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Thin Parks / Thick Edges

Towards a linear park typology for (post)infrastructural sites

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Introduction: edges and ruptures

Edges are often the most dynamic locations in ecosystems. The cusp is spatially and temporally the zone of maximum activity, exchange, hybridization and instability. This condition extends beyond intersections between ecotones in natural systems. For example, despite their disturbance, cultural impositions such as roads often attract the most verdant growth at the edges. The vibrant edge metaphor also has currency in cities, where edges have a polyvalent relationship with urbanism. An edge can be evoked in the positive sense of a transition, threshold, or activity corridor. Conversely, an edge may imply an impermeable boundary, rupture, or linear void in the urban fabric.

Although Barceloneta's urban/beach transition (figure 1), Sydney's suburban/oceanic cliffs (figure 2), or New York's Central Park/urban interface provide spectacular edge conditions, urban areas are typically incised with more unassuming boundary-forming conditions. While underlying geomorphology is sometimes the determining factor, infrastructural intrusions such as freeways that create dead-ends for those dwelling nearby, or the repellent effect of social hostilities are more likely to create transitional edges and uncrossable spaces (Figure 3). Ruptures may be highly visible but actually superficial in an urban sense, or may hide major disjunctions that are not readily registered through conventional Cartesian mapping. Without clear identity, these situations often exhibit terrain vague characteristics. (de Sola Morales 1996)

Figure 1.
Mediterranean
Sea/beach/
Barceloneta
interface,
Barcelona.

Figure 2. Pacific Ocean/sea cliffs/Dover Heights interface, Sydney.

Figure 3. Goal oriented pedestrian desire-line tracking across the void of the Monumental Axis, Brasilia.

In cities, as in nature, edges are not abstract vectors with effective dimensions of zero, but are thickened in the sense that they exhibit physical width in the real world. Even a single fence line—whether dividing private properties or nation states—exerts an indistinct apron of influence on either side. Within this interstitial zone, edge becomes thick edge-space. Post-industrial cities are laced with such edge-spaces, which are more likely to be the by-product of a plethora of cultural processes and needs than be pre-planned into the urban figure-ground pattern (figure 4). Examples include active, redundant or dormant transport easements (including disused railways and freeway tear-downs); energy infrastructure easements (including high voltage lines and gas pipelines); political boundaries, such as municipal edges, or in more extreme cases, divisions of sovereignty and/or ideology (for example Nicosia, Jerusalem, El Paso/Juarez, Gibraltar, Melilla, Belfast, Berlin); post-industrial waterfronts and rivers (including highly engineered urban rivers); and the ubiquitous ‘buffer’ zones between suburban advancement and the defences of walled communities (figure 5).

Figure 4. Sample of linear voids in the East Bay Area, California.

Figure 5. Typology of (sub)urban linear landscapes, top left to bottom right: (a) planned linear armature; (b) decommissioned railroad easement; (c) freeway shoulder; (d) unrealized freeway or teardown; (e) freeway bury; (f) utilities easement; (g) political or post-political; (h) urban river; (i) post-industrial waterfront; (j) suburban setback.

With the paradigms of ‘connectivity’ and ‘contextualism’ dominating contemporary urban discourse, edge-spaces are often treated as thin anomalies to be ‘smoothed over’ or ‘stitched up’ in order to mitigate the disjunction. Seamlessness takes many forms, but the most persistent is the ‘build out’ constituted as the projection of adjacent urban form, so often pitched against the ‘park’ as the benign embodiment of collective community aspirations (figure 6). Berlin’s No Man’s Land has been the most potent stage for this debate, with propositions for linear parks from Zaha Hadid, Anna Grichtig and many others positioned in opposition to the build-out/stitch-up that financiers and city planners favour.

Certainly, there exist appropriate situations for the stitch-up; the reconstitution, for example, of a community that has been released from the imposition of a freeway which tore it apart for a generation or more (figure 7). However, in many instances, adjacent locales operate according to decidedly different logics, such as a neighbourhood ‘on the other side of the tracks’ that will be altered when the tracks are removed. Here, ‘zipper urbanism’ is akin to attempting to smooth out a cliff, or stitching an egg to an omelette.

[1] The lingering *Mauer im Kopf* (wall in the head), which still weaves through Berliners’ psycho-geography of their city today despite 20 years of meticulous stitching since the fall of the concrete wall, potentially illustrates this condition.

Along side and in-between

Given such pervasiveness at the metropolitan scale, linear edge-spaces may be interpreted as the threads that weave the disciplines of landscape architecture, urban design, planning and ecology together. Nevertheless, despite broad cross-disciplinary relevance, linear landscapes are mostly associated with variations of ‘green infrastructure’, ‘landscape corridors’, ‘greenways’, ‘rails-to-trails’, and ‘wildlife corridors’. Accordingly, critical discussion most commonly operates in the context of larger regional, ecological and recreational systems, and less in terms of immediate and adjacent design qualities.

The relationship between urban design and linear landscapes is often problematic. On the one hand, linear spaces are tools of revitalization, simultaneously delivering recreational amenity and connectivity into dialogue with urban structure. On the other, linear parks perpetuate the perceived rupture and ‘leakage’ of traditional urban form. Kevin Lynch, for example, was not convinced of the effectiveness of linear open space as a definer of city form, “unless that space itself is a powerful landscape: an ocean, a mountain range, or a great river”. (*Lynch 1981: 437*) Andrés Duany has been particularly dismissive of linear parks as “an extended venue for crime” (*P/A Awards 1994: 55*), and as a reoffering of the “matrix of green as a buffer” that perpetuates the problematic dispersive tendencies of the modern city. (*Duany 2010*)

Landscape architecture also exhibits a historical ambivalence toward linear edge-spaces. Ken Smith applies the terms ‘chunks’ and ‘strips’ to this as a key site/anti-site dualism in contemporary landscape. For Smith, ‘chunks’ are the place-defining, contiguous, and balanced sites that ground so many celebrated projects. ‘Strips’ on the other hand

Figure 6. Examples of linear landscape solutions, from top: (a) active easement as hybrid condition (power lines coexisting with ‘small box’ retail/service), Fremont, California; (b) redundant easement as total build-out maximizing residential yield, San Jose, California; (c) active utility easement with typical serpentine path, Hayward, California.

are often evasive, slippery and transitory entities that approach, circumvent, or divide chunks:

Linear strips of space are overlooked, underappreciated, and marginalized. [...] Chunks are thought to be the best commissions. [...] Yet this belies the reality of much landscape architectural production, which is increasingly devoted to exploring what happens in the margins—in left over spaces, in-between areas, and along-side conditions. (Smith 1999: 77)

There are very real reasons for the historical marginalization of the strip in design theory and praxis since the zenith of axial boulevards

Figure 7. Examples of linear urban ruptures, from top: (a) alignment of a segment of No Man's Land, Kreuzberg, Berlin; (b) Central Freeway teardown, Hayes Valley, San Francisco; (c) easement for unrealized freeway extension, Santa Rosa, California.

in Baroque and Neoclassical cities. The detritus of engineering and commerce have largely determined equivalent armatures in the 20th century, creating a symbiotic alliance of strip malls and transport/energy infrastructure. Despite efforts to approach this vernacular head-on (see Venturi 1972), design did not achieve relevance until well after the saturation of modern infrastructure (e.g., freeways) and the decline of industrial infrastructure (e.g., railways). The cross-disciplinary application of diverse rubrics, ranging from *terrain vague* (de Sola Morales 1996) to ecological patch/corridor theory, provide new lenses through which to view the ‘along-side areas’ that had been largely invisible to designers.

Situated within this context, the ‘strip’ or ‘thick edge’ is most often manifested for landscape architecture as the linear park, which increasingly takes its place alongside large parks, neighbourhood parks, pocket parks and urban squares as a subject of legitimate design practice.

Characteristics of thin parks

What defines and characterises a thin park? Thin parks are frequently the design solution for linear infrastructural spaces in post-industrial cities. The High Line in New York is one highly visible recent example, although as an elevated promenade on a post-infrastructure ruin it is an exceptional case (though not without applicable lessons). In addition to occupying decommissioned infrastructure, thin parks also inhabit sites derived from a range of other typological origins including current infrastructure, planned urban figure-ground, boulevard/parks, post-political spaces, urban waterfronts, and urban rivers. In addition to the pre-condition of the site—which due to the high ‘edge effect’ exerts a strong influence on the resultant linear park—a host of other influences, both internal and external, help shape a given linear landscape and determine its success or failure.

This article distils, interprets and categorizes the influences on thin parks and establishes the congruencies and exceptions that distinguish many thin parks. These characteristics are filtered into a more refined set of thin park types that demonstrate a distinct set of common design motivations underlying diverse linear parks. Finally, this typology is vetted for their effectiveness as urban armatures that positively impact surrounding urban structure. Whilst any given park is most often a complex assemblage of more than one type, illuminating its underlying patterns remains an important descriptive and analytical methodology. The objective of this decoding is to provide a context for designers advocating thin parks in urban and peri-urban situations.

Using a range of spatial and observational metrics, the study draws on qualitative and quantitative data gathered from an analysis of 20 linear parks covering a range of linear site conditions (figure 8). For

reasons of expedient field study and availability of high-resolution aerial imagery, most parks examined for this comparative analysis are located in North America and Europe. With the exception of One North Park in Singapore, which remains under construction, all thin park case studies were of well-established extant projects with intact urban or suburban contexts. Common characteristics that emerged from the analysis are summarized below.

1. Proportional definition. Thin parks exhibit a high perimeter-to-area ratio. The minimum length-to-width ratio for a linear park to be read as such is approximately 10:1, although this is highly contingent on other factors influencing the relative perception of length and width. The maximum ratio is harder to establish, since at some point linear parks may be considered greenways. For example, thin parks associated with urban rivers such as Guadalupe River Park in San Jose, California are frequently difficult to define in terms of the length of a single entity; phased implementation of distinct river improvement projects and ambiguity between what is ‘designed’ and what is ‘engineered’ contributes to this indistinctness. In contrast, thin parks on post-industrial waterfronts are often comparatively confined in length on account of adjacent active port areas or off-limits brownfield sites.

2. All edge. With high proportional ratios thin parks are all edge and no middle. Heavily defined by their margins, linear parks are more likely to be experientially volatile than large parks. Just as ecological corridors favour edge species (*Forman 1995: 149*), thin parks are biased towards contextual exchange. The most extreme examples of this phenomenon include post-rail infrastructural adaptations such as High Line and the Promenade Plantee, which are pedestals for a larger contextual experience. Adjacent edge conditions also affect many boulevard-parks, including Unter den Linden in Berlin and Oakland’s Mandela Parkway. The impression of surrounding land use, urban form, traffic, and street level activity effectively narrows a thin park. In the manner of ecological strip corridors (*Forman 1995: 150*), long parks with sufficient width begin to harbour internal non-edge environments, although this is often an indicator of a large park.

3. Limits on size. Independent of their proportions, maximum and minimum scales curtail thin parks. Too large, and a park that exhibits an abundant linearity ratio will read as a large park, since a park user will not be able to sense differential length from width and will feel completely immersed. This impression is formed via a complex relationship between physical distance and the extension or restriction of sightlines; typically, from anywhere within a linear park a park user will have a simultaneous impression of both edges, either via direct sight, peripheral sound, or implied through the presence of physical features normally associated with an edge (such as screening) (figure 9). For example, Lincoln Park in Chicago and the Emerald Necklace in Boston are both categorized as large parks (Czerniak 2007: 24), despite having extremely high linearity ratios on account of the significant width and immersive internal programming. Conversely, despite exhibiting widths of a similar order of magnitude, Crissy Field in San Francisco retains definition as a thin park due to the clear sightlines and constantly legible edges.

Too small, and a park that fulfils the 10:1 minimum ratio requirement will read as a pocket park rather than a linear park, since the user will simultaneously comprehend both ends of the park and negate the impression of linearity. Additional effects can mitigate this characteristic. For example, at just 200 metres long, the diminutive Topographie des Terrors in Berlin maintains thin park classification through the immersive qualities of the linear below-ground level exhibit and the spatial compression associated with the adjacent remnant of the Berlin Wall, both of which distract attention from the ends of the space.

4. Contiguity vs. cross-connectivity. Thin parks exist in a dialectical relationship with urbanism. On the one hand, contiguity is highly advantageous for linear parks as identity and functionality are typically enhanced. On the other, contiguity conflicts with the fundamental urban principal of connectivity, which typically implies vehicular cross-streets connecting urban form on both sides of the park (figure 10). This tension is explicated with two diametrically opposed examples. The Panhandle in San Francisco halts the urban

Figure 9. Typical thin park 'edge impressions', from top: (a) Topographie des Terrors, Berlin; (b) Avenue Foch Promenade, Metz, France; (c) High Line, New York; (d) Gabriele-Tiergit Promenade, Berlin; (e) Mauerpark, Berlin; (f) Panhandle, San Francisco, CA. Drawing (b) by Meghan Sharp, drawing (f) by Gar-Yin Lee.

Figure 10. Examples of varying of linear park cross-street fragmentation, from top: (a) Rose Fitzgerald Kennedy Greenway, Boston; (b) Mandela Parkway, Oakland, CA; (c) South West Corridor Park Section 1, Boston; (d) La Promenade Plantée, Paris. Diagrams not to same scale.

street grid at all but one location. Here, street gives way to park. By contrast, an intersecting street grid that remains wholly intact fragments both Mandela Parkway and Commonwealth Mall in Boston. In these instances park gives way to street. Singapore's One North Park seeks to circumvent this dialectic through partial vertical separation between park pedestrian circulation and vehicular cross-streets. The elevated morphologies of Olympic Sculpture Park (Seattle), High Line and Promenade Plantee are examples of completely grade-separated systems.

5. Lateral porosity. As the particular post-infrastructural conditions of the site most often enforced, the degree of side-permeability varies greatly between thin parks (figure 11). Place d'Youville in Montreal and Commonwealth Mall are both highly laterally

Figure 11. Examples of varying degrees of linear park side access, from left: (a) Place d'Youville, Montreal; (b) Commonwealth Mall, Boston; (c) Mauerpark, Berlin; (d) High Line, New York. Diagrams not to same scale.

permeable, a condition that an abundance of pedestrian access points from the adjacent sidewalks establishes in both instances. High Line and Mauerpark exhibit far less lateral access. Applying the dominant paradigm of connectivity, Ian Baldwin (2009) argues that to fulfil its potential, High Line requires more comprehensive integration with buildings and streets. Given that the disconnection to public amenity is widely understood as a significant negative condition within the modern city, Baldwin's argument is understandable. Nevertheless, the success of a thin park does not appear to be heavily influenced by the porosity of its sides. On the contrary, restricted permeability potentially enhances the sensation of exoticism or difference. When the spectacle of the promenade and its events lures a visitor in, they make a conscious decision to be in the park and not on the street.

6. Absence of ecotones. Independent of the degree of permeability, hard interfaces dominate thin parks. Edges typically formed by roads, balustrades, or fence lines reinforce Richard Forman's (1995: 83) observation that "cultural edges tend to be straight, without coves, lobes, or tiny patches". In suburban contexts, 'fence creep' and neighbouring residents' general appropriation of linear park edges for semi-private purposes often helps to soften the edge interface. However, such appropriation does little to enhance the heightened interaction associated with the 'interdigitating' [2] concave and convex edges observed between many natural ecosystems.

7. Linear transit. The expectation for providing lateral transit from somewhere to somewhere else burdens linear parks. Entrance/exits at both ends joined by an efficient thoroughfare encourage this assumption. Degrees of success vary depending on the significance of the end destinations, the degree of connectability versus fragmentation along the length of the linear park, and the presence or absence of a return path. Whereas Unter den Linden is significantly landmarked at both ends, Rose Kennedy Greenway in Boston is hindered by problematic freeway tunnel bookends and a high degree of fragmentation. Elsewhere, thin parks use shrewd design techniques to circumvent this problem of 'how to end an axis:' for example Gabriele-Tiergit Promenade in Berlin uses a helical earth-form to obscure the anti-climax of its southern end.

8. Tunnel vision. The elongated habitus and linear transit impulse associated with thin parks can lead to a tunnelling effect. Although appropriate in the context of the grand sight-lines and approaches found in ceremonial linear landscapes such as the Mall in Washington D.C., in many instances over-emphasizing the long axis at the expense of the cross axis destabilizes thin parks. Strategies for ameliorating this condition often involve the use of landform (as on Gabriele-Tiergit Promenade), planting, materiality and complex path alignments (as explicated in the Southwest Corridor Park, Section 1 in Boston).

9. Geometric rigidity. Given the planned or infrastructural origins of most linear park sites, the majority are straight and narrow, containing at most one or two oblique angles. Significant deviations include the arced Rose Kennedy Greenway, the serpentine One North Park, and the ornately folded Olympic Sculpture Park. With issues of contiguity and connectivity exerting far greater impact, complex geometry does not appear to be a significant factor in thin park performance and identity. In fact, in high-density urban contexts in particular, a crooked template can help to reduce the 'tunnelling effect' whereby peripheral buildings obscure sightlines and diminish the tendency to visually consume the entire thin park in a single glance.

10. Peninsula effect. Thin parks with little or no lateral permeability and uneven calibration of end-only access points are susceptible to the cultural equivalent of the peninsula effect, whereby species diversity declines from base to tip of a peninsula. Mauerpark illustrates this phenomenon. With little side permeability and access heavily biased to one end, park users must at some point take a conscious decision to turn around and go back. The result is diminishing patronage and diversity further into the park. This is not necessarily a negative condition since it potentially promotes greater overall diversity whereby a variety of park users are able to find their niche, and possibly form 'subcultures' along the way.

11. Compressed circulation. In parks generally, loop paths contain the inbuilt feature of automatic return to one's point of origin. Loops are thus enormously popular with park users, since they represent complete knowable worlds and do not require cognitive mapping to navigate. Although wider thin parks such as the Panhandle can accommodate loops, most thin parks contain sole promenade type arrangements that require the park-user to make out-and-back journey to return to their point of origin. This obliges the user to make a conscious decision on when to turn around and retrace their steps. To augment the legibility required to facilitate such return journeys, single-path linear parks often utilize a combination of a series of landmarks, revealed views and changing programmes to

support cognitive positioning along the way and to differentiate the outward journey from the return.

12. Design continuity. In the context of fragmentary external pressures, the design layouts of thin parks typically rely on repetition of design elements and branding to maintain the integrity of the whole. From the braided trails of Guadalupe River Park, through the vivid interdigitated path edgings of High Line, to the precise demarcations of surface materiality of Unter den Linden, seamless continuity of ‘design form language’ is an almost universal feature. Forming ‘rooms’ of distinct theming and design form-language is less common. Of the parks examined only Rose Kennedy Greenway used this strategy, which the heavily fragmented circumstances of the site enforce to a certain degree.

13. Programmatic exclusivity vs. layering. Like streets, thin parks are programmatic compromises that either assign space for the exclusive use of individual programmes or accommodate hybridized un-programmed space. Assigning programmes exclusive space has much in common with modern boulevards where each transport type—including fast traffic, slow traffic, parked traffic, cyclists and pedestrians—is designated sovereign use of boulevard territory. The Southwest Corridor Park is a highly compartmentalized example where urban agriculture, recreation, leisure, circulation and egress each exclusively occupy territory. Hybridized un-programmed space has more in common with the European piazza, where on a single undesignated surface numerous programmes coexist in a constant flux of negotiation. Both the Panhandle and the Mall exhibit peripheral circulation and multifunctional grass expanses that can be continuously reprogrammed as required.

14. Programmatic shoehorning. In thin urban spaces that are built out, spatial-programmatic specificity strongly dictates the layout and densities of new buildings. Similarly, rigid dimensional constraints influence programmatic self-selection in thin parks, whereby programmes are literally limited to what fits. The most acute renditions of this phenomenon are found in sports courts and fields,

where the width of the linear space available determines the game to be played. Site determinacy notwithstanding, games and their associated game-fields are fluid and urban actors have a knack of mutating games away from their ratified terms of engagement to fit the particular circumstances on the ground.

15. Incubators of spectacle. With all park types, spectacle can be manifest as programmed or spontaneous events within the confines of the park, or as an intrinsic scene or event that occurs outside the park but whose experience that park facilitates. By virtue of their linear habitus, extensive perimeters and heightened exposure to the urban context, thin parks are particularly well adapted to both internal and external programming. With scheduled markets and fairs, boulevard parks such as Unter den Linden are programmatically self-contained, while waterfronts such as the Central Toronto Waterfront exploit the drama of the adjacent water. Elevated rail parks such as Promenade Plantee and High Line take this concept further still, appropriating novel kaleidoscopic glimpses of the urban fabric that is visible above, beside and below.

16. Typological vulnerability. Thin parks exhibit a high degree of typological leakage and hybridization. Boulevards and malls are adjacent topologies with significant overlap, resulting in a frequent conflation of terms. Boulevards often include stratified traffic that flows in opposite directions on either side of a generous central median strip that a thin park may co-inhabit. Examples include Berlin’s Unter den Linden and Foch Avenue Promenade in Metz. True non-boulevard thin parks are satisfactorily defined as including dual-directional traffic on both sides. As Gabriele-Tiergit Promenade illustrates, each adjacent roadway functioning as an independent street erodes the impression of the boulevard and enhances the sense of an independent thin park. Thin parks are also frequently set within larger greenway systems that further dilute typological clarity.

17. Evasive identity. In urban navigation terms, linear spaces are ‘catching’ features, which means that they are relatively easy to encounter. However, even when encountered, typically high visual

permeability presents thin parks with a visibility/identity problem. This invisibility is largely inherent in the topological nature of long skinny spaces; like a runway illuminated at night, a thin park does not come completely into focus until perfectly aligned with it. Linear parks use various design strategies to overcome this effect. Gabriele-Tiergit Promenade implants landform into the viewer's sightline, positioning itself as unavoidably exotic in the context of the city and other linear features. Mauerpark controls access so that the visitor never approaches from the side and is always in alignment and 'on the runway'.

18. Fragile genealogies. At the centre of cities, large parks are customarily either repurposed hunting reserves (in Europe), or designated for public health and amenity (in North America). Whereas large parks are typically adapted to public use or pre-planned as such, thin parks tend to be retrofitted or established on entirely constructed ground. The wholesale retooling of an existing site or the fabrication of a new one creates a fragile connection with origins. Thin parks are therefore more likely to be implanted than emergent. There are exceptions; Mauerpark, for example, is the design interpretation of the self-made spatial appropriations that characterized much of post-wall No Man's Land in Berlin. Here, the genealogical rupture is political in nature and predates the construction of the park. High Line is a more complex case since the romance of the urban wilderness that underpins the project is emergent, but the realities of modern project construction resulted in a simulacra of an uncultivated landscape. With its dishevelled freeway pylons standing sentinel, Cheonggyecheon River in Seoul also trades in the romance of the ruin of the former use of the site, albeit in a more overtly manufactured way.

19. Disciplinary possession. Whereas town squares and big parks tend to fall increasingly within the scopes of both landscape architecture and architecture, thin parks tend to operate in less contentious disciplinary territory. Of the environmental design disciplines, landscape architecture has retained greatest 'intellectual ownership' of thin park projects, although this is rapidly changing as a

result of the 'High Line effect' whereby the linear park genre increasingly seduces architecture.

Thin park typology

From these identified characteristics a number of general qualities emerge. Loosely corralled around themes of programme, circulation, context and visibility, these threads are framed as seven primary types (figure 12). The objective of this typological classification is to illustrate congruencies between thin parks that transcend the influence of the origins of the linear sites that underpin them (e.g., current infrastructure, abandoned infrastructure post-political spaces, urban rivers etc.). Whilst a thin park is most likely to exhibit an assemblage of multiple types, reducing each to a principal motivation provides a baseline which is of descriptive and prescriptive use to landscape architects attempting to both *read* existing thin parks and *conceptualise* new park designs for thin sites. As outlined below, urban context and varying degrees of receptiveness to design as a creative artifice influences each type.

1. Filter. As a semi-permeable membrane, the 'filter' thin park selectively edits through-flow of matter and energy across the short dimension of the site. Vehicular traffic, cyclists, pedestrians and sight lines are alternately deflected, absorbed or advanced through the site. The Panhandle is an example of a thin park with filter characteristics; the structure of the park deflects traffic, absorbs park users, and advances goal oriented pedestrians and cyclists. The filter type is most effective in high-density urban contexts where an even and consistent distribution of stratified flows (of traffic, cyclists, pedestrians) enables the filter to be calibrated appropriately. In lower density suburban contexts, the filter is more prone to failure. Lower flow volumes and less concentrated usage make it much harder for the design to be appropriately 'fine tuned'. In terms of the designer's toolbox, selective use of road and path geometry, as well as constructed and vegetal screening, form the primary design elements applicable to creating a filter.

Figure 12. Thin park typology, from left: (a) filter; (b) programme sink; (c) conduit; (d) suture; (e) stage; (f) pedestal; (g) thicket.

2. Programme sink. As a repository for set programs, the ‘programme sink’ thin park is filled with precisely defined functional uses, usually in the form of sports courts and fields. Other functions and facilities are secondary to the maximized programmatic yield that the dimensions of the site and the fields themselves determine. Sarah Roosevelt Park and East River Park, both in New York City, exhibit programme sink characteristics, as do sections above the sunken commuter rail line in Berkeley, California. Due to the self-contained nature of many programs, context exerts a low degree of influence of this type of thin park, which as a result is equally effective in both high and low density situations and areas of urban blight or transition. However, of all the types, programme sinks are most likely to form typological monocultures, where the pressure for high programmatic yields squeezes out other uses. As a function of the spatial metrics of

particular programmes, linear programme sinks can exhibit very mechanistic design layouts. For the designer, interrogating the set programmes and seeking opportunities where game fields might be adapted or hybridized in the manner of ‘street games’ offer the most productive opportunities.

3. Conduit. As the most prevalent thin park type, the ‘conduit’ is a channel for rapid non-vehicular movement. As rails-to-trails and canal tow-path conversions epitomise, conduits are associated with river parks and abandoned rail easements. Rail and river easements are often vertically separated from the regular traffic network, a feature that makes conduit type thin parks more efficient. However, journeys along conduits still typically lack the goal-orientation of the regular street network. This is a by-product of the fragmented and disconnected reality of green networks. In all likelihood, old

infrastructure alignments and not the directional objectives of everyday users determined the route. In situations where a fragmented conduit park acts like a freeway to nowhere, design interventions that employ tactics to slow elements of the conduit down may be justified.

4. Suture. When used to stitch up an urban rupture or ‘wound’ that is usually infrastructural in origin, the thin park is constituted as a ‘suture’. [3] For example, the Rose Fitzgerald Kennedy Greenway deck stitches across the now buried freeway that ‘cuts’ through historic downtown districts. In these instances a park is not always the first development choice but may be predetermined by capital and engineering constraints that preclude the ‘build-out’ of adjacent urban form back over the rift. This is particularly problematic typological territory for the discipline of landscape architecture in that it evokes the discipline’s historical role in ameliorating the incisions of modernity. For designers, amplifying differences instead of endeavouring to apologetically mitigate them is often a more rewarding strategy. Rather than a chameleon attempting to mimic each side of its urban context, the park becomes a third element that is more honestly representative of the realities of its site.

5. Stage. As a necklace of events or spectacles, the thin park is typologically a linear ‘stage’. Inherently internalized, the theatrics of this category are programmed and positioned within the boundaries of the site. Mauerpark is the quintessential linear stage with its central spine of sequential ‘landing sites’ that host both spontaneous and premeditated events, compounded with the semi-enclosure of the folded landform. Although the borrowed cultural atmosphere often found in denser urban cores offer some assistance, stage type thin parks also have the capacity to generate their own spectacle. This suggests that suggests stage type thin parks can also function in lower density suburban environments. The critical design components in this regard are: (1) a combination of spaces that are suitably scaled and oriented to host events, and (2) proactive creative event programming.

6. Pedestal. As a linear setting for externalized spectacles or panoramas, the thin park is constituted as plateau or ‘pedestal’. This ‘extroverted’ condition places the park in a symbiotic relationship with external landmarks and atmospheres. With exotic elevation and alignments situated within the context of the gridiron street life of New York, High Line is an example of a sequence of pedestals that frame and amplify kaleidoscopic sightlines into the surrounding urban fabric. For this reason, pedestal thin parks employ Baroque and Picturesque garden and landscape design strategies including ‘borrowed landscape’, screening, and visual foreshortening between foreground and background. The pedestal type is less dependent on urban density than on the topography of the surrounding environment and the position or elevation of the linear park itself. As a consequence, if the key topological circumstances are not pre-existent, pedestal type thin parks are more difficult than any of the other types to contrive through design strategies.

7. Thicket. As a dense impediment to passage in any direction, the thin park is typologically described as a ‘thicket.’ While overgrown vegetation most evidently creates this effect, the thicket can also be a product of constructed complexity and messiness. As depth of field, interior and exterior become obfuscated, the experience from within a thin thicket is both explorative and disorienting. This type builds on Michael Mense’s (1997: 164) conceptualization of the ‘urban thicket’ as a condition that negotiates between estranged parts of the urban fabric. Rather than attempting to heal a linear rift with a suture, the thicket fills the thin park with dense matter, within which local tactical connections and disconnections hinder efficient passage from one side to the other. This literally ‘re-grows’ ingrained urban fissures as ‘thresholds’ rather than ‘ruptures’. Applied design has an ambiguous and even fraught relationship with the thicket, with extant examples tending to be emergent rather than designed in the traditional sense of the top-down application of a project to a given site. Un-engineered urban rivers often exhibit thicket traits, as do the as yet ‘un-sutured’ portions of overgrown No Man’s Land that slice through Kreuzberg, Berlin. As illustrated by this example, the thicket

is most potent when highly contrasted against its context, as is the case in dense urban areas.

Conclusions: thin armatures

Each type is suitable for particular urban contexts; for example, a linear site near a school may be most effectively designed as a 'programme sink', while a particularly topographical situation may lend a setting that is primed to operate principally as a 'pedestal'. A linear site leading to useful destinations may function best as a 'conduit', while an overgrown linear site may hold the potential to be converted into a 'thicket'. In these instances, selecting appropriate typological identities helps focus the intent of a proposed thin park for a given linear site in a given urban setting.

In addition to being strongly influenced by their context due to high edge-to-area ratios, thin parks exert influence back into this context. This symbiosis is clear in more traditional boulevard-based thin parks that demonstrate the capacity to structure a hierarchy of urban form within the surrounding urban fabric. For other linear site preconditions that cut or repel the urban context (such as active, redundant or dormant transport and energy infrastructure easements), coherently influencing adjacent urban structure is a more difficult proposition. It is, however, an outcome that is essential if a thin park is to successfully integrate with or catalyse a renaissance of adjacent neighbourhoods. That is, to empower 'strips' not as entities that approach, circumvent, or divide 'chunks', but as armatures that play an integral role in the structure of the adjacent city. [4]

Since the potential for a *perspectivally* sequenced linear approach is often limited by the realities of the site itself, thin parks located on infrastructural-type linear sites are unlikely to function as urban armatures in the sense of traditional European boulevards. Instead, urban armatures in these instances need to be recalibrated as *programmatic* sequences. Thin parks that are manifested as a sequence of experiences—whether variably visual, tactile, or event based—are typically more successful at magnetizing their urban

context. The vibrancy of the High Line in New York is a visible example of a project that achieves this with some success. On the other hand, Mandela Parkway does not move beyond a static perspectival sequence that struggles to stimulate or be stimulated by the surrounding context.

Thin parks constituted as 'programme sinks', 'pedestals' or 'stages' all have clear programmatic sequencing in the form of events and variable visual cues. Although more experientially based, 'filters' and 'thickets' also exhibit non-perspectival sequencing traits that have innate integrative and urban structuring capacities; the 'filter' by virtue of the selective threads of different forms of egress that reach out to the surrounding context, and the 'thicket' on account of the sheer contrast of its density that presents clear urban legibility.

Through these first five types, thin parks demonstrate potential to be elevated to the status of urban armatures. More problematic however, are the remaining two types of the 'conduit' and the 'suture'. At one end of the spectrum, the tunnelling effect and rapid conveyance of the 'conduit' type thin park is typically the antithesis of an urban armature in much the same manner as freeway systems impact on urban areas. At the other extreme, the tendency of 'suture' type thin parks to mitigate and smooth urban ruptures into the surrounding context potentially negates linear legibility. This type is effective only in situations where the suture succeeds in completely healing the cut. Any less, and the bandaged urban wound will endure as a thin park 'scar' that is likely to be avoided.

The supply of disinvested thin spaces is destined to continue unabated as cities transform from the hard linear infrastructure of the industrial era to the soft webbed infrastructure of the information economy. Pressure to densify is likely to drive expectations that myriad 'along-side and in-between' spaces be increasingly designed as public space. Enhancing the thin park design knowledge base suggests two longer-term implications for the discipline of landscape architecture. Firstly, in the context of the general encroachment of other design disciplines into traditional landscape architectural 'turf'

(Miller 1997: 70), the genre represents an opportunity for the discipline to consolidate the thin park as core disciplinary territory. Secondly, whereas other park genres such as large parks remain locked into a dependency on derivatives of the picturesque, thin parks are far less subservient to this aesthetic paradigm. Therefore, as a design pursuit, thin parks hold the potential to present landscape architecture with compelling aesthetic alternatives that suggest more authentic representations of contemporary conceptions of urbanism, ecology, culture and nature.

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Notes

1. In reference to British architect Cedric Price's boiled/fried/scrambled egg city structure analogy. (Price 1982)
2. 'Interdigitation' is a landscape ecology term for the interlocking fingers between ecological zones. (See Forman 1995)
3. 'Suture' is a surgical term for joining tissue together.
4. Observing a tendency to utilize perspectival structure to sequence these entities linearly, David Grahame Shane (2005: 75) terms traditional boulevards 'urban armatures'.

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