Ruderal Aesthetics

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Ecologists use the term ruderal, from the Latin rudus (rubble), to describe disturbance-adapted species. Ruderal species embody the unruly, tenacious, and opportunistic qualities of vegetation. They are metaphorically paradoxical: indexing catastrophe and abandonment, yet conversely representing resilience and renewal. Ruderal species and processes are engaged in a range of contemporary works of art and landscape architecture. In these works, ruderal species perform ecological, spatial, visual, and metaphoric work. This discussion draws together and critiques examples of how an aesthetics of the ruderal is constructed, both physically and metaphorically. This article outlines the development and projection of ruderal aesthetics in three parts: a review of recent literature on "the ruderal problem" in landscape architectural and ecological theory, an outline and critique of ruderal works in contemporary art and landscapes architecture, and speculation on the future use of ruderal species, forms and processes in post-industrial cities.

Ecologists use the term ruderal, from the Latin rudus, or rubble, to describe species that thrive in poor soils. Ruderal species are visible, virtual, and ambient. Visibly, they cover abandoned lots and the spaces in between pavement; as virtual vegetation, their seeds lie dormant in soil, awaiting disturbances that provoke germination; they are ambient, in the air around us, descending on recently exposed soil. The term ruderal is ostensibly objective, as it describes a specific adaptation. Yet particular ruderal species—depending on location—are vilified for their very adaptability and resilience, described with adjectives such as invasive, aggressive, and non-native.

Ruderal species perform ecological, metaphoric and cultural work. They are employed by humans as first responders to disturbance: after forest fires, seed mixes of ruderal species are dropped from helicopters to stave off erosion after forest fires, and they are sprayed on road cuts and quarry sites to stabilize soil and lay foundations for other species. The presence, or images of, ruderal species can have contradictory meanings: ruderals can at once represent dereliction, abandonment and ecological

misbehavior, and yet at the same time trigger optimism and imagination about redevelopment of a site. German biologist Herbert Sukopp and his German colleagues, and a number of citizen-naturalists extensively mapped colonies of ruderal plants in growing in the rubble post WWII Berlin. Sukopp's work inventorying ruderal species, their habitats and migrations, laid the foundation of contemporary study of urban ecology.²

In this paper I discuss how ruderal species are dispatched as aesthetic subject and medium in works of contemporary art and design, and how these methods, materials and metaphors in these works can be productively engaged in all modes of site work in post-industrial landscapes.

WHY RUDERAL THINKING IS APPROPRIATE TO URBAN ECOSYSTEMS

Ecological restoration projects aim replicate an authentic yet idealized point in history, but to what point exactly? Do we restore to a pre-disturbance condition, before urbanization, before a species invasion, before European colonization? Ruderal species are a perennial trouble in the field of ecological restoration. They physically displace "desired" native species, of course, as the unwanted time-travelers emerging from a worm-hole of *now*. Ruderal biotopes are authentic to a specific site, and to a particular moment—right after—a specific disturbance. Ruderal is a wild card: to be ruderal is to be that "right after" landscape-in this case right after landscape that rises into Detroit's urban obsolescence.

Though we see examples of nostalgic ecological restoration in cities, the material and theoretical tenets of restoration quickly falls apart in the city. Cities are too disturbed, too novel, too cosmopolitan to be viable sites for imaginary ecosystems ³. Thus, ruderal, non-equilibrium models of ecosystem dynamics may prove more open-ended and generative than those of ecological restoration. The following discussion of works of ruderal aesthetics offers models for a multivalent, ruderal urbanism in today's post-industrial cities.

In his 2008 essay, "Aesthetic Implications of the New Paradigm in Ecology", Jason Boaz Simus discusses how the new paradigm of ecology, as outlined by S.T.A Pickett and V.T. Parker, and P.L. Fielder in "The Ecology of Natural Disturbance and Patch Dynamics", challenges aesthetic biases in that privilege balance and stability in the evaluation of ecosystems ^{4,5}.

He contrasts new paradigm with the early 20th century model promoted by Frederick Clements, whereby ecological succession is geared towards a stable climax community, and that any disturbances to this balance are



"explained as temporary anomalies" ⁶. In Clement's model, biotic actors were considered as a super organism with a telos—a goal to achieve climax condition and balance without disturbance ⁷. Pickett, Parker and Fielder's contemporary research disproved the notion of an optimal "balance of nature" by revealing that landscape processes, and disturbances in particular, had a greater influence in shaping the environment than interactions between species.

According to Simus, the new paradigm "emphasizes dynamic change, disturbance, and non equilibrium in natural systems" which "presents some challenges for contemporary environmental ethics". Simus proposes we consider the aesthetic implications of a nature that "is imbalanced, disorderly and disharmonious" and "that the beauty of nature is dynamic and chaotic rather than stable and orderly". Thus, I propose we dig deeper into the ruderal period in the continuum of "dynamic and chaotic" ecological events.

My analysis of works of ruderal aesthetics is parsed through a series of verbs. These verbs—demarcate, initiate, occupy, reconstitute, restitute, and stylize—demonstrate how ruderal aesthetics operate or are constructed or dispatched in site works. Katherina Grosse's bold murals demarcate the ruderal spaces of Philadelphia's commuter rail corridors, colonizing space with swaths of color. In works such as Hans Haacke's Bowery Seeds, materials and formal qualities of soil and substrate are carefully considered to initiate, or lay the groundwork for, the emergence of ruderal vegetation. The political instrumentality of ruderal vegetation to occupy contested sites is illustrated by the photographs of The High Line by Joel Sternfeld. TerraGRAM's proposal for the High Line reconstitutes the High Line of Sternfeld's images through the construction of new layers that provide public access and highlight ongoing ecological processes. Through the redistribution of ruderal soils, the Harrison Studio's *Trümmerflora*, a proposal for a memorial on the site of the former Gestapo headquarters in Berlin, builds a dialectic process of restitution, or a healing, of physical and metaphoric aspects of the site. Finally, I examine how designer team of James Corner Field Operations and garden designer Piet Oudolf stylize the ruderal vegetation into a

Figure 1: Katherina Grosse: psychylustro.

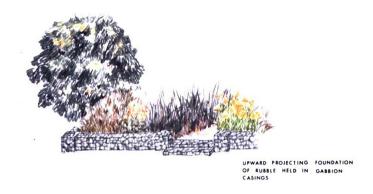


Figure 2: Harrison Studio: *Trümmerflora*

continuous confection of textures and colors that amplify an impression of the ruderal vegetation that once grew on the viaduct.

DEMARCATE: KATHERINA GROSSE: PSYCHYLUSTRO

Katherina Grosse's *psychylustro* (City of Philadelphia Mural Arts Project, 2014) (fig. 1) is a complex of seven murals sited within the AMTRAK corridor in North Philadelphia. Like the ruderal vegetation growing along the corridor, *psychylustro* is hooligan work, occupying and *demarcating* an infrastructural cut. The work's primary audience is the daily commuters riding the AMTRAK and SEPTA rail lines. Her fluorescent paint limns a liminal space, as if a giant highlighter were dragged across the landscape. *psychylustro* disturbs: disturbs with color splashed against all in its path; buildings, ruderal vegetation, rubble. Though it demarcates a space, the work does not begin and end neatly (and why should it).

In one gesture *psychylustro* brokers a truce between architecture and landscape architecture, and unites building and infrastructural ground with a single hue of color ⁸. It disturbs notions of painting, namely that painting (abstract or figurative) is largely a planar and contained

The Fertility of Urban Ruins Brooklyn Says, "Move to Detroit" 389



Figure 3: Hans Haacke Bowery Seeds

endeavor. Grosse's previous monumental works of "painting" combined multiple hues that dematerialize the figure and form of its various substrates: including beds, walls, soil, or large shards of cut polystyrene. In *psychylustro*, the hues are separated by hundreds of feet, yet they meld in time, as the fluorescent paint occupies the rail passenger's retinal after-image before encountering the next pulse of lurid green, orange, then pink. It touches on op art: solid color is transformed into a work of colored light. *psychylustro* is a landscape; it is a landscape painting, and a landscape *painting* ⁹. Unlike typical murals, *psychylustro* lacks figures, allegory, message, sentiment, nostalgia nor obvious optimism.

Critic Daniel Marcus speaks to the aesthetic rift opened by *psychylustro*: "There are few conventional definitions of beautiful that would accommodate Grosse's installation...calculated to startle the eye, if not offend it outright" ¹⁰. Her indiscriminate painting of railway vegetation mimics the sprayed applications of herbicide along rail corridors (though using polite, water-based low-VOC paint) jostles how we discriminate against certain species. *psychylustro* doesn't ask for your position on native vs. non-native.

Unlike architecture, landscape is nothing if not inevitable. We can bound it, curate it, interpret it, analyze it, rearrange and design it, level it, diminish it, but we can't destroy it. Too often landscape architecture has relied on the crutches of the –ables: sustainable, justifiable, quantifiable, etc., in lieu of an autonomous dialog of disciplinary critique. The –ables can't be applied to psychylustro. Through shocking application of color, it doubles down on the idea of landscapes' inevitability, and that's what makes it reference point for ruderal aesthetics.

INITIATE: HANS HAACKE: BOWERY SEEDS

In 1971, Hans Haacke placed a pile soil on the roof of his Bowery studio. Photographs of the work depict a small pile of rough soil, with green forbs and grasses foregrounded in sharp focus, while the surrounding urban context is obscured. In the work, entitled *Bowery Seeds*, the site is defined by the soil, as the locus, and wind as a mechanism of seed distribution. As a sitework that renders visible urban energy flows, *Bowery Seeds* (fig. 2) sits between his contemporaneous works of institutional critique that also "daylighted" otherwise unseen patronage relationships, such as Haacke's cancelled 1971 solo show at the Guggenheim, *Shapolsky et al Manhattan Real Estate Holdings, A Real-Time Social*

System as of May 1, 1971 that traced the financial relationships of the museum's trustees and a notorious slumlord, and ecological systems (Rhinewater Purification Plant, Krefeld, Germany, 1971). Bowery Seeds also recalls Yoko Ono's Painting for Wind (1969), which featured a small packet of seeds hung from a larger piece of paper, and text instructing one to cut a hole in the paper and then cut a hole in the bag and place it in the wind (Masters 2008). Bowery Seeds and Painting for Wind are examples of early works of ruderal aesthetics. These works foreground ideas of latency, ambience and emergence: the seeds lie dormant in the soil; the atmosphere provides sun, water and windborne seeds; the seeds then germinate on a given fertile substrate as formed by the artist.

A key aim in the parsing of a ruderal aesthetics from the genre of "green art" is to differentiate how artists and designers interpret or channel ecological relationships and mechanisms vs. "ecology" a both an ideology and means of countering capitalist, consumptive systems of human interaction with the living global environment. Works of ruderal aesthetics present an alternative to orthodox ecological thinking; unfortunately while artists borrow liberally from ecological science, rarely do ecologists inflect-or infect-their work with artistic methods.

INITIATE: HARRISON STUDIO: ART PARK: SPOILS' PILE RECLAMATION, 1976-1978 ONGOING

In 1976, the Helen and Newton Harrison invited local contractors to dump 3,000 truckloads of mixed construction fill to an abandoned quarry on the Art Park site in Lewiston, near Buffalo, New York. In building *Art Park: Spoils' Pile Reclamation, 1976-1978 Ongoing,* (Lewiston, NY, 1976-1978, the Harrisons initiated a process of transformation of a former quarry. A sign on the entrance to the site instructed contractors to "dump on the white X". The Harrisons' notes from the project delineate between the "weeds" that grow on the tipping piles, and the intentional distribution of "native" seeds.

By this admission, Spoils' Pile's ruderality is ambivalent: it is both an extension of Bowery Seeds, and a precursor to the themes of green art of the end of the 20th century. Consider the perennial return of twee "seed bomb themed works, beginning with Kathryn Miller in 1992 at the Raytheon plant in Santa Barbara. Although these works share methodthe shaping of substrate and the application to a specific site, and the documentation of the work through germination, I differentiate works of ruderal aesthetics from their close cousins in eco-sentimental artworks. Bowery Seeds and Spoils Pile are larger-scale works, their situation within a system of material transformation is carefully articulated. Haacke found surprise in the composition of the species that emerge, while the "green" artists privilege certain species - in many cases, the "native." Because these natives are often poorly adapted to the compacted, xeric and low-fertility soils of post-industrial sites, they require the special fertile mix of their projectile. Thus, the ruderal work critically engages the idiosyncrasies of found soils/site, while the green works privilege the visual presence of "appropriate" vegetation.

OCCUPY: JOEL STERNFELD: WALKING THE HIGH LINE:

Seeds can infiltrate barriers and germinate, occupying the soils of fenced-in lots and elevated structures like Manhattan's High Line.



Figure 4: Joel Sternfeld. High Line, Looking East.

Ruderal occupation is the subject of much contemporary landscape photography—often called "ruin porn"—published in folios such as Joel Sternfeld's High Line images (fig. 4), photographers Andrew Moore (*Detroit Disassembled*. 2010), Camilo Jose Vergara (*American Ruins*, 1999), and James Griffioen (*Feral Houses, Lost Neighborhoods*, 2009). These images play on the oscillation between pathos of abandonment and the riotous optimism of the ruderal vegetation occupying the ruins.

After rail traffic ceased on western Manhattan's High Line, ruderal vegetation grew in the coarse rail ballast. Several years of vegetal decay and growth thickened the fertile section of the rail line. Sternfeld's images create two spaces for imagination: the thin carpet of the vegetated path, and the sky and skyline. The contrast between the saturated and textured carpet and muted context and sky focus attention on this "a pocket of scraggly disobedience" within the sanitized Manhattan of the early 21st century ¹¹.

After publication, Sternfeld's serial images of the High Line operated in a rhetorical capacity, attracting New Yorker's attention to the viaduct's precarity as an urban artifact and instrumental in ferrying the idea of an elevated park from imagination to construction. For a brief time,

no one entity or person claimed the High Line; it ownership and future was entangled in city and transportation politics. It was rare space in Manhattan, open to occupation: physically through trespass, or virtually, via Sternfeld's depopulated images. This ambiguity of ownership opened a space of collective imagination, the proverbial "line of flight" discussed by Deleuze and Guattari in A Thousand Plateaus¹². Here the line of flight is opened by visual and vegetal means: the infinite is implied by the single vanishing point in the image, and by the unsanctioned ruderal occupation The images conjured a kind of virtual air rights that said: this land is everyone's: dwell here for a moment, and imagine. In the essay "Walking the High Line", Robert Hammond, in conversation with Alan Gopnik, spoke of it "hallucinatory" qualities of the space:

"The High Line is just a structure, it's metal in the air, but it becomes a site for everybody's fantasies and projections... I just pray that, if they save the High Line, they'll save some of the virgin parts, so that people can have this kind of hallucinatory experience of nature in the city" ¹³.

Though the public park has replaced the ruderal landscapes of the 1990s, Sternfeld's images endure and represent a space of dreaming and imagination; vegetation's physical occupation conjures virtual occupation. It begs the question, should we preserve similar *imagination landscapes* in our cities, or does the power of these spaces lie in their ephemerality?

The Fertility of Urban Ruins Brooklyn Says, "Move to Detroit" 391



TerraGRAM-ing

Build a team around an approach in which landscape processes not only regulate park programming but are the engines of the design. TerraGRAM proposes to reuse and enhance existing physical conditions-the High Line structure and its counterpart, a highly-resilient successional landscape—then to develop a plan to channel the F.H.L. and the City's support of the High Line landscape into a system of community infrastructures that will nurture its transformation into a park.



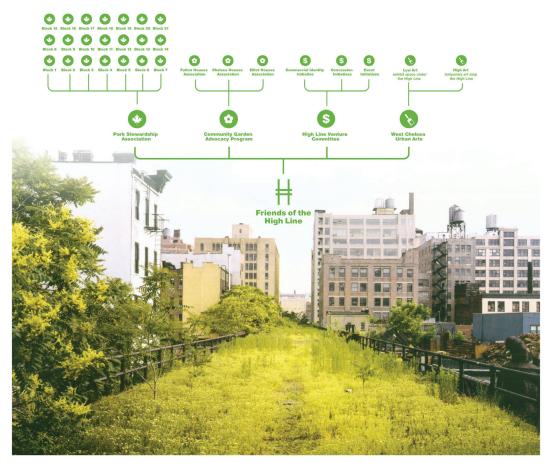


Figure 5: TerraGram High Line proposal.boards

RECONSTITUTE: TERRAGRAM: HIGH LINE PROPOSAL, 2004

In 2004, four teams were invited to submit proposals to redevelop the High Line viaduct as a public park: Diana Balmori, Zaha Hadid and Skidmore Owings and Merrill; James Corner Field Operations & Diller Scofidio and Renfro: Steven Holl & Hargreaves Associates: and TerraGRAM (Michael Van Valkenburgh Associates, D.I.R.T. Studio and Beyer Blinder Belle). TerraGRAM's proposal (fig. 5) privileged the ongoing unfolding of ruderal processes, rather than static landscapes proposed by the other teams. The team sought to reconstitute the ruderality of the existing High Line as a publicly accessible landscape where visitors could witness the ongoing transformation of the idiosyncratic urban landscape; this witnessing, they believed, would effect new thinking about natural processes in cities. ¹⁴ They drew their name from UK collective ArchiGRAM, known for their radical, modular and utopic ideas about city making. Although TerraGRAM's approach was radical at the time in conventional practice, it endures as a subject in the "tradition of design submissions that did not win, but have nonetheless attracted much admiration" their proposal endures as topic in the discourse of landscape architecture, gaining "retrospective notoriety" and continued critical commentary.¹⁵

Half manifesto and half urban ecology primer, their proposal foregrounded processes that are usually camouflaged in works of urban landscape architecture. Their proposal champions the right for ruderal vegetation to occupy the city and aims to unpack and build the scripts that drive its organization:

"The surprise of coming upon a landscape that demonstrates its own ecological logic without aesthetic meddling lays the groundwork for the definition of a new landscape that draws life and purpose from what exists and actively responds to the forces of natural processes in this elevated rail corridor." ¹⁶

The team's rhetoric draws from James Corner's essay "Eidetic Operations and New Landscapes", in which he calls on designers to privilege landscape processes over picturesque compositions. ¹⁷ As Andrew Blum notes in "Metaphor Remediation: A New Ecology for the City", the "scheme viewed nature as an evolving ecological process, not a sacred absolute; therefore the landscape of the High Line would not be fixed but would evolve over time". ¹⁸ Seeking to avoid "relinquishing the potency" of the existing ruderal landscape, they proposed that new programs "should tread lightly on its existing ecology. This ecology could never be planned or replaced with the traditional tools of landscape architecture." They close with an epigram worthy of the Karate Kid's Mr. Miyagi: "Succession is a matrix in form and time. Chance is the activating agent". ¹⁹ Though never realized, the TerraGRAM proposal sets up a rich dialectic between design intervention and spontaneous ruderality.

RESTITUTE: HARRISON STUDIOS: TRÜMMERFLORA: ON THE TOPOGRAPHIE OF TERRORS, 1988

The *Topographie des Terrors* is the name given to the former site of the Gestapo headquarters in Berlin. Today the site hosts an indoor-outdoor museum by architect Ursula Wilms and landscape architect Heinz W. Hallmann. In 1988 Helen and Newton Harrison developed their proposal during a residency at the Berlinischer Gallery at the Gropius-Bau.

The work does not recuperate the site, rather, it is a work of restitution, highlighting healing in a dialectical process, where vegetation grows and effects the decomposition of the troubled rubble of the Gestapo ruins.

The site work and respondent ruderal vegetation are an amplified, political complement to Herbert Sukopp's' postwar work documenting rubble-adapted species in Berlin. The Harrison's call this vegetation *trümmerflora*, "or rubble plants and trees are a special phenomena unique to heavily bombed urban areas. The bomb acts as a plow, breaking brick, mortar, metal and wood into fragments and, in a single gesture, mixing these fragments with earth from below.²⁰

The Harrison's 4-phase work is an in-situ memorial that resists the introduction of new materials or the imposition of novel architectural forms. In the first phase, they move the existing rubble piles to match the footprints of the buildings, at a depth of 18 inches, and allow the ruderal vegetation to and leaving the ground plane open with a surface of decomposed granite. In the second and third phase, they add interpretive signage to explain the rubble gardens, in the third, they incorporate the existing Documentation Hall, completed in 1986, that houses a collection of Third Reich propaganda. In the fourth phase, they add a "Naming and Saying Building" housing a projection of an open-ended audio-visual database of victims and their biographic data.

The memorial is legible in two ways: the site palimpsest of the foundations, and the ongoing processes of the growth of the vegetation. It is a work of becoming-history, written in parallel with the ongoing reinvestigation and digestion of the 3rd Reich reign. Through these processes, there is not the myth of closure promised by monuments or memorials. In *Trümmerflora*, the ruderal plants are medicinal, but work metaphoric capacity to treat the chronic condition of the site's history.

STYLIZE: THE HIGH LINE, JAMES CORNER FIELD OPERATIONS

As built, the JFCO/DS+R scheme features a rich corridor of vegetation and architectural materials that interpret and stylize the ruderal landscape depicted in Sternfeld's photographs. The compressed and layered plantings create an inhabitable dioramic space. The intelligence of the scheme lies in its sections: the interleaving of permeable and impermeable surfaces creates both/and conditions rarely found in urban environments. Architecturally, the High Line incorporates state of the art construction technologies for landscapes on structure. Technical aspects of the sections operate invisibly. First, between the rail structure and the new "green roof" landscape is a sandwich of protective waterproofing, drainage matting to capture and convey water; a layer of expanded obsidian gravel; and geotextile filter fabric to hold the soil in place. Next are the pavers tapering into combs, a play on scale that both recall and amplify an image of wild grasses growing through cracks in the sidewalk.²¹ The waterproofing and water conveyance sections are indispensable to the technical success of the project, and the paving system provides material continuity and way finding cues. Above the technical section, interwoven with the pavers, is the enveloping environment of the planting. The designers thickened and modulated soil profile to support the diverse plantings, and varied the height and density of the plantings that draw the eye to detail of texture.

The Fertility of Urban Ruins Brooklyn Says, "Move to Detroit" 393

Once biotopes, today they are gardens, named for their location and landscape conditions: *The Chelsea Meadow, The Chelsea Thicket*, and *The Woodland Flyover*. In each case, garden designer Piet Oudolf took the existing carpet of vegetation as a reference point, and amplified the rough ruderal textures and vertical stratification through careful layering of ornamental species within the compressed space between buildings. The effect of walking the High Line is like traversing a diorama. The material and vegetative composition draws the eye to the color, texture, and movement; viewing becomes a restless, peripheral endeavor; the darting eye enlarges the space within the otherwise narrow confines of the right-of-way; the thick planting buffer is neither solid nor void.²²

Today the High Line looks like the images in the competition renderings. The park's aesthetics are tightly nailed down. As built, the High Line exemplifies a gorgeous new mannerism in ruderal aesthetics. In their extravagant beauty, Oudolf's plantings hijack of the aesthetic, transgressive, and symbolic qualities of the ruderal space in Sternfeld's images. The once ruderal space is now refined and re-coded as a luxurious, hyper-botanical space for occupation and consumption.

INSTITUTIONAL CRITIQUE AND PROCESS ART AS MODELS

In *Relational Aesthetics*, Nicholas Bourriaurd states: "Artistic activity for its part strives to achieve modest connection and open up (one or two) obstructed passages and connect levels of reality kept apart from one-another." Works of ruderal aesthetics open up passages between art, landscape architecture, and ecology, and other disciplines. In considering "that the beauty of nature is dynamic and chaotic rather than stable and orderly", I identified a series of post-minimalist works that can be viewed through a ruderal lens. My sense is that these 'dry" works bring more possibility to open up ruderal passageways between the disciplines than eco-sentimental works of "green" artists.

Artists Barry LeVa (American b. 1941) and Mel Bochner (b. 1940) delineate the gallery field or floor as a site for interaction and happening: their markings are notational armatures for the revelation of physical processes. In LeVa's Six Blown Lines (Accumulation Drift)(1969), LeVa disperses ridges of flour like dunes drifting across the gallery floor, registering the micro topography of the floorboards. In Measurement Room (1969) Bochner drew the dimensions of the gallery, between windows, doors, and fixtures, denoting spaces "art" might inhabit (walls) and where it could not (apertures). This work of institutional critique triggers thoughts of how a dialog between "found" barriers to germination and constructed might lend legibility to a ruderal landscape.

Dutch Artists Heringa/VanKalsbeek (Heringa b.1966, VanKalsbeek b. 1962) fabricate complex wire armatures and then drip and apply colored resin to create baroque works of terrifying beauty. The resin, in this case, can be imagined as living, growing processes, while the armature might be an architectural or infrastructural element. An evolving dialectic between ruderal processes and durable, but mutable armatures can bring richness to post-industrial landscapes.

In his essay "In Praise of Vagabonds", landscape architect Giles Clément's states "We are witnessing—even if this word is never used—a general ruderalization of territory".²⁴ As the spatial territory of the ruderal

expands through disturbance and attention, there is a concomitant need to expand term and its implications. We can imagine resilient and disturbance-adapted. ruderal architectures, economies, and cultures. This examination of ruderal aesthetics-in both found and intentional conditions-can serve as a scaffold for expanded thinking about the nature of urbanism in post-industrial cities.

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