

Infrastructure as Art: The Principle of Mimetism as a Paradigm through which to Read the Architectural and Artistic Intervention in the Landscape and in the City

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The image that shapes the conceptual framework of this article is the experience of the road trip undertaken by minimalist artist Tony Smith with his students along the New Jersey Turnpike, a highway undergoing construction in the American suburbs. The narrative of this nocturnal journey, published in Artforum magazine in December 1966, prompts the question of the dual aesthetic nature of the road. On the one hand, the road can be considered an infrastructure, an architectural element inserted into the landscape. On the other hand, the road can be regarded as a route, an abstract sign that crosses the landscape, drawing it. The question thus arises as to how the road should be considered: “as an object or as an experience? As a space or as the act of crossing? What role does the landscape around it play?” (F. Careri). The relationship between architecture, infrastructure and the art world offers a unique perspective to explore the interaction between built space, landscape and culture. This article investigates from different perspectives the link between infrastructure as an architectural object and artistic interventions in open space, highlighting how they both find their primary field of intervention in the landscape.

Introduction

Outline Paper Structure

This article investigates infrastructure as art, addressing the conditions under which infrastructure can be understood as an artistic device and, conversely, under which art can operate as infrastructure. Although infrastructure has increasingly been interpreted as a spatial, cultural and aesthetic construct, a conceptual framework capable of defining this hybrid condition remains underdeveloped. The paper therefore addresses two reciprocal research questions: (1) under what conditions can infrastructure be understood as art? And (2) under what conditions can a work of art be understood as infrastructure? Building upon these questions, the article proposes the concept of art-infrastructure as a new hybrid category within the expanded field of architecture, landscape and art.

The introduction develops this argument through the image-guide of Tony Smith's experience travelling along the unfinished New Jersey Turnpike. Rather than treating Smith's account as an opening anecdote, the paper considers it the conceptual hinge of the research, revealing how infrastructure may generate an aesthetic experience through movement, scale, perception, and the embodied

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encounter with the landscape. This reading is further supported by Francesco Careri's reflections in the book *Walkscapes. Walking as aesthetic practice*.¹

The second chapter constructs the theoretical framework supporting the proposed definition of art-infrastructure. It begins with Lawrence Halprin's concept of Traffic Architecture, understood as a design approach that recognizes infrastructure as a spatial and cultural device capable of choreographing movement and shaping bodily experience. Although Halprin never explicitly refers to the concept of mimetism, this paper interprets his work through this lens, arguing that infrastructure can reproduce the experiential qualities of landscape through movement, perception, and environmental interaction. This interpretation is then related to Sigfried Giedion's reflections on infrastructure and modernity before being placed in dialogue with Rosalind Krauss's theory of the Expanded Field. Rather than presenting these theories independently, the chapter progressively builds the conceptual foundation from which the new category of art-infrastructure emerges. Robert Smithson's understanding of the entropic and layered landscape further supports this discussion by extending the relationship between artistic intervention, territory and infrastructure.

The third chapter presents the research methodology. Adopting an interdisciplinary critical-theoretical approach that intersects architectural theory, art theory, design culture, visual studies, and landscape studies, the paper investigates infrastructure as both a cultural artifact and a symbolic-spatial construct. To test the proposed definition of art-infrastructure, four case studies are selected: the High Line and the Promenade Plantée, representing infrastructures that acquire artistic agency within the urban context, and *Double Negative* and *Spiral Jetty*, representing works of art that simultaneously assume infrastructural qualities within the landscape. Rather than offering descriptive readings, each project is analysed through a shared analytical framework derived from Tony Smith's experience and Halprin's Traffic Architecture, including criteria such as territorial scale, organisation of movement, bodily experience, temporal sequencing, relationship with the landscape, and the capacity to generate aesthetic and perceptual intensification. The comparative assessment is summarised through a matrix that positions each project along the proposed art-infrastructure spectrum.

The fourth chapter discusses the research findings. Through the comparative analysis, the paper demonstrates that art and infrastructure should not only be understood as separate or opposing categories, but that they can be understood as positions within a continuous spectrum in which projects may exhibit different degrees of infrastructural performance and artistic agency. The proposed concept of art-infrastructure identifies the conditions under which these two dimensions coexist and provides a framework for interpreting hybrid interventions operating simultaneously as spatial infrastructure and aesthetic devices. The findings are subsequently discussed in relation to Luca Galofaro's notion of "artscapes,"² together with the broader theoretical debate on the expanded field, highlighting the paper's contribution to extending these existing conceptual frameworks.

1. F. Careri, *Walkscapes. Camminare come pratica estetica*. (Torino: Einaudi, 2006).

2. L. Galofaro, *Artscapes. L'arte come approccio al paesaggio contemporaneo* (Milano: Postmedia Books, 2007), 7.

Finally, the conclusions argue that art-infrastructure constitutes a new hybrid category within the expanded field, capable of describing architectural and landscape interventions that simultaneously organise movement, structure territory, and generate aesthetic experience. Rather than representing a fixed category, art-infrastructure is proposed as a spectrum in which projects may lean more strongly towards infrastructural function or artistic agency depending on the relationship established between movement, landscape, perception, and embodied experience. The paper concludes by reflecting on the relevance of this framework for contemporary architectural research and identifies potential directions for future investigations into infrastructural landscapes and hybrid spatial practices.

Tony Smith's Journey on the Turnpike under Construction

In the late 1950s, Tony Smith (South Orange, 1912 – New York, 1980), minimalist artist, architect, and designer, entered a construction site with three students from Cooper Union University, where he taught, and takes a road trip along the New Jersey Turnpike, a highway under construction on the outskirts of New York. Of that journey, from exit 16 at Meadowlands to exit 9 at New Brunswick, during the night and in complete darkness, without road signs, markings, edges, or lines to indicate the path, what the artist remembers most vividly is: “the dark pavement moving through the landscape of the flats, rimmed by hills in the distance, but punctuated by stacks, towers, fumes, and colored lights”.³

This memory-image, the smooth flow over a black, flat surface, a trace and also a void in the anthropized landscape, is visually counterbalanced by distant vertical structures, refineries, power plants, and oil tanks. The environment traversed by Smith is an urban-industrial context, where the coexistence of infrastructure and nature leads the gaze to contemplate a layered and multifaceted landscape. In this sense, “the infrastructure was not only at the service of transport: it associated locomotion with perception of the landscape it forged.”⁴ About a decade later, in December 1966, *Artforum* published what has since become a well-known account of that journey. Its relevance lies in the fact that a banal and common car trip, albeit illegal, had expanded the boundaries of artistic experience, provoking a methodological and conceptual shift in the relationship between art, architecture, infrastructure, and landscape, and in doing so, contributed to expanding the very definition of art.

Indeed, during those years, many artists began to appropriate the language of architecture, Gordon Matta-Clark for example, or to intervene directly in peripheral contexts, as did Robert Smithson; others, like Lawrence Weiner, used language as a sculptural form. These radical practices, spatial, conceptual, and often site-specific, of such magnitude to create a tabula rasa of traditional artistic categories and their definitions.

Smith's experience on a highway under construction can thus be seen as aligned with the practices of these artists, as the act of crossing challenged conventional artistic categories and, most significantly, dissolved the boundary between art and the

3. S. J. Wagstaff, “Talking with Tony Smith,” *Artforum* (1966): 19.

4. P. A. Trévelo, and A. Viger-Kohler (Eds.), *The Earth is an Architecture* (Leipzig: Spector Books, 2021), 39.

everyday event. The artist himself recalls that specific drive as “a revealing experience”⁵ so powerful that it became both a symbol and paradigm of a new way of making and perceiving art, in relation to the space and of the landscape traversed.

What makes Smith's account particularly significant is that the artistic quality of the experience does not derive from an autonomous artwork, but from the act of moving through an unfinished infrastructure. The road is experienced not as an object to be observed but as a spatial sequence unfolding through bodily movement, perception, and the changing relationship between the traveller and the surrounding landscape. These aspects - movement, scale, temporality, and embodied perception - constitute the conceptual dimensions that this paper later develops through Lawrence Halprin's theory of *Traffic Architecture* and ultimately employs to define the proposed category of art-infrastructure.

The Dual Aesthetic Nature of the Road

The significance of the narrative surrounding this nocturnal journey, chosen here as the guiding image and opening of this article, lies in the questions it raises about the dual nature, both aesthetic and conceptual, of the road-object.

On one hand, when viewed as infrastructure, the road is an architectural element with precise structural characteristics. It is a trace-mark in the landscape, cutting through and crossing it, defining a specific space, measuring it, and distinguishing it from everything around it. As a trace, it is the object over which movement occurs; its presence draws and measures space through its own linearity. In this sense, it functions as an object designed to facilitate movement from one place to another.

On the other hand, the road can also be seen as an abstract line traversing the landscape, a conduit for an ephemeral action, simultaneously index of movement and surface of displacement. In this regard, the road becomes an experience.

In 1969, these issues were echoed in the exhibition “Live in Your Head: When Attitudes Become Form. Works – Concepts – Processes – Situations – Information”, curated by Harald Szeemann at the Kunsthalle Bern. The show, now a cornerstone in exhibition-making history, emphasized attitude and process, exploring how artistic experience itself could become form.

Even earlier, in 1941, Sigfried Giedion, at the conclusion of *Space, Time and Architecture*,⁶ celebrated the American Parkways, highlighting their anticipatory role for contemporary cities and their boundless freedom of movement, elevating them to a new form of art, a view that, in many ways, foreshadowed discussions surrounding Land Art.

Similarly, Lawrence Halprin, in his 1966 book *Freeways*, wrote:

“Freeways out in the countryside, with their graceful, sinuous, curvilinear patterns, are like great free-flowing paintings in which, through participation, the sensations of motion through space are experienced. In cities the great overhead concrete structures with their haunches tied to the ground and the vast flowing cantilevers rippling above

5. Wagstaff, “Talking with Tony Smith,” 1966, 19.

6. S. Giedion, *Space Time and Architecture: The Growth of a New Tradition* (Cambridge: Harvard University Press, 1941).

the local streets stand like enormous sculptures marching through the architectonic caverns. These vast and beautiful works of engineering speak to us in the language of a new scale, a new attitude in which high-speed motion and the qualities of change are not mere abstract conceptions but a vital part of our everyday experiences.⁷”

In light of this, after reading Smith’s account, a number of critical questions naturally emerge concerning the double nature of the road, questions that Francesco Careri addresses in his 2006 book *Walkscapes. Walking as an Aesthetic Practice*. How should we consider the road? “Is the road a work of art, or is it not? And if it is, in what way? As a large ready-made object? As an abstract sign that cuts through the landscape? As an object or as an experience? As a space in itself or as the act of crossing it? What is the role of the surrounding landscape?”⁸

The journey along that unfinished highway opened up a set of reflections that extended beyond the road itself to embrace the very nature and meaning of art. Indeed, Gilles Tiberghien, the French philosopher, traced the origins of American Land Art to this moment, an art movement built on actions and interventions in the landscape, on various scales, from deserts to urban voids and city peripheries.

From the 1960s onward, these heterogeneous practices expanded the very definition of art, pushing it into what Rosalind Krauss called the “expanded field”, a territory where art began to engage in active dialogue with architecture and landscape.

A seminal example conceptually aligned with Smith’s road journey is Richard Long’s *A Line Made by Walking* (1967). The simple act of walking across a field assumed a methodological and conceptual significance, transforming a common activity into an artistic gesture.⁹ The trace of that act—captured in a black-and-white photograph—challenged the very notion of the artwork itself, just as Smith’s Turnpike trip had done: Is the artwork the walk or the photograph? The journey or the story that documents it?

These reflections remain intentionally open, to emphasize that, in the wake of Smith’s experience, many radical interventions emerged, reshaping how we interpret the relationship between art, architecture, and landscape, ultimately transforming our perception.

As a consequence, Smith’s nocturnal drive along the unfinished highway becomes embedded in a broader historical and critical context. Why, in this particular case, could a simple and everyday act like driving be considered art?

The answer lies in time and perception. During that movement, the spatial perception of perspectives, viewpoints, colors, sounds, occurred over an extended duration, not in a single glance as when one observes a static painting on a wall. The experience of the journey could not be localized to a fixed point in space; rather, it was inseparable from the motion itself, which, animated by an intrinsic dynamism,

7. L. Halprin, *Freeways* (New York: Reinhold Publishing Corporation, 1966), 17.

8. Careri, *Walkscapes. Camminare come pratica estetica*, 2006, 88.

9. Other Land artists explore the relationship between landscape and art through walking such as Walter De Maria with *One Mile Long Drawing* (1968), Bruce Nauman with *Slow Angle Walk* (1968), Carl Andre with *Secant* (1977), Christo with *Wrapped Walk Way* (1978) and *Running Fence* (1976). In these works the theme of the path is expanded by the dialectic between the physical geometry of space and the bodily experience of movement.

placed Smith's body in relation to constantly shifting spatial and geographical contexts.

Thus, the dual nature of the road comes into focus: not merely as infrastructure, which functions by definition as a tool for reaching one place from another, but as experience, something that has little to do with utility. As Smith himself wrote:

"The road and much of the landscape was artificial, and yet it couldn't be called a work of art. On the other hand, it did something for me that art had never done. At first I didn't know what it was, but its effect was to liberate me from many of the views I had about art. It seemed that there had been a reality there that had not had any expression in art. [...] There is no way you can frame it, you just have to experience it."¹⁰

This concept of experience, understood as the relationship between body and space, and thus between movement, infrastructure-architecture, and art, offers a unique lens through which to explore the interplay between built space, landscape, and cultural meaning.

The aim of this article, therefore, is to investigate the role of infrastructure as art, drawing from both art and architectural discourses and the intersection of key theoretical perspectives within each. In particular, Halprin's principle of "mimetism" and Krauss's theory of the "expanded field" are proposed as the two main paradigms through which to analyze architectural-artistic interventions in the landscape.

The analysis of selected case studies will demonstrate that such interventions can no longer be defined through rigid or static definitions. In this sense, Tony Smith's Turnpike narrative and the road-object that opens this article serve not only as a symbolic image but also as a methodological device, framing the themes discussed within a broader conceptual framework while reflecting the interdisciplinary nature of the approach, situated between art criticism and architecture. The landscape, the city, and the bodies that inhabit them remain the central focus of this inquiry.

Literature Review

From the Hybrid Space of Lawrence Halprin's Traffic Architecture to Mimetism

In the 1960s, Lawrence Halprin's interest in urban highway infrastructure stood out for its radically different design vision compared to the prevailing functionalist engineering of the time. In his book *Freeways*,¹¹ Halprin introduced an approach that might be defined as "Traffic Architecture", a mode of design that conceives the freeway not merely as a technical device, but as a spatial and cultural structure capable of generating new relationships between bodies, architecture, landscape, and the city. Within this framework, the highway is not simply a trace, it can become a "hybrid space", positioned between infrastructure and landscape, between a place of movement and one of experience.

10. Wagstaff, "Talking with Tony Smith," 1966, 19.

11. L. Halprin, *Freeways* (New York: Reinhold Publishing Corporation, 1966).

Building on these ideas, this paper argues that this work on infrastructure be further understood as an additional conceptual tool: that of “mimetism”, not as the will to disappear into or camouflage within the context, be it natural or urban, but rather as a form of “active mimetism”. In Halprin’s vision, architecture has the ability to read, recognize, and enhance existing signs — natural, architectural, infrastructural, or social — and transforms them into lived spaces. Infrastructure becomes part of the context itself: an “urban fact” containing formal, ecological, and perceptual potential. The freeway is thus reimagined as an opportunity to design with “what is already there”, in continuity rather than rupture.

Halprin’s work invites us to read the highway as mimetic: as part of an artificial context or landscape that visually and functionally integrates with the natural or urban environment. As opposed to the elevated highway traced over a territory as the shortest line connecting two points, he proposes routes that follow the local topography, integrating plant elements, pedestrian paths, scenographic ramps, architectural forms, rest areas, and viewpoints.

The notion of “hybrid space” between art and infrastructure also connects to Halprin’s experiential and participatory design vision, developed in parallel with his wife, dancer and choreographer Anna Schuman. The moving body, a central element in their urban participation workshops, also becomes a paradigm for reading highway space: not only a space to be traversed, but one to be lived, seen change over time, inhabited visually and sensorially. His designed sequences function as landscape choreographies intended for the automobile traveler, but also for those who walk, observe, or pause. It is an immersive, performative, and environmental approach, as reflected in his writings on the kinetic experience of traveling along freeways.

A key example of this vision is *Freeway Park* in Seattle¹² (1976), where Halprin transformed an infrastructural void into a layered urban park: green areas, water features, ramps, and stairways articulate a plane that reconnects two parts of the city divided by a freeway. Here, infrastructure is not denied or hidden, but incorporated, reinterpreted, and mitigated. The space once designed for traffic becomes a place of pause, contemplation, and play, a true public space, hybrid by definition.

Halprin’s approach finds resonance with the work of Alison and Peter Smithson, particularly in their use of photography¹³ as a critical tool and means of documentation. Just as the Smithsons analyzed the transformation of postwar British cities through photographic collages and visual sequences, Halprin uses photography in *Freeways* to narrate the impact of highways on the American landscape. His images are not merely technical illustrations but a visual essay: they reveal contrasts, distortions, unintended forms; they expose the latent aesthetic and spatial potential of the freeway. This emphasis on visual and perceptual qualities aligns Halprin with a design tradition attentive to the lived experience of spaces and infrastructures, how they are perceived and inhabited beyond their technical function.

12. V. Umani, “The Role of Architecture in Overcoming Barriers: From Ronald Rael’s Teeter Totter over the US-Mexico Border to Lawrence Halprin’s Freeway Park Designed over the Seattle Freeway,” *Athens Journal of Architecture* 9, no. 4 (2023): 367-386.

13. See for example the experimental structure and juxtaposition of texts and images of the book *Team 10 Primer*. A. Smithson (Ed.), *Team 10 Primer* (Cambridge: MIT Press, 1969).

In summary, Halprin's "Traffic Architecture" represents a pioneering attempt to reimagine infrastructure as a hybrid, mimetic, and participatory space, capable of fostering new forms of coexistence between mobility, nature, and the city. The freeway, for a long time a symbol of urban alienation and territorial rupture, becomes instead fertile ground for a form of design that is sensitive, ecological, and profoundly human.

Rosalind Krauss's Sculpture in the Expanded Field

In the spring of 1979, American art critic Rosalind Krauss formulated the concept of the *expanded field* to frame the methodologies of artists who, during those years, were extending their fields of action toward architecture and landscape, a shift that naturally led to the explosion of disciplinary and formal boundaries within which sculpture had previously operated.

In December of the same year, *Artforum* published Krauss's now-canonical theoretical essay *Sculpture in the Expanded Field*.¹⁴ The text proved both disruptive and highly influential, as it demonstrated how the sculptural object had expanded toward architecture and landscape, a tendency that characterized many artistic practices of that period.

Krauss critically examined the modernist definitions of sculpture, particularly the binary concepts of "not-architecture" and "not-landscape". Until that moment, sculpture had been defined as everything that was neither architectural (i.e., not built) nor landscape (i.e., not natural). Thus, "not-architecture" referred to the natural realm, while "not-landscape" referred to the built, the artificial. However, this very dichotomy between constructed and unconstructed marked the threshold explored by artists at the time. Since these works could not be classified under traditional sculptural definitions, they remained suspended in a no man's land, awaiting new terminology.

Krauss's structuralist and analytical perspective materialized in the application of Klein's mathematical expansion model to art, a drawing-diagram composed of three progressively complex configurations that visualized the expanded field in which sculpture operated during the 1960s. The binary structure that had defined modernist sculpture — not-architecture and not-landscape — expanded into a field that now included the positive categories of architecture and landscape. According to this view, if the negative pairings defined sculpture's neutral territory, the positive pairings mapped the space of place-making.

The concept of complexity, as used by Krauss to describe the relationship between architecture and landscape, signals a profound methodological transformation, both operational and conceptual. In artistic practice, this complexity defined the formal nature of the intervention: no longer self-referential, but expanded, in dialogue with the landscape. Krauss used complexity to describe relational dynamics, highlighting how art and architecture were no longer operating on separate planes but instead engaging on shared ground. Her theory introduced a new parameter for defining a distinct category of works that could no longer be described using traditional aesthetic frameworks.

14. R. Krauss, "Sculpture in the Expanded Field," *October* 8 (1979).

As a result, the term sculpture was extended into three categories: *Marked sites* (a combination of landscape and not-landscape), *Site-constructions* (a combination of landscape and architecture), and *Axiomatic structures* (a combination of architecture and not-architecture), all of which emphasize the formal and conceptual complexity of these practices. In this sense, the concept of expansion applies not only to the spatial realm in which sculpture operates, but also to the artistic language itself.

In this context, Krauss spoke of a “reinvention of the medium”,¹⁵ since the artwork could no longer be defined by a singular, specific medium—such as painting or sculpture—but rather through a set of logical operations conceived as an expanded structure of forms, materials, and most importantly, sites.

Starting in the 1960s, movements such as Land Art, Earth Art, and Environmental Art brought about a new material paradigm: landscape itself—desert expanses, peripheries, infrastructure—was elevated to the status of primary artistic medium. In a broader sense, the landscape was transformed from something to be observed into a material for design. In this regard, the perspective of artist Michael Heizer is particularly significant: “Museums and collections are full, their floors are collapsing—but real space exists¹⁶”.

Hybrid Figures: Mimetism, the Expanded Field, and the Definition of Art-Infrastructure

The preceding chapters have established the conceptual foundations of this research through Tony Smith's experience of the unfinished Turnpike, Lawrence Halprin's conception of *Traffic Architecture*, the principle of mimetism, and Rosalind Krauss's theory of the *expanded field*. Rather than treating these frameworks as parallel theoretical perspectives, this chapter brings them together to define the proposed category of art-infrastructure. The objective is not to replace existing interpretations of infrastructure or sculpture, but to identify the conditions under which infrastructure can be understood as art and, conversely, under which a work of art can assume infrastructural qualities. In this sense, the proposed category is conceived not as a fixed definition, but as a spectrum of hybrid conditions situated between architecture, infrastructure, landscape, and art.

Each of the theoretical frameworks discussed throughout this paper contributes a specific component to the proposed definition.

Tony Smith's journey along the unfinished New Jersey Turnpike reveals the experiential dimension of infrastructure. His account demonstrates that a highway can generate an aesthetic experience independently of any intentional artistic intervention. The artistic quality of the experience emerges through movement, bodily immersion, changing perception, and the continuous unfolding of the landscape. Infrastructure is therefore understood not simply as a technical object but as an experiential device capable of producing wonder, estrangement, and new ways of perceiving territory.

15. E. Grazioli (Ed.) *Reinventare il medium: cinque saggi sull'arte di oggi* (Milano: Bruno Mondadori, 2005).

16. J. Kastner, *Land Art e Arte Ambientale* (Londra: Phaidon 2004), 14.

Lawrence Halprin provides the design dimension of the framework. Through Traffic Architecture, movement is no longer understood merely as circulation but as the primary generator of spatial experience. Although Halprin never explicitly refers to the concept of mimetism, this paper interprets his work through this lens. Here, mimetism does not imply formal imitation of nature or its forms, but rather the capacity of infrastructure to reproduce and intensify the experiential qualities of the landscape through bodily (or car) movement, spatial sequence, and environmental perception. Infrastructure becomes a choreographic system capable of transforming movement into a cultural and aesthetic experience.

Sigfried Giedion contributes the territorial dimension by interpreting infrastructure as one of the principal instruments through which modernity reshapes the landscape. Infrastructure is therefore understood not simply as engineering, but as a cultural artefact capable of reorganising territory, perception, and collective life at an architectural and territorial scale.

Rosalind Krauss provides the conceptual model through her theory of the expanded field. Her work demonstrates that artistic categories should not be understood as fixed disciplinary boundaries but as dynamic fields in which hybrid conditions emerge between sculpture, architecture, and landscape. Krauss never directly mentions infrastructure, but nevertheless, establishes the theoretical possibility that a new hybrid category may develop the traditional disciplinary classifications (including her own).

Finally, Robert Smithson reinforces the landscape dimension of the framework. His understanding of entropy and the landscape as a process rather than a static object extends the relationship between artistic intervention and territorial transformation, demonstrating that landscape itself may operate simultaneously as material, context, and artistic medium.

Taken individually, none of these theoretical positions is sufficient to define the relationship between infrastructure and art. Together, however, they establish the conceptual foundations for recognizing a new hybrid condition in which infrastructural function and artistic agency become inseparable.

Minimum Conditions of Art-Infrastructure

The concept of art-infrastructure should not be understood as a generic overlap between infrastructure and art, nor should every aesthetically designed infrastructure or every work of Land Art automatically be included within this category. Instead, the proposed definition identifies a series of minimum conditions that must coexist for a project to be considered art-infrastructure.

Rather than constituting a fixed category, art-infrastructure should be understood as a spectrum. Like Krauss's expanded field, it accommodates different degrees of overlap between artistic agency and infrastructural function. Some projects remain predominantly infrastructural while incorporating symbolic and aesthetic qualities that transform the experience of movement. Others remain primarily artistic while simultaneously organizing spatial sequences, territorial relationships, and patterns of occupation traditionally associated with infrastructure.

This understanding avoids reducing the relationship between art and infrastructure to a binary opposition. Instead, it recognizes a continuous field of hybrid conditions in which projects may occupy different positions according to the balance established between their functional, territorial, perceptual, and artistic dimensions.

From the infrastructural perspective, a project must operate beyond the scale of the isolated architectural object. It should establish territorial or urban relationships, organize movement, connect places, and actively structure the experience of traversing space. Infrastructure is therefore understood not simply as construction but as a spatial system that mediates relationships between body, landscape, and territory.

From the artistic perspective, the intervention must exceed functional performance to generate an aesthetic experience. It should intensify the perception of place, produce symbolic meaning, and engage the observer emotionally through movement, scale, sequence, and the transformation of landscape into a perceptual event. The artistic dimension therefore lies not in formal expression alone but in the capacity of the work to provoke wonder, reflection, and a renewed awareness of the surrounding environment.

Movement constitutes the fundamental element that links these two dimensions. While infrastructure organizes movement, art transforms movement into perception. It is precisely through bodily experience that technical function becomes aesthetic experience and landscape becomes a cultural construct.

Defining Art-Infrastructure

On the basis of these considerations, art-infrastructure may be defined as a hybrid spatial category in which infrastructural function and artistic agency become inseparable through the organization of movement, bodily experience, and the construction of landscape perception. Rather than representing either infrastructure embellished with aesthetic qualities or autonomous works of art situated within the landscape, art-infrastructure simultaneously operates as a territorial connector and as a poetic device capable of generating symbolic, emotional, and perceptual meaning.

Consequently, infrastructure can be understood as art when its primary function extends beyond technical performance to produce an aesthetic experience through movement, spatial sequence, and the perceptual transformation of the landscape. Conversely, a work of art can be understood as infrastructure when it structures movement, establishes territorial relationships, and functions as a spatial device capable of connecting places and organizing bodily occupation within the landscape.

This reciprocal relationship constitutes the central theoretical contribution of the present research. Rather than opposing art and infrastructure, the proposed framework identifies the conditions under which the two become mutually constitutive, forming a new hybrid category situated within the expanded field.

The following chapter tests this theoretical definition through four case studies selected for their ability to represent different positions along the proposed art-infrastructure spectrum. Using the analytical criteria established above - territorial scale, organization of movement, bodily experience, temporal sequence, relationship with the landscape, and aesthetic intensification - the comparative analysis evaluates the extent

to which each project fulfils the proposed definition and contributes to validating the conceptual framework developed in this paper.

Methodology

This research adopts a qualitative and interdisciplinary methodology situated at the intersection of architectural theory, art theory, landscape studies, urban design, and visual culture. Rather than approaching infrastructure as a purely technical or functional system, the study employs a critical-theoretical perspective that interprets infrastructure as a cultural artefact capable of generating spatial, symbolic, and aesthetic meaning. The objective is not simply to analyze existing projects, but to develop and test the proposed conceptual framework.

It is constructed through the integration of complementary perspectives drawn from different disciplines. Tony Smith's account of his journey along the unfinished New Jersey Turnpike provides the experiential foundation of the research by revealing how movement through infrastructure may constitute an aesthetic event. Lawrence Halprin's concept of Traffic Architecture is interpreted as a design methodology that conceives infrastructure as a choreographed spatial system, while the principle of mimetism proposed in this paper is derived from a critical reading of Halprin's work rather than from an explicit formulation by the author himself. Sigfried Giedion contributes an understanding of infrastructure as a territorial and cultural agent, while Rosalind Krauss's theory of the expanded field establishes the conceptual possibility of hybrid categories operating between architecture, landscape, and art. Finally, Robert Smithson's reflections on entropy and landscape extend this framework by emphasizing landscape as a dynamic spatial process rather than a static setting.

Rather than reviewing these theoretical positions independently, the research synthesizes them into the proposed category of art-infrastructure. This category is conceived as a spectrum defined by a series of minimum criteria through which infrastructure may be interpreted as art and works of art may assume infrastructural qualities. These criteria constitute the analytical framework employed throughout the comparative analysis.

To examine the validity of the proposed definition, the study adopts a comparative case study methodology. Four internationally recognized projects were selected because they occupy different positions within the proposed art-infrastructure spectrum and collectively represent both directions of the reciprocal relationship explored in this paper. The High Line (New York) and the Promenade Plantée (Paris) investigate how obsolete infrastructure may acquire artistic agency while maintaining its organizational role within the city. Conversely, Michael Heizer's *Double Negative* and Robert Smithson's *Spiral Jetty* examine how works of Land Art may assume characteristics traditionally associated with infrastructure by organizing movement, structuring territorial experience, and redefining the relationship between body and landscape.

The case studies were not selected to provide an exhaustive survey of contemporary practice, nor to establish a historical genealogy of infrastructural

design. Instead, they function as conceptual test cases through which the proposed theoretical framework can be constructed, compared, and evaluated. Their role is therefore methodological rather than illustrative: each project is analyzed to assess the extent to which it satisfies the minimum conditions defining the category of art-infrastructure.

The comparative analysis is conducted through a consistent set of analytical criteria derived from the theoretical framework developed in the previous chapters. These include: (1) territorial scale; (2) organization of movement; (3) bodily and perceptual experience; (4) temporal and spatial sequencing; (5) transformation of landscape and urban context; and (6) symbolic or aesthetic intensification of place. These criteria allow each case study to be examined through the same interpretative lens and subsequently positioned within the proposed art-infrastructure spectrum according to the relative balance established between infrastructural function and artistic agency.

Rather than treating the selected projects as isolated architectural or artistic objects, the methodology understands them as spatial devices that construct new relationships between movement, landscape, and perception. The comparative approach therefore serves not only to analyze existing works but also to evaluate the explanatory capacity of the proposed category of art-infrastructure as an analytical and potentially projective framework for future architectural, infrastructural, and artistic interventions.

The results of this comparative assessment are synthesized in a matrix that positions each case study within the proposed art-infrastructure spectrum, making explicit the relative contribution of each project to the theoretical definition developed in this research.

Case Studies

Infrastructure and Art in Relation to the City

The urban case studies examine infrastructures that have been transformed into public spaces without losing their original organizational role within the city. Unlike Land Art This experiential dimension directly recalls Lawrence Halprin's conception of Traffic Architecture. Circulation is no longer treated as a purely functional necessity but becomes the medium through which architecture, landscape, and perception are choreographed into a continuous spatial narrative. Interventions, whose primary objective is artistic expression, these projects continue to structure movement and urban connectivity while simultaneously generating new forms of aesthetic and spatial experience. They therefore represent the infrastructural pole of the proposed art-infrastructure spectrum, demonstrating how functional systems may acquire artistic agency without abandoning their role as urban infrastructure.

The High Line¹⁷ (Figure 1) represents an exemplary case of art-infrastructure because it satisfies the two fundamental conditions established in the previous chapter. On the one hand, it continues to operate as a linear infrastructural system

17. G. F. Shapiro, *Osservare, muoversi e riunirsi: le funzioni dell'High Line* (Domus Web, 2011).

organizing movement through the city; on the other, it transforms this movement into an aesthetic experience that redefines the perception of the surrounding city landscape.

Originally constructed as an elevated freight railway, the project retains its territorial continuity and connective function despite its adaptive reuse as public space. Rather than eliminating its infrastructural identity, the intervention amplifies it through a new program centered on pedestrian movement and landscape experience.

Movement remains the project's primary organizational principle. Like Tony Smith's journey along the unfinished Turnpike, the visitor experiences the city not from a fixed viewpoint but through continuous bodily displacement. The sequence of changing perspectives, framed views, variations in vegetation, and changing spatial compressions transforms walking into a perceptual event.

At the same time, the High Line exceeds infrastructural performance by generating symbolic and emotional meanings. The obsolete railway becomes a new cultural landscape whose aesthetic value emerges precisely through the coexistence of industrial memory, spontaneous vegetation, and contemporary urban life.



Figure 1. *High Line, New York City, USA*

Like the High Line, the Promenade Plantée (Figure 2) demonstrates that the artistic dimension of infrastructure does not arise through the addition of sculptural objects or decorative interventions, but through the reconfiguration of movement itself.

The Promenade Plantée, completed in Paris in 1993, primarily reinforces the infrastructural dimension of the proposed spectrum. The project establishes a continuous pedestrian route that links neighborhoods, gardens, and public spaces, once again, demonstrating how obsolete infrastructure can be reactivated without losing its organizational capacity. Its artistic dimension therefore emerges less

through formal expression than through the careful orchestration of movement, vegetation, changing perspectives, and the gradual revelation of the city. Walking becomes a perceptual sequence in which Paris is experienced from an elevated position, allowing everyday urban space to be rediscovered through a renewed visual and bodily relationship. It therefore fulfils the proposed definition of art-infrastructure while remaining predominantly positioned towards the infrastructural end of the spectrum.

The High Line and the Promenade Plantée demonstrate that infrastructural transformation does not require the abandonment of function in order to acquire artistic agency. In both cases, infrastructure continues to organize movement while simultaneously generating new perceptual and symbolic relationships between body, landscape, and city.

Rather than becoming artworks in the traditional sense, these projects reveal how infrastructural systems may operate as aesthetic devices through the choreography of movement, the sequencing of spatial experience, and the reinterpretation of urban memory.

Within the proposed spectrum, both projects therefore remain closer to infrastructure than to autonomous art. Their artistic dimension emerges not from formal autonomy but from the experiential transformation of movement itself.



Figure 2. *Promenade Plantée, Paris, France*

Infrastructure and Art in Relation to the Landscape

Rather than functioning solely as autonomous artistic objects, *Double Negative* and *Spiral Jetty*¹⁸ organize movement across the territory, establish new relationships between body and landscape, and transform the act of traversing space into the work itself. They therefore represent the artistic pole of the proposed art-infrastructure spectrum, demonstrating how artistic interventions can simultaneously operate as territorial and experiential devices.

18. R. Smithson, "The Spiral Jetty," in G. Kepes (Ed.) *Arts of the Environment* (New York: G. Braziller, 1972).

Michael Heizer's *Double Negative* (Figure 3) exemplifies the proposed definition of art-infrastructure by transforming the landscape into a spatial system to be physically traversed. Rather than presenting a sculptural object to be contemplated from a distance, the work consists of two monumental excavations cut into the edges of Mormon Mesa in Nevada, separated by the natural void of the canyon itself. The intervention does not occupy the landscape; it reorganizes it.

Although *Double Negative* has no “utilitarian function” in the conventional sense, it nevertheless assumes several characteristics associated with infrastructure. It operates at the territorial scale, establishes a continuous spatial sequence across the mesa, and structures movement through the landscape. The visitor is required to descend into one excavation, cross the natural void mentally and perceptually, and ascend through the second cut. The work therefore exists not as an isolated object but as an experience unfolding through movement, duration, and physical immersion.

In this respect, *Double Negative* strongly recalls Tony Smith's experience of the unfinished Turnpike. In both cases, the artistic dimension emerges through the act of moving across an altered landscape rather than through the contemplation of a discrete object. Space is perceived sequentially, while scale, distance, and bodily displacement generate an awareness of the surrounding territory that could not be achieved from a single viewpoint.

The project also reflects Lawrence Halprin's understanding of movement as the generator of spatial experience. Although conceived outside an architectural framework, Heizer's intervention choreographs the visitor's body through a carefully constructed sequence of descent, passage, and ascent. The landscape itself becomes the medium through which perception is organized, transforming topography into an experiential device.

Within the proposed art-infrastructure spectrum, *Double Negative* occupies a position close to the artistic pole. Its primary identity remains that of a work of Land Art; however, it simultaneously fulfils several infrastructural criteria by structuring movement, operating at a territorial scale, and organizing the visitor's bodily relationship with the landscape.



Figure 3. *Double Negative, Nevada Desert, USA*

Robert Smithson's *Spiral Jetty* (Figure 4) represents an even more explicit convergence between artistic intervention and infrastructural logic. Constructed from basalt rock and earth extending into the Great Salt Lake, the work is simultaneously sculpture, landscape intervention, pathway, and territorial marker. Rather than existing as an object placed within nature, it constructs a new spatial relationship between body, water, geology, and time.

Unlike *Double Negative*, whose spatial sequence unfolds primarily through linear movement, *Spiral Jetty* organizes experience through a continuously unfolding spiral path. Movement is no longer directed simply from one point to another but becomes cyclical, encouraging the visitor to experience the landscape through changing perspectives, shifting horizons, and gradual immersion within the work itself. The journey becomes inseparable from the artwork.

This temporal and experiential dimension directly reflects Smithson's conception of the entropic landscape, in which natural processes continuously transform the work through fluctuations in water level, crystallization, erosion, and geological change. Consequently, *Spiral Jetty* does not simply statically modify the landscape but participates in its ongoing evolution, reinforcing the understanding of landscape as an active process rather than a static setting.

The project also resonates strongly with Halprin's conception of movement as choreography. Although Smithson never intended to design infrastructure, the spiral functions as a spatial device that directs bodily occupation "on the water", frames perception, and structures the visitor's progression through the site. Walking becomes the mechanism through which the work is experienced, echoing Careri's theories.



Figure 4. *Spiral Jetty, Great Salt Lake, USA*

Compared with *Double Negative*, however, *Spiral Jetty* places greater emphasis on symbolic and perceptual meaning than on spatial continuity. Its infrastructural qualities emerge less through connection than through orientation, circulation and the organization of experience. Rather than linking two places, the spiral creates a destination whose significance lies in the relationship established with movement through space and geological time.

Taken together, *Double Negative*, *Spiral Jetty*, *High Line* and the *Promenade Plantée* reveal how movement ceases to be merely a means of reaching the work and instead becomes the work itself. Landscape is transformed from background into spatial medium, while bodily experience becomes the principal mechanism through which meaning is produced.

Conclusions: Towards a Theory of Art-Infrastructure

This research has demonstrated that the relationship between infrastructure and art cannot be adequately understood through existing disciplinary categories alone. By bringing together Tony Smith's aesthetic experience of infrastructure, Lawrence Halprin's conception of Traffic Architecture, and Rosalind Krauss's expanded field, the paper has proposed art-infrastructure as a new hybrid category capable of describing interventions that simultaneously organize movement, structure territory, and generate aesthetic experience.

The principal contribution of this research does not lie simply in identifying similarities between infrastructure and art, but in defining the minimum conditions under which one may be interpreted through the other. By understanding art-infrastructure as a spectrum rather than a fixed category, the proposed framework

recognizes different degrees of overlap between infrastructural function and artistic agency, allowing projects to be positioned according to their territorial, perceptual, and experiential characteristics.

The four case studies discussed in this paper should therefore be understood as conceptual test cases rather than as an exhaustive catalogue of art-infrastructure. They were selected because they occupy different positions within the proposed spectrum, allowing the theoretical definition to be progressively constructed and verified through comparison. Their role is not to prove that all infrastructure is art, or that all Land Art is infrastructure, but to demonstrate the conditions under which these two domains begin to overlap.

Precisely because art-infrastructure is conceived as a spectrum rather than a closed category, its limits remain open to further investigation. Future research should therefore test the proposed framework against a broader range of projects, including contemporary infrastructures, landscape interventions, and emerging hybrid practices, in order to identify both its applicability and its point of conceptual rupture. Such cases would allow the spectrum to be progressively refined, clarifying where the relationship between artistic agency and infrastructural function ceases to be productive and where the definition itself requires revision.

Ultimately, the proposed category of art-infrastructure is intended not only as an interpretative framework for reading existing works, but also as a design instrument capable of informing future architectural, infrastructural, and artistic practice. Rather than retrospectively assigning a new label to projects that already exist, the framework proposes a set of spatial, experiential, and perceptual principles that may consciously guide future interventions seeking to operate between infrastructure and art. In this sense, art-infrastructure should be understood not simply as a theoretical category, but as a design attitude capable of expanding the possibilities through which infrastructure contributes to the cultural, symbolic, and aesthetic construction of contemporary landscapes.

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