: “Yes We Camp” and “Plateau Urbain”, and this is how Les Grands Voisins started. Other structures joined the initiative of reusing the vacant building and outdoor land of the former hospital. It is now a participative hub for youth, artists, urban farmers, shops, restaurants and associations.



Figure 23. A paved market and a vegetated community garden at Les Grands Voisins (www.theguardian.com)

Natural compatibility

The site of Les Grands Voisins is a district scale site. The premises of the former hospital cover 3.4 hectares (3500m² of open space and around 10000m² of built structure) in the heart of the French capital. So public can access it easily thanks to the flat topography and the location close to public transportation network. It presents various land cover aspects (open spaces, semi-open, covered, uncovered, with furniture, vegetated, soil and paved)

Legal status

Even after closing its doors, the site was managed by the Public Institution of Parisian Hospitals (aka AP-HP). Thanks to the trust built between the direction and “Aurore” and based on previous collaborations, they agreed on a temporary use of some of the departments run by the association. So, it started as collaborative rights relationship. From 2014, the overall management of the site is transferred to the association. A tripartite agreement is signed between the AP-HP, “Aurore” and the Paris municipality as the owner of the property. This agreement establishes the clauses of temporary provision of the site of Saint-Vincent de Paul. Subsequently, the owner of the site evolved. The AP-HP transfers the property to the Public Real Estate Institution of Ile-de-France (aka EPFIF). A new agreement was then drawn up between the EPFIF and Aurore, stipulating the provision of "precarious and temporary" areas of the old hospital. On a power relationship level, it became a case of appropriated site rights

5. Findings

According to the 3 cases considered, the legal status being between appropriated rights and full rights helped maintaining the transformation of the space. Temporary occupations were permitted by the establishment of derogatory leases and precarious occupancy agreements, however the use of these legal tools remains exceptional, and transitional or temporary projects are often faced with a legal problem. It is clearly easier if the owner of the land is the one managing the new function. For the physical compatibility of the site, the flatness and central location of the land seems to be important to attract more flow. The shape does not present the biggest issue against designer’s creativity and innovative solutions. Besides, dealing with a site that have a vacant structure in addition to the open space is making the management and control more efficient and attract more contributors to the development and the placemaking.

- Prinzessingärten (Berlin) : **Scale:** district ; **Shape:** irregular ; **Topography:** flat ; **Land cover:** pavement ; **Power relationship:** appropriated site rights
- Tempelhofer Feld (Berlin) : **Scale:** city ; **Shape:** irregular ; **Topography:** flat ; **Land cover:** mixed (soil, vegetation, pavement, with furniture, built structure) ; **Power relationship:** full site rights
- Les Grands Voisins (Paris) : **Scale:** district ; **Shape:** regular ; **Topography:** flat ; **Land cover:** mixed (soil, vegetation, pavement, with furniture, built structure) ; **Power relationship:** Collaborative rights / appropriated site rights

Table 1: General overview of the analysis results

	Natural compatibility				Legal status
	Scale	Shape	Topography	Land cover	Power relationship
Prinzessingärten (Berlin)	District	Irregular	Flat	Pavement	Appropriated site rights
Tempelhofer Feld (Berlin)	City	Irregular	Flat	Mixed	Full site rights
Les Grands Voisins (Paris)	District	Regular	Flat	Mixed	Collaborative rights Appropriated site rights

6. Conclusion

Through dynamic process of cities evolution, vacant spaces tend to appear. Certainly, empty and abandoned lots in a dense urban fabric could persist for numerous reasons. This phenomenon could be perceived from different perspectives from urbanists, and landscapers to architects, geographers, environmentalists and sociologists. Multiple data, parameters and definitions are in play. This multidisciplinary produces an issue of terminology in the scientific body related to urbanism and landscape architecture. Several definitions were generated and thus, more academic clarity is needed to have more efficiency concerning the perspectives of vacant spaces. The literature review aimed to discern these definitions. It is clear that defining was not an easy task seen the complexity of the interaction between the phenomena in play urban vacancy and urban regeneration. The dominance of the idea of emptiness, uselessness and negative input is clear regardless the definer's perspective. However, academics and professionals agree also on the fact that vacancy and temporality may represent a starting point for reuse. Being a blank canvas ready to redress the urban balance, the empty urban space is considered as an adaptive tool to meet the emerging needs of the community, and reach economic growth. The vacant space got rid of the earlier negative connotations, as it was generally defined by the character of decay, deterioration, as leftovers. Seen from a futuristic perspective, the evaluation of vacant urban spaces has changed and it offered the possibility to rethink the design and even the structure of the city. In the process of establishing the role of the vacant urban spaces as a sustainable way of urban regeneration, the definitions helped set a categorization for these spaces. Multiple researches started on the analysis of transformed unused urban spaces, in order to develop a guidebook to urban recycling. As a demonstration of the modus operandi of the methods used in this process, the illustration of the examples in the precedents analysis, presented the factors of analysis and the result of the considerable transformations of unused empty areas.

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