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https://escholarship.org/uc/item/3xj99167

Journal

Studies in the history of gardens & designed landscapes, 34(4)

ISSN

1460-1176

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Publication Date

2014-10-02

DOI

10.1080/14601176.2014.916035

Peer reviewed

Red Loops, Green Links Park Rabet and urban decline in East Leipzig

Karl Kullmann 2014, *Studies in the History of Gardens and Designed Landscapes* 34 (4): 259–274

Introduction: design and decline

With its vividly sinuous and over-scaled red asphalt circuit, Park Rabet in East Leipzig is notable as one of the earliest built examples of the late 1990s rediscovery of biomorphic design form. The park is also a relatively uncommon example of landscape design undertaken within a shrinking urban context. Rather than constructively engaging the difficult issues associated with urban decline, design culture has a tendency to fetishize it, as the prevalence of romanticized 'ruin-porn' imagery of the US Rust Belt and Eastern Europe illustrates.¹ As a result, design—and landscape architecture in particular—remains somewhat peripheral to the body of literature on decline, with existing research viewed primarily through non-spatial economic, social and policy frameworks.² Moreover, in instances where spatially based strategies for addressing decline are generated in the design and planning disciplines, most aim to reverse decline through growthbased urban renewal.³ Within this context, public landscapes tend to be reductively framed as predetermined types (park, plaza, naturalistic, urban), with the specific design qualities of each somewhat incidental to the overall strategy.⁴ In contrast to this newurbanist tendency to contain landscape within reductive types—along with the dubious legacy of landscape used as inert pastoral filler in modern urbanism—landscape design is now widely rediscovered as an active agent that shapes urbanism.⁵





Figure 1: Expansion of Leipzig footprint. East Leipzig highlighted (data source: City of Leipzig)

Although more articulated as a principle in green infrastructure plans for new and retrofitted cities, landscape-driven urbanism may also have applicability to shrinking cities. As a city that has replaced aspirations for urban growth with strategies for controlled shrinkage, Leipzig is an ideal setting for investigating the capability of a designed landscape to function as an active agent in a situation of urban decline.

I explore this connection through the relationship between the design features of Park Rabet and the structural forces and urban strategies that presently shape East Leipzig. Specifically, the article examines; (1) the interaction between the circuit at Park Rabet and the greenlink/urban-consolidation strategy for East Leipzig; (2) the relationship of the plan-based design-form-language of Park Rabet and its experience at the ground-level reality of East Leipzig; and (3) the criteria for evaluating the success of Park Rabet in the context of urban consolidation strategies and difficult social and economic conditions in East Leipzig. The article draws on the analysis of design and planning drawings, field observations, informal interviews with park users, interpretation of statistics published by the City of Leipzig and thematically relevant literature.

Leipzig: rise, decline, re-conception

The Saxony region of Germany industrialized rapidly in the nineteenth century, with the city of Leipzig becoming a centre of metalworking, textile and publishing industries. In the early twentieth century, the addition of chemical, electrical, mining and energy industries swelled Leipzig to a peak population of 713 000 inhabitants in 1933.⁶ The partition of Germany into two states after WWII disrupted the traditional economic networks of Leipzig's industries, although the establishment of industrial conglomerates oriented toward the Eastern bloc mitigated this effect. Nevertheless, Leipzig still experienced significant decline in the socialist era, with the loss of 170 000 residents by 1988.⁷ Following the collapse of the GDR (East Germany) in 1989 and the subsequent reunification of Germany, the already stagnant industrial economy of Leipzig rapidly contracted. Population loss accelerated, as younger people in particular departed for more prosperous regions in search of employment and social opportunities. Initially uncontrolled suburbanization on the periphery also contributed to the hollowing-out of population density in the urban core as many families chose to relocate within commuting distance (figure 1).⁸ When compounded with declining birth rates, by 1998 the population of Leipzig had decreased to 437 000, with an average housing vacancy rate of over 20%.⁹

Neighbourhoods characterized by empty apartments, surplus infrastructure, social problems, and environmental degradation presented intractable challenges to a municipality with a shrinking tax base and limited avenues for action. Initial efforts to address these problems focussed on re-growing declining cities, with nearly 800 000 new apartments constructed throughout former East Germany in the 1990s. Despite this investment, population in the former socialist state actually declined over the same period by 1.2 million, necessitating a rethink of growth-oriented strategies.¹⁰ In the late 1990s, under the federal-state funded Urban Restructuring in East Germany program, Leipzig embarked on the more pragmatic management of urban shrinkage by selectively demolishing sparsely inhabited residential buildings. Although disruptive for displaced residents, the community-wide advantages of the strategic rationalization of 7% of the building stock (20 000 units) were promoted in terms of lowering densities and creating opportunities for new public open spaces and green networks.¹¹ Emphasis was also placed on transforming the rapidly deindustrializing region into a service economy and refurbishing and consolidating urban centres. With Leipzig's highest rates of urban decline and associated social problems, East Leipzig became a primary focus for these rationalization and renewal efforts.

East Leipzig: urban consolidation, green links

Prior to WWII, East Leipzig comprised dense mixed-use working-class neighbourhoods mostly constructed in the late-nineteenth century *Gründerzeit* (foundation era) of rapid industrial expansion (figure 2). As the first enlargement of Leipzig beyond the borders of the old city, the buildings were modelled in the *Wilhelminian* style with direct street frontage, internal courtyards, and rear houses within each urban block.¹² With no public parks or squares incorporated into this dense urban template, streets and courtyards doubled as improvised playgrounds and meeting places. In the GDR-era, voids resulting from war destruction were filled with prefabricated concrete apartment blocks set back from the street in parallel rows. Post reunification, the collapse of Leipzig's industrial economy most acutely affected the



Figure 2: 1943 aerial photo, with East Leipzig outlined in orange and the future site of Park Rabet outlined in red. Leipzig Hauptbahnhof (the world's largest train station) is located at the top left.

district of East Leipzig. Statistics from the 1990s were more extreme than elsewhere in Leipzig, with 40% population decline, 50% vacancy, and above average rates of unemployment and recipients of state-subsidised housing. In one survey, 75% of remaining inhabitants indicated their desire to leave the district.¹³

In this context, the relevance of historical population levels and the efficacy of conventional growth-based planning strategies were severely diminished. In their place, the ambitions for East Leipzig were recalibrated towards the sustainable stabilization of the population at the new reduced levels. With funding from regional and federal government and the European Union, East Leipzig was masterplanned with the long-term goals of decommissioning surplus buildings, consolidating neighbourhood cores, and improving green connectivity



Figure 3: East Leipzig long-term green links and urban consolidation phasing strategy. Site of Park Rabet circled in red on each diagram (source: City of Leipzig, translated by author).

(figure 3).¹⁴ Facilitated by the strategic demolition of derelict and under-occupied buildings, a chain of new and existing interlinked green spaces were planned to connect the periphery with the urban core (figure 4). The route of the green finger roughly traced the original alignment of Rietzsche Creek, which originally served as a scenic walk before being culverted beneath buildings and streets by the late eighteenth century.¹⁵

At the street scale, the green link strategy incorporated the opportunistic creation of 'stepping stones' in the form of temporary neighbourhood gardens on vacant lots. A concession agreement with cooperative landowners, who permit public use of their land five-year terms, facilitated this appropriation of underutilised private land.¹⁶ At the structural scale, the green links plan included the incorporation of several existing vacant road shoulders, neighbourhood parks, sports fields, and community facilities. The assimilation of several of these existing land-uses into an expanded district park represented a keystone project in the urban stabilization and sustainability strategy for East Leipzig.



Figure 4: East Leipzig long-term green links and urban consolidation strategy superimposed onto 2012 aerial photo.

Park Rabet: site, brief, process

District Park Rabet is located between the neighbourhoods of Neustadt to the north, Volkmarsdorf to the East, and Neuschönefeld further afield to the southwest. The park boundaries correlate with the earliest housing established east of the Rietzsche Creek in the midnineteenth century (figure 5). Open space at the site was originally created in the 1970s through the extensive clearing of war-ruined buildings in the area by the GDR. The incremental establishment of a kindergarten, primary school, youth club, adventure playground, amphitheatre and football pitch followed into the 1980s. Part of the residual historic street pattern was retained for local traffic. However, while enabling convenient vehicular access, this grid compartmentalized the various programs and contributed to the poor spatial coordination and connection across the site.

By 2000, the general condition of the site echoed the overall social, spatial and structural problems besetting East Leipzig (figure 6). The City thus conceived renewing and expanding Park Rabet as a key building block for leveraging the urban renewal of the district.¹⁷ By acting as an identifiable zone of activity within the green thread, the park would ideally function as magnet to nearby residents, and eventually others from further afield along the completed green link. In 2001, a series of vision-forming community workshops accommodating all age groups developed the agenda for the new park. The brief that the City subsequently refined requested a design for a new expanded and contiguous 10-hectare park to unify the existing dispersed green spaces and community facilities. In addition to improved spatial and programmatic clarity, the design goals also stipulated a clear and unique identity for the park to be recognisable and memorable to locals and visitors. Interaction and accessibility from surrounding residential and commercial edges were also stated as important considerations, as were strategies for rationalising the surplus apartment buildings and disorganized tree distribution on the site. Moreover, existing building leases and city budgetary constraints mandated the park design be compatible with incremental construction over an extended time frame.¹⁸

In 2002, ten design studios were invited to submit concept designs: EGL (Leipzig), GFSL (Leipzig), Ritter.Grundmann (Leipzig), Hanke & Partner (Berlin), BGMR (Berlin), Lützow 7 (Berlin), Grothaus (Potsdam), Prof. Nagel, Schonhoff & Partner (Hannover), Kokenge und Ritter (Dresden), and Studio di Architettura del paesaggio (Milan). A judging panel comprising nine voting members including representatives from the planning, environment and sports departments of the City of Leipzig, and design and planning experts from across Germany reviewed the concept designs anonymously. Seventeen additional non-voting community leaders, youth representatives and technical experts further advised the voting panel.¹⁹



Figure 5: 1864 plan, Park Rabet site.



Figure 6: 2000 aerial photo, Park Rabet site.

Laufband: winning concept, design development, realization

The first ranked design concept by Lützow 7 proposed a 1-kilometre long *Laufband* as the leitmotif for the project (figure 7).²⁰ Loosely based on the form of an amoeba, the red asphalt circuit of varying width encircled most of the facilities on the site, with only the primary school situated outside of the loop. The designers described the exaggerated form of the circuit as permitting circumnavigation of the park at different speeds ranging from promenading to in-line skating.²¹ The red colour served the dual purpose of differentiating the circuit from conventional road asphalt, and referencing the blackberry thickets after which the area was originally named. The scheme also proposed replacing the internal roads with secondary pedestrian system of decomposed gravel for traversing the site. Additionally, the tree concept proposed a dense frame outside the circuit, with the interior generally cleared-out as undulating open grassland). Numerous buildings along the northern edge were designated for demolition to create a new marketplace and open the park up to the main district thoroughfare.

In the design competition report, the winning scheme was commended for addressing the heterogeneity of the site and balancing traditional conceptions of a park with dynamic contemporary forms.²² The variation in width of the main loop was interpreted as playfully accommodating a range of passive and active exercises. The judging panel also noted the design's suitability for implementation at the relatively low cost of €50 per square metre, and likely durability under a low-maintenance regime. Minimizing upkeep was evidently a significant criterion for the City of Leipzig, given that since reunification, the maintenance workforce was reduced by 70%, while the demolition and renewal process simultaneously enlarged the total open green space in the city by 40%.²³ The termination of the citizen-workforce who undertook maintenance of expansive green areas around GDR apartment developments further exacerbated the limited upkeep of public space.²⁴



Figure 7: Park Rabet design concept plan (courtesy of Lützow 7).



Figure 8: Park Rabet detail design plan (courtesy of Lützow 7).

Several adjustments to the original competition-winning concept are evident in the design detail drawings and subsequent completed construction (figures 8 and 9). First, the alignment of the loop was fine-tuned to negotiate existing elements including the nautically themed playground, sunken amphitheatre and climbing apparatus. Second, the dimensional variation of the activity circuit was reduced, with the narrowest sections widened to accommodate the variety of potential uses, and the widest sections narrowed to reduce the total area of impervious surfaces. Third, extensive white 'road' markings were added to the circuit. An unbroken marathon-style guideline precisely one kilometre in length was incorporated, along with two start/finish points and 100m increments stencilled onto the asphalt surface. Zebra-crosswalk styled markings were also overlain adjacent to activity locations and intersections between the loop and secondary path grid. Finally, permeable cobblestone paths were extended through the central meadows to accommodate shortcuts across the park while remaining secondary to the circuit.

Background 1: circuits

Through the original concept, design developments, and subsequent construction, the circuit was reinforced as the principal motif of the design for Park Rabet. Historically, circuits are a recurring feature in parks and gardens; circuits were traversed amongst the peripatetic colonnades of ancient Greece, and later in medieval cloister gardens that by necessity made efficient use of enclosed spaces.²⁵ Circuits endured as themed walks stitched through renaissance gardens, and as pan-European grand tours popular in the seventeenth and eighteenth centuries. In English landscape gardens, the circuit was refined into an orchestrated narrative that rhetorically returned the walker home.²⁶ In enclosed royal hunting grounds, loops facilitated the need to journey within an enclosed forest; these circuits often endured after the walls came down in the nineteenth century and hunting grounds were transformed into public space.²⁷ In midnineteenth century in the US, the circuit enabled park patrons to immerse in healthful nature without coming into contact with the



Figure 9: 2009 oblique aerial photo, Park Rabet.

urban ills of the surrounding city. When closed to traffic, the 6-milelong grade-separated road (East Drive and West Drive) around New York's Central Park epitomizes the immersive experience of the circuit.

In general, circuits provide the advantage of being finite, quantifiable, and controllable. People moving along a circuit are automatically returned to their point of origin, without any of the cognitive decision-making regarding when to turn around and head home as typically required on linear or networked paths. Circuits also exhibit reduced or absent interactions with the external landscape which may interrupt the rarefied experience along the path. To be sure, John Dixon Hunt has questioned the ability of prescribed circuits to hold our captive attention against the lure of 'casual and random exploration' that frustrates any intended or imagined 'narrative sequence'.²⁸ The complexities inherent in many gardens—along with our innate roving impulses—undoubtedly subvert the linearity and authority of a circuit and its attendant revelations. However, in other contexts the circuit is able to enforce narrative control, as demonstrated in theme parks

where the circuit is used to spatially compress and regulate exaggerated experiences.

Conversely, circuits within public parks are often set within wide-open spaces and therefore readily avoidable but may nevertheless be captivating without the aid of physical or thematic enforcement. The park circuit functions less as a prescribed sequence of revelations with which to draw the *attention* of park users, and more as platform for *inattention*. In theory, the circuit user can suspend their faculties of orientation and relinquish their physical journey to the path, in turn freeing-up cognitive space for thinking, daydreaming, or socializing. Moving in this habitual and repetitive manner is similar to the experience on a treadmill (the literal translation of *Laufband*). Like a treadmill, when a circuit can be traversed repeatedly without any apparent loss of enjoyment or dilution of experience, it becomes a loop.²⁹

Perceived disadvantages of circuits and loops include the lowered capacity for exploration out into new areas and the absence of directional choice. Whereas the extensive path networks associated with green link systems often give the impression of being limitless and open ended, circuits are closed systems that encapsulate complete known worlds; as Robert Harbison observed of the inner circuit at Stourhead, circuits satisfy 'homing rather than adventuring instincts'.³⁰ In one sense, the circuit implies an absence of the Modern concepts of choice and progress, and embodies a more fatalistic and circular conception of a person's life path, as reflected in the single-path spiral loops of the original Classical labyrinths.³¹ Conversely, encircling something as a way of knowing it is a very Modern strategy for discovery, although this superficial circumnavigation may conveniently reaffirm preconceptions in ignorance of the interior.³²

Nonetheless, circuits potentially encompass more variation and choice than is cursorily evident. While the loop assuredly returns us 'home,' this point of origin may not be immediately recognizable if we are disoriented or displaced from the experience of moving along the path. The complex directional inflections and distractions in a theme park circuit are likely to engender this sensation, although simple featureless paths such a flat loop around a lake, or an athletics track encircled by a stadium, are also capable of displacing a person's point of origin. In this context, it is often possible to proceed along a circuit without realizing a second or third lap is already underway, effectively extending the set length of the loop. Like all paths, circuits also have two distinct journeys inbuilt, with each direction likely to engender completely different experiences.

Analysis 1: Rabet loop, Rietzsche link

Within Park Rabet, the red asphalt circuit meanders around most of the site. In addition to increasing the length of the path within the fixed confines of the park boundaries, the twisting route also heightens the degree of directional variation that path users experienced. The indirectness of the path privileges movement for its own enjoyment over the timely arrival at a specific destination. To be sure, this is a common feature in the landscape, with park circulation traditionally not beholden to the expectations placed on urban circulation systems to be orienting, legible and efficient.³³ However, the addition of 100m increments marked onto the path surface transform the loop into a hybrid between the meandering route and precise calibration of distance (figure 10). While the 100m increments convey distance travelled along the path, the meanders of the path's route cause this information to not readily correlate with a sense of orientation within the overall system. The surety that the distance calibration provides is therefore offset with enough inflection to provide a sensation of openness within a closed loop.



Figure 10: meandering circuit with dual-direction distance markings (source: author 2013).

Although inbuilt into the design, in reality three conditions partially curtailed this openness; (1) an anticlockwise bias; (2) the pervasive use of smartphones; and (3) the incomplete status of the green link. First, the distance markings on the path are duplicated to face each direction, implying both clockwise and anticlockwise experiences were designed into the loop. Although the over-scaled width of the path readily accommodates this dual-directional choice, nearly all observed loop users turned to the right on approach and proceeded in an anticlockwise direction around the circuit (figure 11). This phenomenon is consistent with the direction of travel in the vast majority of loops, with athletics circuits, velodromes, racetracks, and ice rinks all typically traversed anticlockwise.³⁴ The circuit at Stourhead is also experienced anticlockwise, although apparently through accumulated assumptions rather than design intent.³⁵ While no conclusive research attributes this recurring directional bias to bodily asymmetry (including right-handedness) or the global coriolis effect, it is at the very least a habitually reinforced cultural norm that



Figure 11: time-lapse photograph of cyclist moving in typical anticlockwise direction (source: author 2013).

appears to limit the experiential possibilities of the Park Rabet loop to many users.

Second, the pervasive use of smartphones and other specialized training devices dilute the traditional hegemony paths have held over locational and directional information. At Park Rabet, many path-users acknowledged using GPS enabled devices to keep track of distance and direction around the circuit. While a natural extension of the increasing tendency for urban dwellers to delegate their immediate orientation and route planning to digital navigation devices, their use in the context of a path built for pleasure somewhat negates both the disorienting route and distance calibration of the loop. Nevertheless, the presence of a physical loop still has existence-value advantages over a digital one. The enduring popularity of light rail illustrates this phenomenon; even though buses may offer faster and more comfortable service, light rail tracks provide tangible reassurance by physically indicating the trajectory of the tram before it arrives.³⁶ Similarly, the vivid presence of the red loop path unambiguously

announces its route to park users in a manner that cannot be completely substituted with electronic navigation devices.

Third, Park Rabet was planned as an 'activity magnet' set within the Rietzsche green link that aims to draw local residents and others from further afield along the link.³⁷ While this strategy is rendered with clarity on city plans, the realities of forging a green link through an existing residential district are more complicated. Avoiding similar violent upheavals to those enacted in many cities during the most prolific decades of urban freeway construction (1950s-1980s) necessitates the opportunistic greening of vacant lots and selective demolition of buildings. Nonetheless, while the temporary greening of vacant lots has successfully created green islands within the urban fabric, these remain too dispersed to serve as legible 'stepping-stones' along the green link as intended in the urban strategy (figure 12).³⁸ In this regard, the parallel objective of consolidating urban cores appears incongruent with the high frequency of greened vacant lots required to make a continuous green link legible at ground level. Additionally, the demolition of building stock is contingent on the cooperation and compensation of individual landowners, and as such remains extremely nascent. Without land resumption, physically forging a green link through the built-up areas of East Leipzig is likely to take considerably longer than originally envisaged in the twenty-year strategy.

Nevertheless, the incomplete status of the East Leipzig green link does not necessarily negate its value, nor adversely impact the usability of Park Rabet. Most journeys on completed greenway networks are smaller out-and-back excursions associated with exercise and leisure, as opposed to longer-range exploration out to the hinterland or destination-oriented commuting into the urban centre.³⁹ Accordingly, full continuity of a green link is not essential to the performance of the system, since even in instances of uninterrupted systems, people tend to only use parts in a localized manner by creating short return loops



Figure 12: example of trees planted on isolated vacant lot as a massing substitute for absent buildings (source: author 2013).

for themselves within the larger system.⁴⁰ The circuitous path at Park Rabet accommodates these popular short return loops within the park boundaries. In this regard, the park functions as a self-contained site. Additionally, when eventually completed, the Rietzsche green link is likely to provide complementary context to the park; even though rarely travelled in their entirety, green links retain existence-value for urban residents by promising direct connectivity to the countryside through an alternative, non-vehicular network. In time, Park Rabet has the potential to fulfil William H. Whyte's ideal condition in which the green link is comprised of a network of interlinking locally useful paces, with the park circuit acting as a knot within the larger green thread.⁴¹

Background 2: landscape design-form-language

Park Rabet is significant as one of the earliest constructed projects following the rediscovery of formal fluidity in landscape design culture. A distinct break from the acute angular forms prevalent in the 1980s and 1990s and often associated with postmodern collage and deconstructivist superimposition characterised this shift. While more poignant in a controlled architectural setting, the deconstructivist agenda of destabilizing the ground as a reliable foundation for meaning implicitly undermined the place-making basis for landscape.⁴² As a consequence, many of the public spaces from this era came to be judged as hostile to people as the preceding modernist spaces.⁴³ By the mid to late 1990s, the timely emergence of digital technologies that stimulated parametric experimentation in fluid topological form filled the resultant formal impasse.⁴⁴ The guite rapid shift to formal fluidity influenced the re-emergence of Gestalt theory (focussing on the sensory perception of objects), and biomorphic form; both of which had heavily influenced modern landscape architecture, but had been eschewed by designers since the 1970s.⁴⁵

To be sure, the actual value of form-language has traditionally been a more contested issue for landscape design than for other design disciplines. This is largely due to the ambiguous nature of landscape, which exists both before and after it is designed and uses the same materiality as the world at large.⁴⁶ As a consequence, the 'unformed' vernacular or natural context is seen to dilute the design-form of a landscape project to a greater degree than is the case with buildings or designed consumer products. In particular, the enduring influence of archaic (non)forms derived from the picturesque have implied that the form-language associated with landscape design is somewhat predetermined.⁴⁷ Where the use of forms has appeared innovative—as per the amoebas, boomerangs, and kidney shapes prevalent in modern gardens-they have nevertheless been critiqued as superficial appropriations from art, and attractive merely for their 'natural' appearance.⁴⁸ This legacy is manifested in the present day when curves of any formal variation are described as a universal representation of 'nature', despite the highly elastic cultural

construction of both nature and the geometries that cyclically embody it. $^{\rm 49}$

Furthermore, while picturesque designers may have used view-based techniques to manipulate landscape form—and current parametric digital modelling is also premised on three-dimensional viewpoints—landscape design-form remains largely a product of the plan-based overview. Consequently, the relationship between designform in plan and its experience in reality is a recurring debate in landscape design.⁵⁰ On the one hand, overly manipulated plan-based form is argued to result in the translation of scale-less twodimensional graphics onto the human-scaled three-dimensional landscape. While plan graphics may be aesthetically balanced on paper, the discrepancy between this hypothetical aerial viewpoint and the experience on the ground may exclude and alienate users of public space. On the other hand, the landscape is largely organized and understood from above; in design practice, manipulating design in plan is an integral technique for influencing spatial perception at the human scale. Even prominent contemporary designers who use the scene-view as an integral conceptual design technique inevitably revert to plan to develop and refine the form-language of a project.⁵¹

Between these two positions, built landscape designs exhibit a range of interactions between plan and reality. On the one hand, Pierre Legrain's design for the Tachard Garden in Celle-Saint-Cloud, Paris, closely references the designer's book cover graphics, but nevertheless translated successfully into the real landscape.⁵² On the other, Peter Walker and Partners scheme for the Sony Centre at Potsdamerplatz, Berlin, is highly articulated in plan while remaining largely imperceptible at ground level. As a third example, the cryptic translation of a Felix Nussbaum painting into stone paving insets at the Jewish Museum Garden, Berlin, indicates that plan-derived form need not be immediately coherent or legible to effectively influence groundlevel spatial perception. Framed by this context, the following analysis examines the relationship between the design-form of Park Rabet in plan and as perceived on the ground.

Analysis 2: Rabet design-form in plan and reality

The curvilinear design-form of Park Rabet follows several formlanguages. Spaces demarcating the playgrounds inside the circuit conform to the 'gathering' and 'figure-ground' principals of Gestalt theory (figure 13.1). diverging sequences of acute and obtuse curved corners interspersed with straight segments characterize this formlanguage. While the red loop path also exhibits traces of Gestalt form, a looser more biomorphic form-language is prevalent, as illustrated in the designers' conceptualization of the circuit path as an amoeba.⁵³ The curve language of the loop is more fluid than the internal shapes, with the radii of the path tightening into corners, before inflecting directly into reverse curves. As with the internal shapes, the circuit also exhibits varying widths that widen out into the tightening curves, and narrow down into the meandering sections. How these planforms impact ground level perception and use is analysed in two adjacent situations in the western most section or the park. In both situations, the planform is compared with an equivalent a photograph taken facing anticlockwise to reflect the most popular direction and using a 50mm lens to approximate the human field of view.⁵⁴ Both forms of representation are modulated through the (author's) perception of motion along the circuit.

The first path situation is a progressively loosening curve to the right that subtly narrows and smoothly inflects to a progressively tightening curve to the left (figure 13.2 and figure 14). As the path enters an almost 180-degree rotation to the left, the edges of the path diverge, causing the path surface to seamlessly double in width in this area. Seen from eye-level when moving along this section of the loop, the sinuosity of the curve-form exaggerated to appear as a distinctive Sbend. Due to the combined effects of optical foreshortening and our preconception that paths be consistent in width, the significant variations in breadth are not visually apparent in advance. For example, the exaggerated girth of the 180-degree curve in the middledistance is predominantly camouflaged within the acute optic angles of eye-level perception. However, while not perceived in



Figure 13: plan-form-language of western area of Park Rabet. Notation: (1) inner shapes; (2) inflecting curve with increasing width in distance; (3) opening curve with narrowing width.



Figure 14: inflecting curve with increasing width in distance (source: author 2013).

advance, width variations are experienced in their immediacy as encountered along the path. Moreover, while the design-form correlation between tight curves and wider path widths is clearly evident in plan, the relationship between the two remains surprising in each situation as encountered on the ground.

The second path situation begins midway through the 180-degree bend, at which point the path transitions into an opening curve that continues to progressively loosen for approximately 50 metres, before slowly inflecting into a reverse curve of equally large radius (figure 13.3 and figure 15). In contrast to the slackening radii of the curve, the path tapers quite quickly from the widest point on the 180-degree curve down to half this width and holds this narrower girth for some distance. When viewed on the ground, optical foreshortening—and assumptions of consistent path width—combine to optically elongate this section of path. When in motion, the result of this illusion is the sensation of effortless acceleration, as more appears to be covered for the same exertion. While far less perceptible on the ground than in plan, the increasing radii of the slackening curve also contribute to this sensation of centripetal acceleration. The faster the motion, the more heightened the experience, with cyclists and in-line skaters experiencing the effect most acutely, runners moderately, and walkers subtly.

In both situations, varying the width of a path has an impact on spatial cognition; given that a path's primary mandate is to lead somewhere, we expect it to remain consistent in width along its length. Moreover, since we typically relate the width of path (or road) with its capacity, we are conditioned to associate variations in width with changed circumstances. For instance, a progressively narrowing trail through a forest may be cause for concern, since it implies that hikers before us had doubts about the destination of the path and turned around, in turn compounding the narrowing in a feedback loop. To be certain, as a circuit with no definitive beginning or end—and a hard surface that is not enlarged through wear as per a trail—the Park Rabet path avoids these more acute path-destination-anxieties. But nevertheless,



Figure 15: opening curve with narrowing width (source: author 2013).

the significant width variations along the loop impact the perception of speed and sense of possible use. Along straighter sections, the narrow width imlies a degree of compression that is readily associated with speed. The wider sections that relate to the tightest curves are less like conduits and imply stiller, slower areas. Here walkers, joggers, skaters, and cyclists were observed to be more likely to begin, end, and take visual notice of their surroundings.

The design-form-language and width variations of the Rabet loop path as designed and constructed in plan thus anticipate the actual experience on the path. In this regard, the park loop is reminiscent of Kevin Lynch, Donald Appleyard, and John R. Meyer's 'motion and view' diagrams that articulated envisaged experiences on their proposed route for the Boston inner ring road (figure 16).⁵⁵ While these diagrams illuminated the hidden temporal and perceptual dimensions of a standard-width freeway, the park loop is akin to a literally constructed 'motion and view' diagram that directs and amplifies the experience of motion within a confined space.



Figure 16: diagrammatic anticlockwise motion and view analysis of hypothetical Boston ring road (source: Lynch, Appleyard, and Meyer 1964).

Background 3: criteria for success within urban decline

Within the context of conventional growth-oriented economic structures, decline is typically viewed as a negative outcome. The general cultural and professional bias towards growing populations is also reflected in the design and planning disciplines, where the tendency towards confronting and attempting to reverse population retreat is pervasive.⁵⁶ As Lynch observed, urban models are usually premised on generating and accommodating growth, and rarely on managing shrinkage. Lynch noted that this may be due the associated degrees of difficulty, given that decline tends to present more severe problems.⁵⁷ The early 1990s growth-based strategy of investing heavily in construction in an attempt to reverse acute decline in former East Germany exemplifies Lynch's observation. The abandonment of this strategy (that failed to attract population and increased the oversupply of housing stock) for the more pragmatic objective of sustainably stabilizing the reduced population represents a significant reorientation away from the growth-bias.

While challenging from economic, social, and urban planning perspectives, operating in a non-growth environment also presents particular problems for landscape design.⁵⁸ Investing in the public realm is a proven catalyst for urban renewal, but the excess capacity typically designed into renewal projects in anticipation of growth is unlikely to be utilized in a shrinking urban context. The increasing tendency for public space to be defined by its use, both in terms of the range of activities available and absolute numbers of patrons who utilize the facilities, magnifies this surplus. The expectation for urban parks in particular to be accountable to neo-liberal economics-along with the infiltration of the architectural conception of 'programming' space—reduces the traditional role of landscape as a refuge from the rationalist processes of the city.⁵⁹ While such activated urban landscapes may have clear rationale and captive user-bases in bustling and growing cities, more porous shrinking cities are less likely to capture sufficient population to keep an urban park heavily utilized.

Applying conventional growth-oriented and use-based criteria to evaluate the success of urban landscapes in shrinking cities is therefore likely to indicate underperformance. Nevertheless, the success of both urban planning strategies and designed urban landscapes can be evaluated using criteria other than increases in economic and population metrics. For example, environmental ethics positions the social and environmental components of sustainability as essential for establishing a meaningful existence.⁶⁰ Even the traditionally growth-oriented field of economics has absorbed broader frameworks for evaluating community performance that encompass a deeper understanding of the value of a society that reflects the aspirations of its constituents, and establishes a sense of place, liveability, identity, and creativity.⁶¹

These concepts have been observed in shrinking rural settlements, where communities rarely evaluated revitalization initiatives negatively if growth was not an outcome of their investment and efforts; instead, heightened civic pride and engagement, and a creative environment were identified as tangible positive outcomes.⁶² Realistic metrics for evaluating an urban park a non-growth context

are therefore less about outright use or overall physical condition; rather, environmental sustainability, strengthened sense of place, and a sense of community cohesion and belonging become credible alternative measures of success.

Analysis 3: evaluating Rabet as a park and urban catalyst

The condition of Park Rabet is surprisingly poor for a relatively new German park. Maintenance is evidently minimal, with overgrown grass and shrubs and numerous damaged furnishings. Most surfaces of buildings, fences and furnishings have been tagged with graffiti, and the asphalt surface of red loop has been defaced in places with paint (figure 17). Additionally, refuse associated with the frequent incidence of intoxicated individuals and small groups is evident in the interior areas of the park. To be sure, low maintenance was a criterion in the original design brief and a factor in the selection of the winning design.⁶³ However, the reality that in just five years, parts of the park have become indistinguishable from un-designed urban wastelands common elsewhere in former East Germany challenges the conceptual and material resilience of the constructed design. In this regard, the red asphalt loop that forms the leitmotif for the original concept is also central to the durability, usefulness, and legibility of the park. The distinctiveness of the materiality and form of the loop offsets the rough patina elsewhere in the park, thus distinguishing design artifice from an incidental wasteland.

When entering the park from any direction, the loop forms a consistent inner threshold that unifies the patchwork of parking lots, plazas, buildings and planting around the fringes of the park. Approximately half of people encountering this threshold were observed decisively continuing across the red asphalt and onward



Figure 17: extensive graffiti evident on a range of surfaces (source: author 2013).

through to a destination outside of the park. Common destinations include the ALDI market on the north-eastern corner of the site, and tram stops to the north. For the most part, the secondary gravel and cobblestone paths are generally used for these goal-oriented journeys into adjacent neighbourhoods, minimizing desire-line tracking over the grass areas (Figure 18). Of the remainder of park users, the majority turned right and continued along the circuit for the purpose of exercise, with walking, pushing strollers, jogging, cycling, and inline skating all popular pastimes. Participants in theses activities were mostly solo and generally travelled multiple laps of the circuit during the course of their exercise and started and stopped at the same location. Few people were observed approaching the park, traversing the circuit, and then exiting the park in another direction. This suggests the park is primarily used as a closed system, operating in isolation from both other parks and the nascent green link.



Figure 18: cobble and grass short-cut path (source: author 2013).

This closed system is also socially manifested, with park users (both exercising on the circuit and loitering in the interior) tending to be suspicious of outsiders with cameras, with the author assertively questioned on numerous occasions despite exercising a high degree of discretion. Reticence towards being observed is understandable in the context of residual East German sensitivities to surveillance from the STASI era. Nevertheless, once these misunderstandings were resolved, park users generally conveyed a strong sense of pride in the park and in particular the uniqueness of the circuit. Park users considered the park to be reasonably well used, although in several instances conceded this was not always in a socially constructive and inclusive way. The park tended to be described as embodying hope for the future and placed in contrast to the difficult economic and social conditions afflicting adjacent neighbourhoods.

Investing in Park Rabet was a central component of the strategy for stabilizing population decline and consolidating East Leipzig. Normally, an investment in public space would be expected to attract a new demographic to offset existing population outflows and increase nearby property values. The resultant increase in land taxes would ultimately pay off the investment, with eventual benefits to the local economy.⁶⁴ In East Leipzig, there is little empirical or anecdotal evidence that Park Rabet has thus far influenced the value or stabilized the population of surrounding neighbourhoods, as expected of a public investment of this magnitude. To be fair, the existence of the park coincides with the duration of Global Financial Crisis; although Germany as a whole proved resilient, already depressed districts in former East Germany in particular remained acutely vulnerable to the downturn.⁶⁵ Nonetheless, while Park Rabet is yet to visibly improve the fortunes of the district, it plays an important role within the present realities of East Leipzig. Rather than functioning as intended as a leveraging mechanism for establishing economic and demographic stability, the park fulfils a far more traditional—but nevertheless valuable—role as a refuge from the problems facing East Leipzig in the present day.

Conclusion: flows, place making

With numbers of residents increasing by 85 000 through the 2000s, population loss in Leipzig appears to have recently reversed, although the statistical incorporation of outlying suburban districts accounts for most of this gain.⁶⁶ Whether artificial or real, this overall reversal is not reflected in East Leipzig, where continuing urban decline and social problems are the visible consequence of decades of outflows from the area. Moreover, even if it were to occur, growth is not simply decline running in reverse; as Philipp Oswalt notes, 'shrinkage in one place feeds growth in another,' indicating that 'the opposite trends of growth and shrinkage can run parallel'.⁶⁷ The static view of the cultural landscape as the 'space of places' is therefore reconceived as the 'space of flows'.⁶⁸ Since the reunification of Germany, those flows have moved from east to west. However, while a percentage of the population have successfully ridden these economic and demographic currents, many have not been able or willing to move. As is abundantly evident from the shortcomings of 'free-flowing' modern

urbanism, many people do not readily adapt to living in accelerated flows and continue to seek a grounded sense of place.⁶⁹

While over a decade old, the pragmatic planning strategies that aim to tame these outflows and stabilize East Leipzig remain largely nascent, with the green link and urban consolidation proceeding cautiously. As the most significant realized component of the urban strategy, Park Rabet therefore represents the central fulcrum around which placemaking opportunities in the district revolve. Whereas public landscapes are often reduced to incidental predetermined types within planning strategies, the specific conceptual features of the competition-winning park design are integral to the function of both Park Rabet and the surrounding neighbourhoods. With a design-formlanguage that choreographs spatial perception within a relatively confined space, the loop path forms the core setting for the interweaving of physical activity and social life. While the park is thus far not heavily used or economically transformative of the surrounding neighbourhoods, its vivid design does instil pride in residents and provide a focus for hope and refuge. Park Rabet thus acts less as a magnet for people flowing along the green link as intended in the original strategy, and more as island within the demographic flows away from East Leipzig.

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Notes

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¹⁴ Daldrup, 'Die perforierte Stadt'.

¹⁵ Author's interpretation of historic maps.

¹⁶ City of Leipzig, *Stadterneuerung: Neue Freiräume im Leipziger Osten* (City of Leipzig, January, 2005,). www.leipziger-

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