This is an extract from:

Landscape Design and the Experience of Motion

edited by Michel Conan

Published by

Dumbarton Oaks Research Library and Collection

Washington, D.C.

as volume 24 in the series

Dumbarton Oaks Colloquium on the History of Landscape Architecture

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Trustees for Harvard University

Washington, D.C.

Printed in the United States of America

www.doaks.org/etexts.html

When the Railway Conquered the Garden: Velocity in Parisian and Viennese Parks

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Over the last twenty years matter, space, and time have been altered so as not to resemble what they had always been before.[1]

—Paul Valéry, on the railway

If Edmund Burke had written his *Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful* with its empirical and sensuous conception of aesthetics not in 1757 but a century later, the notions of suddenness, power, obscurity, precipitousness, vastness, and difficulty as the sources of the sublime—of terror as well as of pleasure—would certainly have been complemented by the notion of *velocity*. Speed, and the completely new experience of motion engendered by speed, are two parameters of central importance for the nineteenth and twentieth centuries. Through them everything was rearranged: time as well as space, landscapes, cities, commerce, and society.

The driving force behind it was industrialization and, in the vanguard, new engineering and the opening up of Europe by means of the railway. In *The Railway Journey*, which is my "traveling companion" for this essay, Wolfgang Schivelbusch describes the groundbreaking role of the railways in the process of mechanization of everyday life.[2] For him it was innovation in the transitory sphere of life that changed both mental perception and aesthetic ideas: the sensation of speed, the crowds at railway stations, the sequences of visual impressions (Fig. 1). The railway is considered the first industrial object in history with which everyone came into contact. From the middle of the nineteenth century, it has fascinated and shocked all strata of society and has also become a central theme in contemporary arts where it has affected the urban park, a development that was not obvious at its inception.

Special thanks to Tina Parte and Maria Verber for revising this essay and helping me present my thoughts appropriately in English.

[1] "Ni la matière, ni l'espace, ni le temps ne sont depuis vingt ans ce qu'ils ont été depuis toujours." I found this quotation in the French translation of Wolfgang Schivelbusch, *Histoire de voyages en train* (Paris: Le Promeneur, 1990), 39.

[2] See Schivelbusch, *The Railway Journey: The Industrialization of Time and Space in the 19th Century* (Leamington Spa, Hamburg, and New York: Berg, 1986); originally published as *Geschichte der Eisenbahnreise. Zur Industrialisierung von Raum und Zeit im 19. Jahrhundert* (Munich and Vienna: Hanser, 1977).

1. *Lesser Ury,* At the Friedrichstrasse Railway Station, *goache on paper, 1888 (courtesy of Stiftung Stadtmuseum, Berlin)*

This essay discusses the transition that has influenced the design and perception of landscapes and parks from the second half of the nineteenth century onward. It also discusses the types of movement and the different ways landscapes before and after the introduction of the steam engine are looked at, and, lastly, it points out how this affected the dissolution of space by speed. A closer observation of Edouard Manet's painting, *The Railway* (1873; Fig. 2), is the starting point for my analysis of two urban parks of the nineteenth century: the Türkenschanzpark in Vienna (constructed 1885–1888; redesigned 1908–1910) and the Buttes-Chaumont in Paris (constructed 1864–1867). Suburban railways run through both and are the starting and vanishing points of their very special landscape designs.

The Railway and the Garden

Manet painted *The Railway* at his studio near Gare Saint-Lazare in Paris; its front door and a window appear in the background. It was here that he tried to experience the rhythm of this modern city as intensely as possible. The floor of the studio trembled with every passing train, "sending up agitated clouds of white steam" to his window.[3] Thus, Manet represented himself as a witness of modern urban life.[4] I once attended an exhibition in which the setting of this painting was reconstructed; immediately it became obvious that

[3] Quoted by Robert Herbert, *Impressionism: Art, Leisure, and Parisian Society* (New Haven, Conn., and London: Yale University Press, 1988), 28.

[4] T. J. Clark, *The Painting of Modern Life: Paris in the Art of Manet and His Followers* (Princeton, N.J.: Princeton University Press, 1986).

2. Edouard Manet, The Railway, *oil on canvas, 1873 (courtesy of the National Gallery of Art, Washington, D.C.)*

the girl and the young woman, both framed by the massive iron grille, are resting in a private garden situated at the edge of the railroad track.[5] Contrary to earlier interpretations that this is nothing more than another classic "snapshot" of Parisian public life,[6] Manet seems to be confronting his viewers with a modern walled garden that has somehow become transparent to the external world. In the way the woman is holding her half-open book, she resembles a Madonna in a garden.The child with her back turned is staring at the railway and the cloud of steam ejected by the train that has just passed the garden. A small part of the iron structure of the Pont de l'Europe, the bridge that the train has just passed, appears in the right margin. Beyond this "slice" of the bridge, Manet has arranged a temptingly shiny bunch of grapes.The appearance of the woman, perhaps a maid, differs from the exquisite appearance of the child.With her plain clothes, her evident effort at dressing up, her loosely waving hair, and the black straw hat crowned by a bunch of wildflowers, she introduces a

[5] *Manet, Monet, and the Gare Saint-Lazare* [exhibition catalogue, Musée d'Orsay, Paris, 9 Feb.–17 May 1998, and the National Gallery of Art, Washington, D.C., 14 June–20 Sept. 1998] (New Haven, Conn., and London: Yale University Press, 1998).

[6] Among them Herbert, *Impressionism*, 28.

pastoral touch into the scenery. However, "clouds of modernity" will soon penetrate that "walled garden," much like a train forging its way through the landscape. The white cloud of steam turns into the sign of modern transitoriness. It refers to the train that has already disappeared. The young woman presents to her onlookers a distracted, lost gaze. Witnessing this special, almost biblical event—the genesis of modern life via the railway, a turning point in human history—has become a normal act.[7]

Gail Finney writes that the pastoral is the "product of transition, [and] transition is the characteristic feature of life in the mid-nineteenth century."[8] For Manet, the steam engine signified industrial motion and the advent of transition as a daily life experience. The garden represents one of the rare pastoral enclaves that cannot be preserved much longer. In contrast, the train in the Türkenschanzpark is not a danger but rather a welcome attraction within the setting (Fig. 3). Its suburban train has just left the tunnel and is entering the park. The cloud of white steam, colored *after* the photo was taken, rises into the sky and looks like an ornament. Visitors observe this spectacle with great interest, and several benches have been specially placed parallel to the railway track so that everybody can sit to enjoy the view.

Transition and the Neopastoral Attitude

The Türkenschanzpark was created according to the ideas of architect Heinrich von Ferstel and constructed under the auspices of Gustav Sennholz, head gardener of the city of Vienna. After it was enlarged, it corresponded to and in certain details copied the alpine landscape of the Semmering, a mountain range a hundred kilometers from Vienna.[9] In 1854 the railway made Semmering accessible to the city, and afterwards it turned into a popular summer resort for the Viennese upper class and intellectual elite. This railway "rearranged" the landscapes of the Rax, Schneeberg, and Semmering mountains by its impressive high viaducts (Figs. 4, 5). The landscape had a pastoral, almost Arcadian atmosphere: huge pine trees, grazing goats, an abandoned castle, lone hikers. The presence of the viaducts reenforces the pastoral atmosphere; indeed, they inspire the artists to create a pastoral setting, for they provide the necessary modern contrast. The appearance of a new technological beauty shaped a long-familiar landscape in a new way. The railroad made it accessible to

[7] On 5 May 1843, with dramatic words, German author Heinrich Heine commented on the opening of the railway lines Paris-Orleans and Paris-Rouen, calling the advent of the railway an initiation for modern life and comparing it to the discovery of America: "This is the way our forefathers must have felt when America was discovered, when the invention of gunpowder was announced by the first gunshots, when the printing press sent the first galley proofs of the divine words into the world . . . a new era in world history has begun and our generation can boast of taking part in it." See Heine, "Lutetia," in *Sämtliche Schriften,* vol. 5, ed. Karl Heinz Stahl (Munich: Hanser, 1974), 2, 62, 448 f.

[8] Finney, *The Counterfeit Idyll: The Garden Ideal and Social Reality in 19th-Century Fiction* (Tübingen: Niemeyer, 1984), 5.

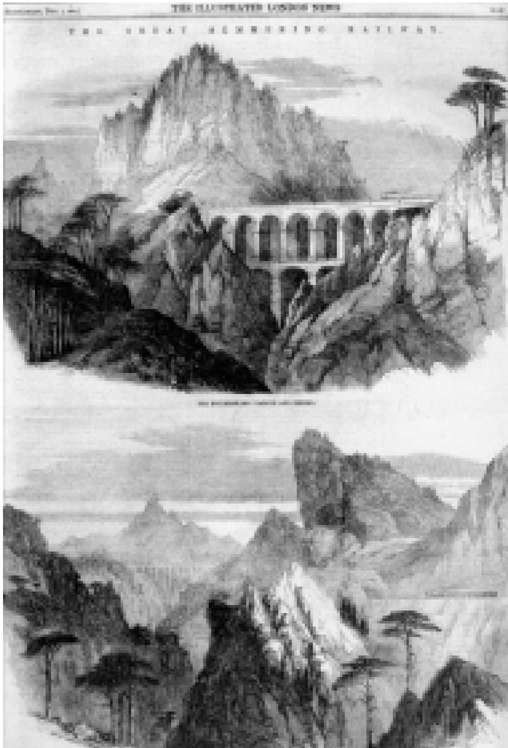
[9] The enlargement was carried out under the director of urban planning for the city of Vienna (Goldemund) and the director of public parks (Wenzel Hybler). Both had also visited Buttes-Chaumont. Cf. Renate Schweitzer, "Der Türkenschanzpark. Ein Abriß seiner Entstehungsgeschichte," *Wiener Geschichteblätter* (1968): 309–16, as well as Cordula Loidl-Reisch, *Der Türkenschanzpark: Der Park aus der Sicht der Denkmalpflege* (Vienna: Bundesdenkmalamt, Parkpflegewerk, 1993).

3. Railway at the Türkenschanzpark, color postcard, ca. 1910 (courtesy of the Historisches Museum, Vienna)

a new group of visitors, mainly city dwellers, who sought aesthetic enjoyment of nature and made the neopastoral a veritable fashion (Fig. 6). It seems only natural that the Viennese upper class did not want to be away from the mountains for too long and were delighted to find their summer resort *en miniature* within the city. There also it could be enjoyed finally by the middle and working classes as well.

The Türkenschanzpark was situated in a residential area, and plans were made to erect a railway station imitating the Semmering, which at the time of its inauguration in 1854 was the highest point that could be reached by rail anywhere in the world. The train station was supposed to be erected behind the main hill of the garden with its lookout tower, as shown in an 1898 painting by Johann Varrone (Fig. 7).[10] An interesting detail is the pictorial integration of the main hill in the Türkenschanzpark with the nearby mountains of the Vienna Woods, Kahlenberg, and Cobenzl, thereby allowing the hill to claim the right to be a mountain. Visitors would be able to hike in the pseudo-alpine landscape, decorated by mountain streams, a waterfall, alpine-styled shelters, and forest clearings imitating those at the Semmering, not to mention an alpine garden with gentian and *edelweiss* (Figs. 8, 9).

[10] The suburban railway opened along with the second part of Türkenschanzpark in 1910. The railway station was intended to give the final touch to the alpine landscape, but for financial reasons it was never built. There were discussions of building a station in the rebuilding work throughout the park to restore its special alpine atmosphere; see Loidl-Reisch, *Türkenschanzpark*, 8, 91.



4. "The Great Semmering Railway," from the Illustrated London News *supplement, 1 December 1860. Collection of Ronald Stifter, Weppersdorf (from Niederösterreichische Landesregierung,* Die Eroberung der Landschaft: Semmering, Rax, Schneeberg *[Vienna: Falter Verlag, 1992])*

5. Anonymous, Semmering Railroad at Klamm*, lithograph, ca. 1870 (courtesy of Niederösterreichische Landesbibliothek, Topographische Sammlung)*

6. Two women clad in typical alpine attire at a photography studio, ca. 1900. Collection of Thomas Reinagl, Vienna (from Die Eroberung*)*

7. Johann Varrone, The Türkenschanzpark, *oil on paper, 1898 (courtesy of the Historisches Museum, Vienna)*

8. Forest clearing, the Semmering, ca. 1982 (photo: Kristian Sottriffer)

The neopastoral motif not only became a fashion and an important theme in contemporary park design but also a central theme in the fine arts. Claude Monet's *Railroad Bridge of Argenteuil* (1873) shows a scene of modern life similar to those frequently represented by contemporary painters (Fig. 10). T. J. Clark comments:

> Train passing over, smoke becoming cloud: boat passing under, sail just entering the shade. If only modernity were always like this![11]

A similar detail appears in a wood engraving of Buttes-Chaumont (Fig. 11) found in Jean Adolphe Alphand's *Les Promenades de Paris*.[12] In the foreground, visitors are represented as small figures, lost in admiration at the sight of the huge, artificial rock massif at the center of the park and of the two bridges that make it accessible: a brick bridge thirty meters above ground, similar to those at the Semmering, and a steel-cable suspension bridge, which the visitors in the foreground are turning to with great interest. One man is even reaching for his telescope in order to see better. This masterpiece of contemporary engineering was Gustav Eiffel's chef d'oeuvre inconnu, an extravagant contribution to the park, which opened in 1867 as part of the World's Fair (Fig. 12).[13] Masses dissolve into a light, delicate structure

[11] Clark, *Painting of Modern Life*, 190.

[12] See Alphand, *Les Promenades de Paris*, 2 vols. (Paris: Rothschild, 1867–1873). This voluminous "architectural theory" contains all of Alphand's works for Paris, not just Buttes-Chaumont. A short good analysis of this work was given in Antoine Grumbach, "Les Promenades des Paris," *Architecture d'aujourd'hui* 185 (1976): 97–106.

[13] See Michel Vernes, "L'Œuvre d'Adolphe Alphand: Du Jardin au territoire," a paper on *suburbanisme* and *paysage* presented at a meeting of the Société Française des Architectes, 5 March 1997, Paris.

9. Forest clearing, the Türkenschanzpark, 2000

10. Claude Monet, The Railroad Bridge of Argenteuil, *1873, private collection (from T. J. Clark,* The Painting of Modern Life: Paris in the Art of Manet and His Followers *[Princeton, N. J.: Princeton University Press, 1986])*

11. Vue des falaises, *Buttes-Chaumont, wood engraving (from Jean Adolphe Alphand,* Les Promenades de Paris, *2 vols. [Paris: Rothschild, 1867–1873])*

suspended from the rocks, floating in midair, and yet entirely stable, although the bridge spans a remarkable sixty-five meters. It gives new dynamics to the rocky ersatz mountain that the bridge appears to penetrate with great force. The contrast between modern bridges, signs of a new engineering age, and the fake archaic landscape underlines the neopastoral atmosphere in the park. These contradictions seem harmonized by the admiring looks of the passersby as they take in these "creations" existing side by side.

The steel-cable bridge corresponds to the concept of contemporary aesthetics. "When we think of Impressionism," asks Robert Herbert, "do we not think first of its rejection of traditional mass and modeling in favor of color and light?"[14] Subsequently he drew a parallel to the new layout of Paris, Baron Georges Haussmann's endeavor to fill the town with light and air—through its wide new avenues and its countless parks and tree-lined squares—covering about two thousand hectares within twenty years.[15] These locations become scenes of the neopastoral attitude where leisure and idleness for everyone predominate, almost like in an egalitarian society; indeed, it was a dream come true.

Paths and Railway Tracks

The New World also developed a serious interest in the neopastoral, and it had already become a major topic in literature, arts, and politics in the first decades of the nine-

[14] Herbert, *Impressionism*, 28.

[15] Françoise Choay, "Haussmann et le système des espaces verts parisiens," *Revue de l'art* 29 (1975): 83–98.

12. Steel-cable suspension bridge, Buttes-Chaumont, 1997

teenth century. The opening up of the North American continent by the railroad played a central role in this process. Leo Marx aptly called the American railway the "machine in the garden."[16] It opened up and connected areas that up to then had been quite untouched; it disturbed the solemn peace in the "Virgin Land."[17] *The Lackawanna Valley* (1855; Fig. 13) by

[16] It became the title of an influential book in which he analyzed 19th-century American literature and its influence on politics of the 19th and 20th centuries; see Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford: Oxford University Press, 1964 and 2000). The cause that triggered the American neopastoral attitude was the same as in Europe; context and sociopolitical consequences were, however, different. The New World was stylized as a paradisiacal wilderness and hostile desert at the same time. Its civilization was a great task that demanded an immense workforce and the solidarity of the community. See Marx: "To describe America as a hideous wilderness, however, is to envisage it as another field for the exercise of power. This violent image expresses a need to mobilize energy, postpone immediate pleasures, and rehearse the perils and purposes of the community. Life in a garden is relaxed, quiet and sweet . . . but survival in a howling desert demands action, the unceasing manipulation and mastery of the forces of nature, including, of course, human nature. Colonies established in the desert require aggressive, intellectual, controlled, and well-disciplined people. It is hardly surprising that the . . . Puritans favored the hideous wilderness image of the American landscape" (43). Unlike in Europe, where an effect of industrialization was the strong augmentation of leisure time and tourism, American pastoral/neopastoral attitudes were twofold: they marked the motor of civilization and the loss of wilderness.

[17] In the introduction, Marx, *The Machine*, quotes Nathaniel Hawthorne, who had written of his visual and sensual experiences in the woods of Concord, Mass., during July 1844. Hawthorne's report was also a homage to Henry Thoreau, who lived in these woods while working on *Walden.* At first, Hawthorne heard only the twittering of birds, the chirping of cicadas, and the humming of bees. After awhile he heard a church

13. George Innes, The Lackawanna Valley, *oil on canvas, 1855 (courtesy of the National Gallery of Art, Washington, D.C.)*

George Innes was commissioned to depict the repair shop, the roundhouse, and some of the smoking trains of the Lackawanna Railroad Company. Despite its banal subject matter, this painting became one of the most famous in America in the nineteenth century. The landscape is evenly flooded by light and air. This atmosphere softly envelops the various objects, and so the different spheres—the landscape, the village, and the technological plants—are harmonized. The airborne emissions from the stacks do not contaminate the scene but confer a rhythmic, nearly ornamental touch. This is a refined, modern fête champêtre. A hiker in a bright straw hat rests on a slope near a mighty deciduous tree. As he is contemplating this modern panorama, a train steams by. Behind are the roundhouse, from which the next train is about to leave, the repair shop, and a village with its church and houses. Beyond is the hilly landscape of the Lackawanna valley. The hiker can enjoy this view only because the woods in front of him have been felled. The remaining tree trunks resemble fresh scars on the landscape. Around the rest of the woodland, however, the track moves in a respectful curve instead of cutting through in a straight line. Thus the bend in the track becomes a gesture of reconciliation with nature. The hiker, with the trodden path at his

bell in the vicinity and then the whistle of a locomotive: "[T]he long shriek, harsh, above all harshness, for the space of a mile cannot mollify it into harmony" (13). The same happens in *Walden*. Marx calls this "the little event," which is the starting point of his analysis of the thorough cultural and political changes in the United States stemming from the introduction of the machine.

back, clearly had walked this route. Having arrived, he has a "front row seat" at a crossroads. Unlike the classical Hercules, Innes's subject cannot choose: both paths have become railway tracks; along both, the machine is leading society into the future. Despite a simple composition, Innes has managed to symbolize a turning point for society as it struggled between old, trodden ways and speedy technological developments whose destinations were sometimes threatening and unclear. At the time he was painting, the debate about motion and the replacement of human or animal forces by the machine had reached a climax. This debate also had an effect on park design. Walking through Buttes-Chaumont, for example, a perceptive and attentive pedestrian notes a system of paths indicating three kinds of movement: walking, driving, and riding on a train. Each has advantages, disadvantages, peculiarities, and possibilities as well as a unique relationship to the landscape and perception of it. The distinct differences in the paths with respect to gradient, width, surface, and setting are striking. By analyzing the different kinds of paths within the two parks and the types of movement and the modes of perception, it is possible to understand the special features of their design and their differences from the English landscape garden.

Importantly, the designers for both parks were engaged in the refurbishing of their cities and, particularly, in the construction of new roads and means of transport. Indeed, this was the case for most urban parks of that time.[18] Their main efforts were directed at layout. As demonstrated by a historical photograph of the Türkenschanzpark (Fig. 14), its winding paths were densely built and were the dominant element of its design. In Buttes-Chaumont, two of the three years of construction between 1864 and 1867 were dedicated to layout: the terrain and system of paths were paramount from the beginning (Fig. 15). As Paris was leveled by Haussmann to facilitate transport, Alphand decided to erect a huge rock in the center of the park. Whereas the maze of medieval streets of Paris was destroyed to make room for straight boulevards wherein movement was accelerated, the paths in Buttes-Chaumont meander through the landscape.

Urban parks appeared like an alternative world where winding curves somewhat reduced the speed of urban life. In the reconstruction of Paris, Haussmann used the railroad as his technological model.[19] It seemed as if a railway engineer had executed the project. The ideal street, according to Newton's Laws of Motion, is smooth, level, and straight, and the railway line comes close to this ideal; modern streets likewise follow this example. Loss of speed by friction is minimized; the resistance of the landscape is dissolved by bridges, leveling, and tunnels. As a consequence, trains can reach their maximum speeds and shoot like rockets through the landscape.[20]

[18] Architect Heinrich von Ferstel worked as a consultant for the new layout of Vienna and designed many buildings along the famous Ringstraße. Goldemund, responsible for the enlargement of the Türkenschanzpark, was at that time the city's director of urban planning. Alphand, as the engineer responsible for Buttes-Chaumont, was director of the Service des Promenades et Plantations de la Ville de Paris and also director of the Voie Publique. (For other impacts that this duality of responsibilities had on Alphand's park design, see Marie Luisa Marceca, "Reservoir, Circulation, Residue: J.C.A. Alphand, Technological Beauty, and the Green City," *Lotus International* 30 [1981]: 56–79.)

[19] According to Schivelbusch, *Railway Journey,* 182 f.

[20] Schivelbusch uses the picture of the projectile throughout.

14. Layout and system of paths at the Türkenschanzpark, ca. 1910 (courtesy of Historisches Museum, Vienna)

In Buttes-Chaumont, the promenades form a ring around its different sections. They are wide with smoother surfaces and significantly smaller gradients than other paths. Hence, the bourgeoisie could take their carriages along them. Smaller, steeper paths were designed for pedestrians. These link the promenades and lead to a number of hills. In general, these were footpaths in an explicitly rural setting: stairs made of tree trunks or stone replicas, paths following creeks, stones, or fake tree trunks functioning as passages. Undoubtedly, pedestrians feel the exertion while taking these paths (Fig. 16). Additional playful elements, even slightly risky situations, may be experienced in the same way as on a hiking trip. The entire zone around the railway is designed as deep, dark woods. It takes hikers along small paths at the edge of steep slopes; it is experienced as a walk through a mountainous landscape—the railroad always in sight.

The system of paths in the Türkenschanzpark is similar to that of Buttes-Chaumont, but the latter has fewer steep paths. Interestingly, these steep paths are always located near the alpine sections: the waterfall, the alpine garden, or the lookout tower (Fig. 17). Also, meadows and "mountain pastures" have gradients of up to forty-five degrees, which are considered challenges for pedestrians. By contrast, the straight line of the railway is mirrored by the bridges within the parks. The two bridges in Buttes-Chaumont overcome the rocky landscape, surmounting every canyon, whereas a dwindling path leads up the north side of the rock (Figs. 18, 19). The footpath raises awareness of the strained slowness of motion, for the irregular movements of pedestrians and animals are linked to physical strength and efficiency. However, it also illustrates how humans can adapt to a landscape and follow

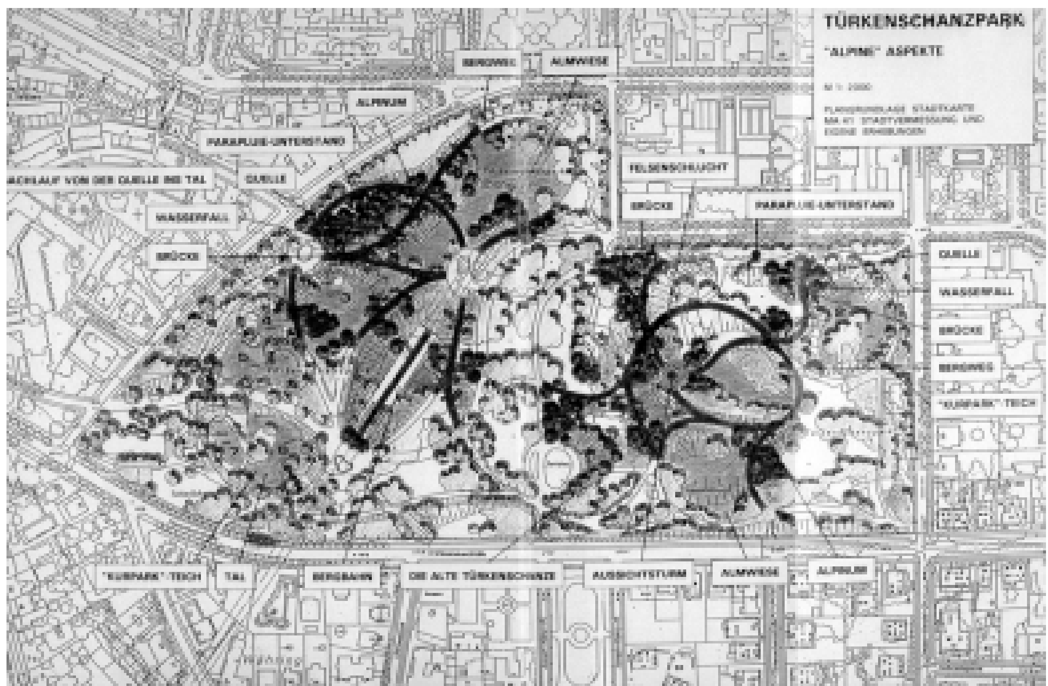
15. Bird's-eye view of Buttes-Chaumont, engraving (from Alphand, Les Promenades*)*

its rhythm. The engravings of *Les Promenades de Paris* offer a striking representation of pedestrians in Buttes-Chaumont. They usually appear in the same scale as nearby plants or stones, and sometimes their clothes are drawn in the same coarse way as the surroundings. For example, the two women admiring the waterfall (Fig. 20) appear as merged with their environment in a kind of equal partnership. The irregularity of the movement of pedestrians and animals limits movement and speed, but both may adapt to the shape of the surrounding landscape.

In contrast, the straight, flat line is the hallmark of industrial movement. Endless continuity and acceleration characterized steam power, and the rail tracks had to be laid out carefully. They cut through a mature landscape, and, though destroying parts of it, they reshaped the ensemble.[21] Visitors can climb the rocks or walk into the "mountains." While "resting" along the way, they can watch trains whiz by before they disappear into the next tunnel.

[21] It is documented how much Alphand enjoyed the transformation of landscape by the railway and its bridges. Alphand (see Alphand and Ernouf, *L'Art des jardins: Parcs, jardins, promenades* [Paris: Rothschild, 1886]) describes the view from the hill of Gravell in another of his œuvres, the Bois des Vincennes: "In the distance to the right appeared the capital; then further the slopes that stand over Versailles. . . . Two railways, that of Lyon and that of Orléans, enliven the landscape with the waving plumes of smoke from their locomotives. To the north stands the castle of Vincennes and, behind, the peaks of Belleville. . . . And finally, as a backdrop to the view, one perceives the magnificent viaduct of the Mulhouse railway whose arches stand clearly against the blue sky."

16. Pedestrian on a path across a creek in Buttes-Chaumont



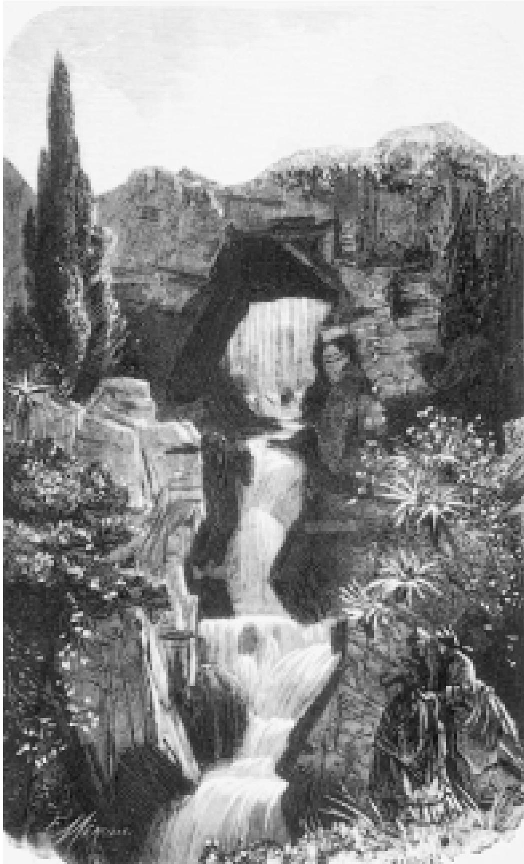
17. Ground plan of Türkenschanzpark with alpine-styled sections darkened: Plan of the City of Vienna, MA 41 (from Cordula Loidl-Reisch, Der Türkenschanzpark: Der Park aus der Sicht der Denkmalpflege *[Vienna: Bundesdenkmalamt, Parkpflegewerk, 1993])*

18–19. Buttes-Chaumont: (left) Brick bridge, 2000, and (right) the north side of the rock with the dwindling footpath (photo: Géza Hajòs)

Dynamics of Sight and the Emphasis on Circulation

While humans can sense speed when riding on a train, at the same time there is the danger of losing the sensual experience of nature. Riding through the Türkenschanzpark (the suburban line in Paris has been closed for decades), it is possible only to catch a glimpse of the landscape above and imagine its beauty; to benefit fully from it requires coming back on foot (Fig. 21).[22] The same applied to a ride up to the Semmering. While on the train, passengers could anticipate which landscapes they would later explore (Fig. 22). According to a popular anecdote, the Emperor Franz Joseph I stopped the train to enjoy a particularly beautiful view during his first ride up to the Semmering. This indicates that the history of newly opened landscapes is also a history of sight. Typical train travelers could not stop the train like a royal; with the opportunity only for fleeting glances, they

[22] A bird's-eye view of Buttes-Chaumont hints at the different scales of speed that lead to different ways of experiencing the surrounding world; the black geometric hole of the tunnel evidently corresponds to the entrance of the grotto. For the train traveler, however, the mountain does not hold any secret but darkness, whereas the city dweller who reaches the grotto on foot can admire the majestic beauty of a 30-m waterfall and concrete stalagmites.



20. Two women (lower right) at the upper part of the waterfall, Buttes-Chaumont, wood engraving (from Alphand, Les Promenades*)*

had to be attentive in order to perceive the passing landscape. I call this *the dynamics of sight*, a concept that was first acknowledged as a special phenomenon during a train ride but later came to have an effect on modern-day perceptions as a whole.[23]

As they rode, passengers took pictures, which were later reproduced on postcards called "dioramas," which presented the Semmering landscape as if densely stratified (Fig. 23). They serve to illustrate the rapidly passing perception of landscape. In the course of industrialization, the "ability to view" changed, and the volume of pictorial impressions rose rapidly. Thus Benjamin Gastineau described the movement of a train through the landscape as dancing.[24] Speed moved pieces of scenery closer to one another, even though they had belonged to distant and distinctly different areas. To Schivelbusch, this was "panoramic" travel:

> Panoramic perception, in contrast to traditional perception, no longer belonged to

[23] See Georg Simmel, "Die Großstädte und das Geistesleben," *Die Großstadt* (Dresden: Jahrbuch der Gehe-Stiftung, 1903), 187–205 (French trans.: Simmel, "Les Grands villes et la vie de l'esprit," *Philosophie de la modernité. La Femme, la ville, l'individualisme* [Paris: Payot, 1989], 232–52).

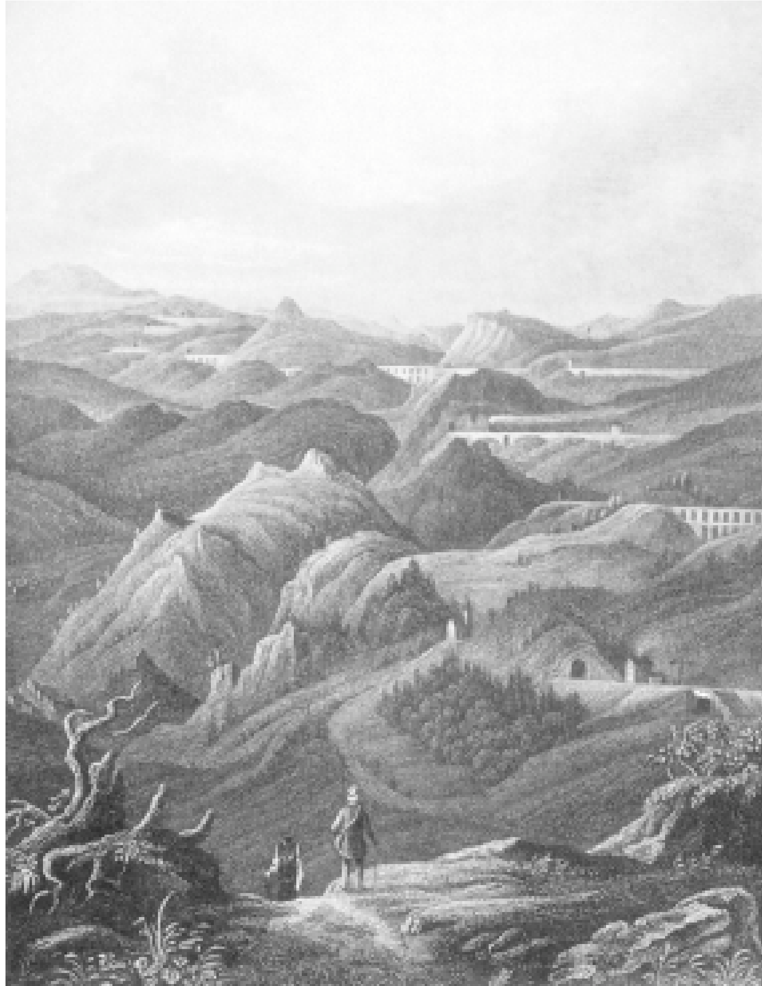
[24] In Gastineau's 1861 travel brochure, "La Vie en chemin de fer" (Life on the Railway); this notion is also in Schivelbusch, *Railway Journey*, 60 f.

21. Train traveling on tracks adjoining the Türkenschanzpark

> the same space as the perceived objects: the traveler saw the objects, landscapes, etc., through the apparatus which moved him through the world. That machine and the motion it created became integrated into his visual perception. . . . That mobility of vision—for a traditionally orientated sensorium, such as Ruskin's, an agent for the dissolution of reality—became a prerequisite for the "normality" of panoramic vision. This vision no longer experienced evanescence: evanescent reality had become the new reality.[25]

The dynamics of sight had also an effect on urban park design from the second half of the nineteenth century onward. The frequent bends in the paths and the vistas that quickly follow one another produce a kind of staccato, a continuously fresh stimulation of perception: a vista has just opened up into the valley and beyond, to the district of the city surrounding the park; then a moment later our eyes are caught by another attraction beside the path: a spring gushing from the ground, a shelter, a wooden fence that seems to have grown there naturally. The continuous wandering of our eyes, inspired by the specific landscape design, is similar to the experience of a train ride: a continuous gliding past discontinuous images that opens up a new accelerated way of perceiving landscape. The "great rhetorical places" (Ian Hamilton Finlay) of the English landscape garden are somewhat diminished. The shortening of time is reproduced in the landscape design.

[25] Ibid., 64. In another chapter, Schivelbusch also includes a discussion of the new evanescent reality of glass constructions.



22. The Railway toward the Semmering*, lithograph after a drawing by Friedrich von Exter, ca. 1855 (Collection of Wolfgang Kos, Vienna)*

The layouts of these Viennese and Parisian parks also constitute an ideal network of paths for pedestrians under crowded conditions. Circulation became one of the most important preoccupations in urban park design after 1843.[26] Likewise, modern street design does not aim primarily to accentuate particular buildings but to maintain traffic flow.[27]

[26] Throughout that year Joseph Paxton worked on his design for the Birkenhead park near Liverpool, which marked a turning point in urban park design and influenced many park designers, among them Olmsted, Kemp, and Alphand. Paxton designed a pattern of paths for the circulation of visitors that separated different types of traffic. See George F. Chadwick, *The Work of Sir Joseph Paxton, 1803–1865* (London: Architectural Press, 1961), 53–69; and *The Park and the Town: Public Landscape in the 19th and 20th Centuries* (London: Architectural Press, 1966).

[27] Françoise Choay, *The Modern City: Planning in the Nineteenth Century* (London: Studio Vista, 1969), and Sigfried Giedion, *Space, Time, and Architecture: The Growth of a New Tradition,* 5th ed. (Cambridge, Mass.: Harvard University Press, 1974).

23. Diorama unfolded: "The Railway toward the Semmering." *Collection of Thomas Reinagl, Vienna (from* Die Eroberung*)*

Thus urban park paths allow access to different attractions that have become more of a decorum for them. It is the paths themselves and motion that are of central importance.

When a Train Links Different Worlds

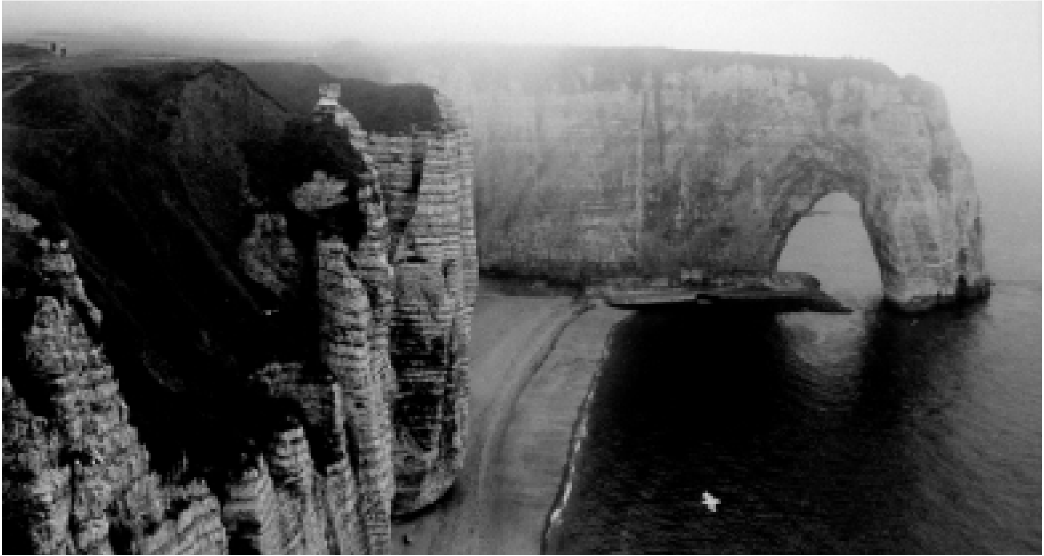
Preindustrial means of movement and transport preserved the continuum of space they traveled because of the mimetic relationship with topography. With the advent of the steam engine, the Atlantic had been reduced to half its size and the Bosphorus was no wider than Fifth Avenue.[28] The railway by its enormous speed dissolved the given space continuum. Two distant places could suddenly be "close." As Heinrich Heine put it in 1843:

> I feel as if all mountains and forests of all countries approach Paris. I already smell the perfume of German lime trees. In front of my door the North Sea is roaring.[29]

The Viennese and Parisian park designs discussed here exemplify the dissolution of the

[28] According to the *Quarterly Review* 63 (1839): 23; in Schivelbusch, *Railway Journey,* 10.

[29] Heine, "Lutetia," 449 (as above, note 7).



24. Inspiration for Buttes-Chaumont: Rocks of Etretât on the coast of Normandy (photo: Christian Huemer)

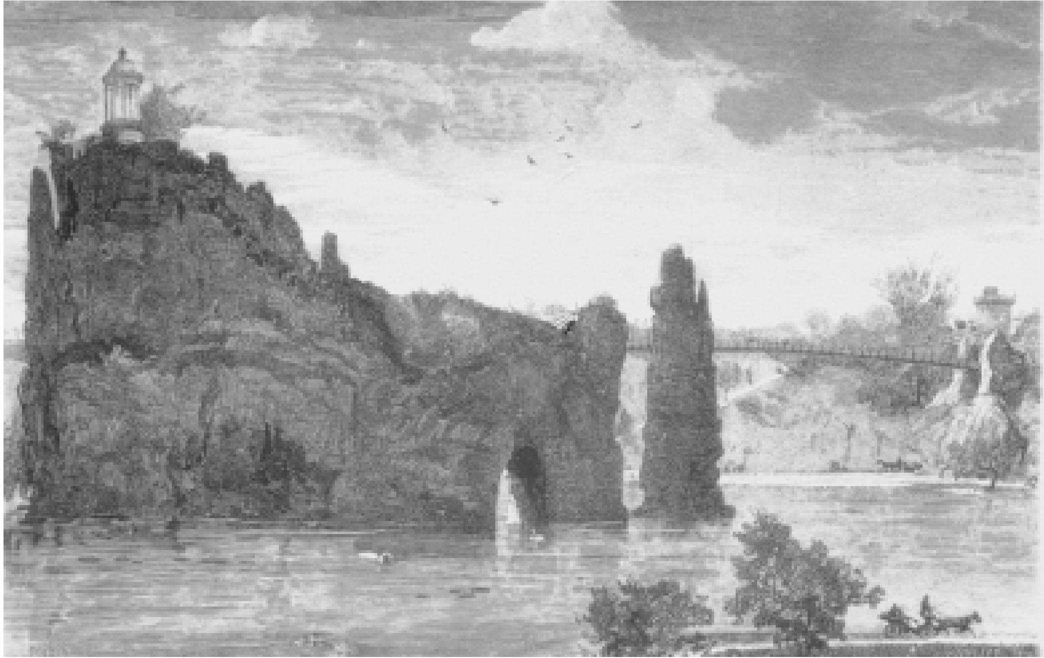
time-space continuum and the minimization of the landscape by the railway. The "park experience" visualizes the gesture of the time: standing on the steel-cable bridge, visitors can feel the city and the landscape approaching each other. Visitors can either direct their gaze toward the unspoiled nature of the rugged rocks or face the urban landscape. Distances cease to be problematic; they are "bridged over." Parisians know this rocky landscape well. It is a replica of the Rocks of Etretât on the Norman coast (Figs. 24, 25). Since the construction of the railway, trips to the coast had become popular. "Untamed nature" turned into landscape, opened up as a novel diversion for the aesthetic enjoyment of excursionists. The bridge in the park exemplifies a new aspect of life initiated by modern engineering and speed. Town and country are now separated only by a turn of the head.

As a consequence of industrialization, excursions to the countryside began on a large scale, thus penetrating nature and arranging it into a landscape (Fig. 26). The establishment of the railway marked the advent of the modern tourist trade, where nature becomes only the coulisse for the daily spectacle and the luggage of the well-educated excursionist includes hiking boots *and* formal dinner attire.

> Still covered with the dust of the capital city, but already in the midst of an alpine countryside. Mountains rising against the blue sky make a great backdrop, inviting you to plunge body and soul into the enjoyment of nature.[30]

This diminishing of distances, the speed at which destinations could be reached, and their

[30] Quoted from a guidebook to Semmering; in Kos, *Semmering*, 100.



25. A vision for the Buttes-Chaumont landscape inspired by the Rocks of Etretât. Vue donnant sur le lac, *Buttes-Chaumont, wood engraving (from Alphand,* Les Promenades*)*

new proximity and accessibility fascinated *everyone* of the era. It became possible to live simultaneously in two worlds. In poor health, Sigmund Freud rented a villa on the Semmering and enthused, "[It is a place] from where I can easily go to Vienna and back in one day."[31]

It is significant that the park design was oriented not only toward the recently rediscovered landscapes near Vienna and Paris. Landscapes opened up by the railway were also linked to the garden: "Life as garden art," wrote Hugo von Hoffmannsthal, enthusiastically describing his stay on the Semmering.[32] Pierre Joseph Proudhon declared the whole French nation an enormous garden thanks to the established railway network.[33] The image of the city, always within reach, created the necessary differentiation for the new aesthetics of landscape and initiated the neopastoral lifestyle. The city park mirrored the landscapes of the then popular excursion destinations. The railway crossing the parks presented the newly established link between two different worlds that now influenced each other.

[31] Sigmund Freud to Karl Abraham, 4 July 1924, in *Sigmund Freud: Sein Leben in Bildern und Texten* (1976); also quoted by Kos, *Semmering,* 9.

[32] Ibid.

[33] Marc Baroli, ed., *Lignes et lettres: Anthologie littéraire du chemin de fer* (Paris: Hachette, 1978). Schivelbusch (as above, note 2), 34 f., does not establish a link to "the world as garden" but to the "world as a metropolis" by mentioning an article in an issue of the *Quarterly Review* (1839), which states that an entire nation could soon be incorporated into a metropolis if the establishment of transport lines continues at the same speed. Apart from Europe, the advent of the railway as "machine in the garden" of the New World was a central theme in 19th-century American literature; see Marx, *Machine in the Garden.*

26. Tourism made possible by the advent of the railway: These excursionists at the Semmering were at the vanguard. (Collection of Ronald Stifter [from Die Eroberung])

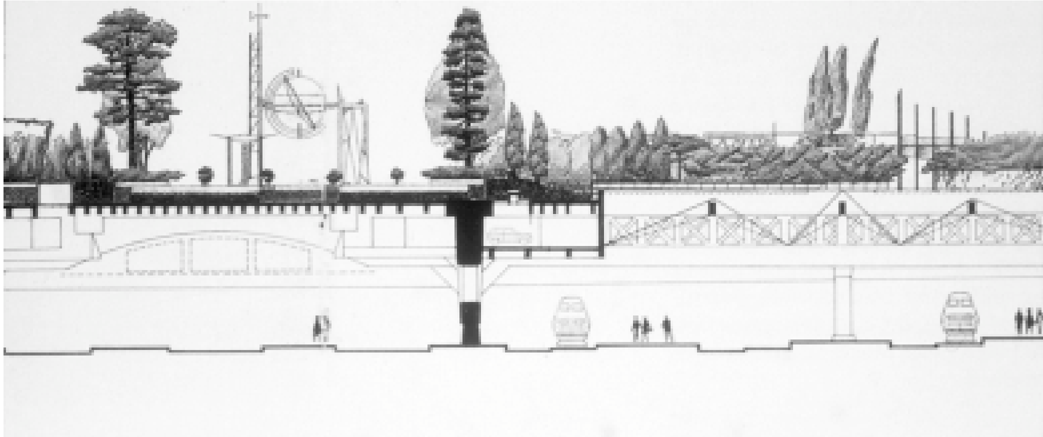
Traveling at High Speed to the Isles of the Blest

The press statements announcing the advent of the modern TGV (*train à grande vitesse*) system in France mirrored the enthusiasm for the railway that had been evident in its early days:

> One moves in order to admire it . . . the technological miracle . . . a heroic feat [and] gem [of French technology, which] awards a certain chic to its environment . . . an orange arrow within the rest of the countryside.[34]

It was in 1993 that an urban garden called the Jardin Atlantique opened atop the new Paris-Montparnasse TGV station (Fig. 27). Notably, more than a hundred years beforehand, Stéphane Mallarmé had proclaimed Normandy and Brittany part of the

[34] Press statements quoted in Agnès Fortier, "Le TGV—Train à Grande Vitesse," in *Paysage au pluriel. Pour une approche ethnologique des paysages*, Collection Ethnologie de la France, Cahier 9, 107–13: "[Il a] sa faculté maîtresse dans la perception de l'espace et du paysage. Il incarne à lui seul un modèle de prouesse technique. [Il est] un fleuron de la technologie française . . . il donne un certain chic à l'environnement . . . une flèche orange dans le reste de la campagne. . . . On se déplace pour aller l'admirer."



27. Cross-sectional view, plan for the Jardin Atlantique (courtesy of François Brun and Michel Peña)

Western Railway,[35] meaning that the railway station served as the gateway to these distant French landscapes. In 1874 this was discussed only theoretically from the point of view of aesthetics. Now within the Jardin Atlantique, landscape architects François Brun and Michel Peña have designed an area of three-and-a-half hectares composed of plantings of species that can be found in their native environments via TGV within a few hours of Paris (Fig. 28). Visitors also find allusions to past European discoveries and conquests. The poetic and symbolic plot of the design expresses the innate desire to be omnipresent; European imperialism and its conquest of landscapes were after all just one of the consequences of this human longing. The huge masts of the sextant sculpted by Bernard Vié function as a memory of the European ships that discovered the New World and therefore they are placed in the section of the garden that was given this name. The masts compete with the Montparnasse Tower. The latter seems to reach the sky, and both sky and tower are mirrored on the façade of a high-rise building that separates the garden from the outside (Fig. 29). This effect changes the fully windowed façade into a vertical blue surface that has a watered effect. Opposite, the imaginary ship seems about to embark on a journey, while the lower-lying trains *do leave* the garden in the *same* direction, taking their passengers to the coast. Those left behind can watch the "ship" or play on the "sandy beach" of the "vertical sea" above the station (Fig. 30). So the garden reaches out to the Atlantic, whose waves are "breaking" near the center of Paris.[36]

With the ocean as their leitmotif, the designers established a dense plot that evokes

[35] Mallarmé, *Œuvres complètes* (Paris: Pléiade, 1970), 774; in Schivelbusch, *Railway Journey,* 39.

[36] This is one example of the poetical references to movement, industrial as well as natural, within the design. The sky was the only natural feature that the team could make out when they visited the site in 1986 to prepare for competition. Both arriving passengers and Parisians were covered by the same sky, which "brought" the weather from the coast to Paris; the Atlantic was the main destination for the departing trains; thus it became their leitmotif. See Brun, Peña, and Schnitzler-Peña, "Le Jardin Atlantique," 41–46.

28. La Salle des plantes ondoyantes, Jardin Atlantique, 1997

myths and memories of past voyages and discoveries.[37] The zones representing the New World and the Old World are separated by the stony sceneries of Mount Atlas on which the heavens were fabled to rest. The Isle of the Blest, a garden with golden apples guarded by the Hesperides, has moved from the western extremity of the ancient world to the center of an urban park in Paris-Montparnasse.[38] A wide path alluding to railway tracks leads to the island, following the same direction as the departing TGV trains.

Within a century, the speed of trains had doubled, bringing formerly distant landscapes closer. Communication in its various forms and speed nowadays seem to be almost more sublime than nature,[39] shrinking the world into an enormous garden or, according to the less optimistic, into a largely destroyed sphere penetrated by never-ending wires, tracks, and traces.[40]

[37] The deepest soil layer does not exceed 1.7 m. Hence, the plant roots had to be specially laid horizontally. For definitions of the garden zones, cf. also Brun, Peña, and Christine Schnitzler-Peña, "Le Jardin Atlantique," *Paysage actualités* 114 (1989): 41–46; Brun and Peña, "Les Formes de la nature dans le jardin contemporain," in *Les Parcs et jardins de demain*, Actes du colloque par l'Ecole Nationale des Ponts et Chaussées, Paris, 4–7 Oct. 1989 (Paris: Presse de l'Ecole Nationale des Ponts et Chaussées, 1990), 143–46.

[38] The sculpture in the middle of the island holds a parabolic mirror. Ironically, the light it captures should enlighten the somber section of the park that represents the New World. Was this another Eurocentristic attempt at enlightenment?

[39] This was discussed, e.g., by Frederic Jameson, "Postmodernism or the Cultural Logic of the Late Capitalism," *New Left Review* 146 (1984), 53–92; and Ulrich Beck, *Risikogesellschaft. Auf dem Weg in eine andere Moderne* (Frankfurt: Suhrkamp, 1986).

[40] Cf. Chris Burden's 1990s' sculpture *Medusa's Head*, Gagosian Gallery, Chicago.

29. Bernard Vié, Sextant*, and the Montparnasse Tower, 1997*

30. "Vertical sea," Jardin Atlantique, 1997

Pedestrians making their way through the Jardin Atlantique cannot help but perceive the noise of the trains and the stench of the underground that infiltrate the surroundings. A promenade through the park is not quiet: the noisy signals of the trains alternate with the splashing of fountains "announcing the roaring sea." Whenever a train departs, the *ceiling* above the station, which is also the *soil* for the garden, begins to tremble.

And even as the pedestrians in the park are shaken by the departing train, the TGV has already left in conquest of new destinations.