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Green Galaxies;
An Interstitial Strategy for Restorative Spaces

INTRODUCTION

Fifty years ago, landscape architect Robert Zion made a design for a small park on an empty lot at 56th Street in New York. It was a speculative design, as the prototype for a new kind of public space, the pocket park. As a critique against the then officially determined minimum size for urban parks of 12,000 square metres, to which he referred as a "myth without foundation", Zion made a proposal – at once modest and monumental - to build a pocket park on every midtown block in Manhattan. He argued for a system of public gardens measuring the size of one single building lot and meant for relaxation for the employees of the neighbouring offices. Zion described the pocket park as: *"a part of space removed from the flow of traffic (including pedestrian traffic), enclosed, protected and sheltered from noise. Preferably it is a space between buildings, benefiting from the shelter of neighbouring structures; the type of space which is now most commonly used as parking lot"* (Zion and Breen, 1963).

The issue addressed in this plea for the smallest possible parks, is the pressure that continuous urbanization puts on open space. In 2050 70% of the world's population is expected to live in the urban environment, and the distance to open areas continues to grow. Decades of research by renowned environmental psychologists Rachel and Stephen Kaplan have shown that relatively natural environments offer possibilities for psychological restoration, which is why most people tend to prefer these environments (Kaplan, 1995). But with growing urbanization, access to natural spaces - the landscape horizon, the reference to nature, and the connection to the underlying landscape - becomes increasingly hard. Consequently the question arises to find spaces as settings for restoration in the *urban* environment. Small-scale alternatives are likely to become more important as settings for restoration.

PROFUSION

A crucial element of Zion's argument for pocket parks was their profusion: *"For such parks to contribute effectively to city life they must be readily available. They should not be looked upon as mere amenities of City Life; they have become necessities. And necessities must, by definition, be close at hand, easily come by. Their presence must be felt everywhere throughout the area – on the way to work, on the way to home, as well as during the lunch hour. If such a system of parks is to succeed, there must be a PROXIMITY as well as a PROFUSION. One such park for each square block."* (Zion and Breen, 1963). However, a park for every block suggests an amount of organisation, a fixed urban image, which is far beyond the present-day available planning instruments and resources. Instead a strategy that makes use of availability has better chances.

STARRY SKY CITY

One of the best-known examples of such a strategy of profusion is the series of playgrounds that Dutch architect Aldo van Eyck designed in Amsterdam, twenty years before Robert Zion exhibited his proposal for New York. Van Eyck's first playground was a reaction on his observation of the need for children's playgrounds in the war-ridden city, but

it multiplied into 734 playgrounds in the next 30 years, partly designed by Van Eyck, partly by fellow civil servants, using his original design elements[1]. What began as an ad hoc reaction accommodating immediate user needs, became official municipal policy, incorporated in the large-scale, post-war extension plans, and creating an exceptional network of public facilities for children.

Despite the modesty of their scale and subject, the playgrounds were most significant. Van Eyck's achievement was to transform these formless stretches of land from 'blind spots' on a city map into defined places. He saw Amsterdam as a constellation, a scheme made up of situational arising units. Liane Lefaivre coined the term 'starry sky city' to describe this, analogous to Mondrian's so-called 'Starry Sky' paintings, in which the artist moved away from the classical, closed mono-centric composition towards an open, anti-classical compositional strategy based on a randomly distributed, polycentric galaxy of nodal points (Lefaivre et al., 1999, pp. 69-70).

The derelict sites of torn-down buildings, traffic islands, medians, widening of the pavement, and unkempt plantations can be gathered under the notion of interstitial spaces. They are the 'negative' spaces of a city: in-between spaces without apparent meaning or function, which we see but never register. Emerging in the cracks and interstices of the city and overlaid upon the existing urban fabric, the playgrounds can be seen as the forerunners of an 'interstitial' approach to the city.

PUBLIC SPACE ACUPUNCTURE

Peter Smithson compared Van Eyck's playgrounds with grains of sand, which, when introduced into an oyster (the city) caused irritation and thus gave rise to a pearl (renewal of urban life) (Smithson, 1956). This comparison resembles the contemporary notion of urban acupuncture, a theory that focuses on urban 'pressure points' to create positive ripple effects affecting the entire community: if the needles are in the right spots, the effect on the entire body is considerable and beneficial. Borrowing from the concepts of acupuncture, according to Kyle Miller the theory talks about the benefits of a targeted (small-scale) approach to 'healing' the (large-scale) malady of urban decay, rather than large-scale revitalization projects that are thought to be not only less effective, but also increasingly less feasible, as municipal budgets tighten. Moreover, such projects fail to meaningfully involve their surrounding communities in their planning and development, discouraging long-term local stewardship. The basis of the theory is that urban revitalization must begin at the local level (Miller, 2011).

However, urban acupuncture is dependent on enterprising pioneers, whose number is finite, and the interventions are not necessarily related. These urban interventions become more specific, and more effective on the large scale, when they focus on the public space arena. Then we can talk about 'public space acupuncture,' a term coined by architects Helena Casanova and Jesus Hernandez (Casanova and Hernandez, 2011). The independent but coordinated interventions create direct improvement in the immediate surroundings, but at the same time, because they are part of a broader strategy, they produce a large-scale benefit for the city. Examples of public space acupuncture are often part of larger strategies to renovate infrastructure or landscape elements of a city, such as harbour areas or waterfronts. Or they concern strategies that affect the ambit of the existing public space, like the network of interventions realized in Barcelona during the 1990s, consisting of dozens of small and medium-sized squares and boulevards.

In 2009 the municipal housing office of Zaragoza started a programme in response to the many complaints about the neglected state of vacant lots in the historic city centre. Initially

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[1] Unfortunately from the 1970's onwards the network began to deteriorate. Many playgrounds were neglected, fell prey to vandalism, were randomly transformed or demolished. Nowadays 370 playgrounds have disappeared and 237 have been changed beyond recognition (Vermeulen et al., 2001).

the plan was just to clean up private vacant lots, but soon the idea emerged to open some for public use, enabling numerous urban voids throughout the city centre to be integrated into the public space network. First the plots in the most frequented areas of the city centre, whose owners were willing to collaborate, were taken in hand. Their success led to the creation of the 'Estonoesunsolar' ('This is not a vacant lot') technical office, to manage the process. It proposed specific plots to develop because of their strategic location in the city. Thus the initial system was transformed into a coordinated, hybrid strategy of public space acupuncture, merging a bottom-up and top-down approach, which today has realized more than 30 interventions. Empty spaces have been re-activated and transformed into 'places', and demand for new projects has spread to areas outside the centre of the city.

The strategy of the coincidental does not need an existing, dense urban fabric and can be implemented in any metropolitan situation. The (unexecuted) design for Almere-Hout, a future district of the city of Almere, by Ellen Marcusse (2001) was based on a trade-off between an orthogonal urban grid and the invisible landscape layer of the many archaeological sites in the area, the former bed of the Zuiderzee. At key archaeological sites holes were to be scooped out of the urban fabric, to enable future excavations here. The holes were conceived as urban gardens. The location of these sites is yet unknown, so the resulting pattern has an element of unpredictability built in. In fact the large-scale and functional overall plan is fully dependent on the as yet unknown urban gardens: a composition based on place, time and coincidence.

INTERSTITIAL GARDENS

Extensive and valuable thoughts have been spent on the implementation of public spaces that can increase social cohesion, decrease vandalism, raise property value, and improve the health of people: stimulating community involvement, stewardship, facilitation by the government, private funding, social return of investments, etcetera. Not so much has been said, however, about the quality of the spaces themselves, the design as the complementary component of their realisation.

After seeing an exhibition where Robert Zion's design was shown, William Paley asked him to create a pocket park as a memorial for his deceased father: Paley Park. It opened in 1967, and still is one of the most extensively used public spaces of New York. This paper presents Paley Park as a case study of an urban garden, to discover several landscape architectural translations of the different aspects of a restorative setting. Which qualities characterise an interstitial garden as a restorative space that connects to landscape and nature?

A garden is traditionally a place for relaxation, recreation and contemplation of nature (otium), as opposed to negotiation (negotium), business, affairs and preoccupation. Robert Zion stresses this in his argument for the creation of pocket parks: "*The Midtown park is for Rest: Rest for the office worker who has finished lunch and seeks a place to spend the remainder of the lunch hour; Rest for the shopper – an opportunity to put down her parcels, recline a moment in a comfortable chair, and perhaps sip a coffee before continuing; Rest for the tourist or passer-by who will be refreshed visually by the scale of the place and by the dense green growth and aurally, by the quiet of the tiny space*" (Zion and Breen, 1963). This is brought about firstly by creating enough places to sit. To fill the space with ledges, steps, benches and movable chairs would - programmatically as well as visually - support the function of relaxation, *otium*.

The roots of the trees in Paley Park reach out through the paving to the water-carrying subsoil. In urbanised surroundings asphalt, concrete and buildings often meet without any in-between surfaces, preventing water from penetrating the ground. In their research into rain gardens for downtown Vancouver, landscape architect Daniel Roehr and his colleagues summarise that gardens, which break up the impervious surface and re-attach to the natural system, could add to the drainage capacity of the city, as an absorbent landscape to soak up, store and slowly release rainfall (Roehr et al., 2009). Overhead a

plane of foliage obscures the view to the surrounding high-rise, suggesting the infinite sky beyond the leaves. When the horizon is obscured and view is constraint, the suggestion of a slice of the sky could open up unsuspected views to infinite space. The *urban tissue is pierced*, both 'floor' and 'roof'.

An entrance space at street level, a transition space narrowed by two kiosks, with a gate and flight of steps, the main space filled with honey locust trees, and a raised pool terminated by a water wall form a *spatial unity*. In one single gesture the staging of sequential spaces guides the movement into the garden, stages the view from the street, and differentiates the space from its surroundings.

The water wall attracts the view, underlined by the bright line of foam where the water hits the pool. The raised pool brings this line at eye level, creating a visual focus, an artificial horizon as a continuation of landscape space. The horizon is the natural limit of landscape space, and its condensation and internalisation into the confines of the interstitial garden is like a *condensation of natural space*, an internal vista.

The enclosing buildings shut out noise, wind, cold, sun and the stench of exhaust fumes. By exploiting this basic situation, sensory impressions are enhanced. The textures of leaves, the sound of water, the humidity in the air, in other words the *sensory perception* provides an unconscious, bodily awareness of nature.

The trees, water wall and ivy-clad walls constitute an abstract image of nature: a 'forest' of trees in an overgrown mountain canyon. This *landscape reference* recalls the virgin landscape of the peninsula of Manhattan, with its forests, streams and rocks, and its rugged, glacially formed topography, planed nearly flat in the course of the city's development.

Flower tubs with tulips and chrysanthemums demonstrate the seasons, in contrast to the evergreen ivy and the artificial lighting that take away any reference to time and give the garden an eternal feel. In every garden these 'layers' of natural materials reflect different *durations of time*.

These principles constitute landscape architectural spaces, relating to nature and to the underlying landscape. However, Paley Park is overcrowded at lunch hour, unable to fulfil its prime function of relaxation. Since usage is so highly localized, the addition of other small-scale open spaces would provide for other localities. Paley Park[2] stimulated municipal policy to provide incentive bonuses for developers who would provide plazas. Since then over five hundred small-scale informal public spaces were introduced in Manhattan, Brooklyn and Queens. Notwithstanding, no one of them relates to nature, to the horizon, or to the underlying landscape. Additionally none of them have been conceived as gardens, offering possibilities for psychological restoration.

Garden qualities – as summarised above - need to be projected onto the interstices of the urban fabric, to create not only urban space acupuncture but also a green galaxy, providing settings for restoration. Paley Park was built on a derelict building site, only three blocks away from where the original design was situated. Maybe this choice of location was the real stroke of genius of Paley Park. Transforming a fallow lot into an urban garden makes it accessible: physically, visually and symbolically, reconnecting it to the public space

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[2] Zion's proposal coincided, not accidentally, with municipal policy: *"Since 1961 New York City has been giving incentive bonuses to developers who would provide plazas. If they did so, they could add 20% more floor space over the amount normally permitted. So they did – without exception. Every new office building qualified for the bonus by providing a plaza or comparable space; in total, by 1972 some twenty acres of the world's most expensive open space"* (Whyte, 1980 p. 104). Since then over five hundred small-scale informal public spaces were introduced in Manhattan, Brooklyn and Queens. The huge difference was that his were not plazas, but parks.

system.[3] Gardens have high value levels (Weilacher, 2008 p. 124), and the garden renders these spaces valuable, while retaining the quality of otherness, as part and counterpart of metropolitan life.


CONCLUSION

An interstitial, cybernetic, polycentric urban strategy, which provides a set of conditions, rather than define particular urban locations, can create a galaxy of public spaces, a non-hierarchical pattern of randomly distributed nodal points, so ubiquitous that each unit would be both special and ordinary. In order to make optimal use of the existing, the stars of the galaxy can be created in available spaces: the interstices of the urban fabric. Since such a pattern, emerging from the cracks and interstices of the city, is superimposed on the existing urban network, it doesn't need its own connections.

In order to create urban settings for restoration, the interstices - removed from the flow of traffic and benefiting from the shelter of buildings - need to be transformed into public gardens: small-scale architectonic interventions where the interaction between city and underlying landscape is intensified. In an interstitial garden an internal horizon replaces the landscape horizon and an image of nature provides a narrative reference to the landscape. To contribute effectively to urban life, interstitial gardens must be part of daily life, and easy to reach. Since their use is so highly localized, the addition of other gardens will not saturate demand. They will increase it.

A separate layer of gardens, aside from the urban network and at the same time intertwined with it, could open up a completely new view to the city: a 'green galaxy.' Its internal logic, determined by situation, dependent on time, coincidence and circumstance, is derived from the in-between and coincidental character of the gardens, simultaneously autonomous and situational. Overlaid upon the existing urban fabric it would offer a counter current to the rush of urban activity, offering eddies in which to pause and gather strength before venturing back into the daily preoccupations.

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[3] Visual, physical and symbolical accessibility are interrelated. If one of them is reduced, the others compensate. Even when closed (at night-time) the park is not taken away from the public domain. If it is clearly visible and its image and history are encased in the collective consciousness of residents, it is still perceived as belonging to the public realm (Carr et al., 1992 pp. 138-144).
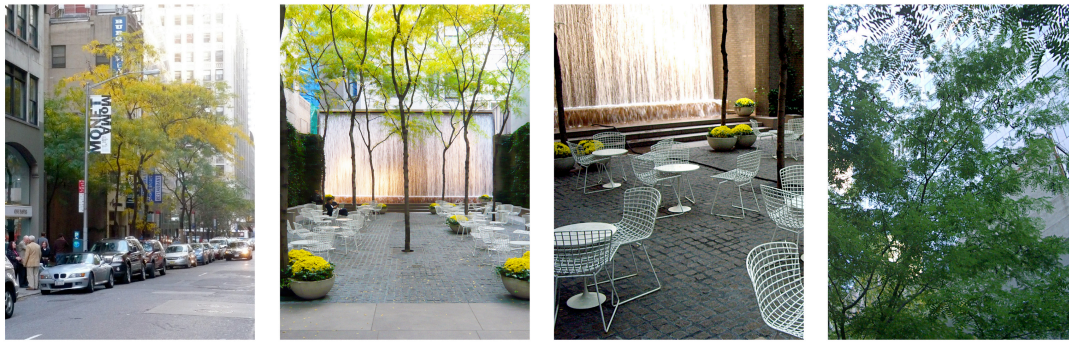
Interstitial garden: Paley Park, design Robert Zion 1967. The street trees mark its position in the urban tissue, the water wall attracts the visitor, the chairs invite to rest, and the foliage suggests the space of the sky (photographs by Sebastiaan Kaal).
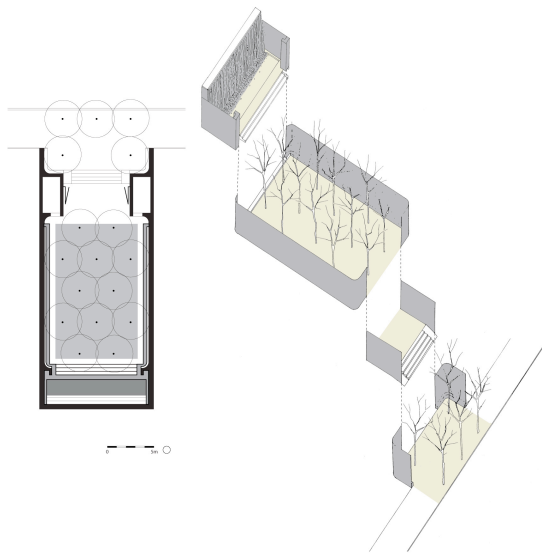
Paley Park: facilitating *otium*, piercing the urban tissue, possessing spatial unity, condensing natural space, stimulating sensory perception, expressing time, providing a landscape reference (drawings by author).

Green galaxies: interstitial gardens in Midtown Manhattan (drawing by author); and in Almere-Hout, design Ellen Marcusse 2001 (drawing by Gemeente Almere).

BIBLIOGRAPHY

CARR, S. & FRANCIS, M. & RIVLIN, L. G. & STONE, A. M. 1992. *Public Space*, Cambridge, Cambridge University Press.

CASANOVA, H. & HERNANDEZ, J. 2011. The regeneration of public life. '*Scape*, 1, 18-25.

JOHNSON, J. 1991. *Modern Landscape Architecture; Redefining the Garden*, New York, Abbeville Press.

KAPLAN, S. 1995. The restorative benefits of nature: toward an integrative framework, *Journal of Environmental Psychology*, 15, 169–183.

LEFAIVRE, L. & TZONIS, A. 1999. *Aldo van Eyck Humanist Rebel; Inbetweening in a Postwar World,* Rotterdam, 010 Publishers.

MILLER, K. Urban acupuncture: revivifying our cities through targeted renewal, *Kyle Miller MSIS*, September 25, 2011, http://kylemillermsis.wordpress.com/2011/09/25/urban-acupuncture-revivifying-our-cities-through-targeted-renewal/ viewed on 10 Aug 2012.

ROEHR, D. & KONG, Y. & KUNIGK, I. 2009. Green Streets Potential for Downtown Vancouver. *Landscape – Great Idea!* Vienna, 70-72.

SMITHSON, P. 1956. Final Report Commission B4, Cluster. *CIAM 10,* Dubrovnik, unpublished congress report.

VERMEULEN, C. & WILDRO, A. 2001. *Analyse en in situ onderzoek van de speelplaatsen van Aldo van Eyck in Amsterdam tussen 1947 en 1978,* Gent, scriptie Universiteit Gent.

WEILACHER, U. 2008. *Syntax of Landscape; The Landscape Architecture of Peter Latz and Partners,* Basel/Boston/Berlin, Birkhäuser.

WHYTE, W. H. 1980. *The social life of small urban spaces,* New York, Project for Public Spaces.

ZION, R & BREEN, H. 1963. *New Parks for New York,* New York, Architectural League of New York.