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ARTICLE

Ghosts and monsters: Reconstructing nature on the site of the Berlin Wall

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Abstract

In this paper I seek to develop a larger argument from a small place that no longer exists. Since 2004 I regularly visited a wasteland or *Brache*, located on the site of the former Berlin Wall, before a process of enclosure and erasure that culminated in the construction of luxury apartments. I draw on my engagement with this temporary space, as a source of reverie and also as a site for ecological fieldwork, in order to reflect on the meaning of urban nature under the speculative dynamics of capitalist urbanisation. I consider the intersections between memory, place, and ecology as part of a wider engagement with "spectral ecologies" in the urban realm. I suggest that affective interpretations of urban nature should seek to develop a conceptual dialogue between ethnographic insights and structural analysis of urban environmental change.

KEYWORDS

Berlin, memory studies, spectral ecologies, urban ecology, urban political ecology, urban wastelands

> Berlin is a place haunted with landscapes that simultaneously embody presences and absences, voids and ruins, intentional forgetting and painful remembering.
>
> (Till, 2005, p. 8)

> When architecture and urban design project their desire onto a vacant space, a *terrain vague*, they seem incapable of doing anything other than introducing violent transformations, changing estrangement into citizenship, and striving at all costs to dissolve the uncontaminated magic of the obsolete in the realm of efficiency.
>
> (de Solà-Morales, 1995, pp. 122–123)[1]

> Voids are the lesions of the city and its opportunities, its blemishes and its utopian spaces.
>
> (Teutsch, 2013, p. 1)[2]

1 | INTRODUCTION

From the early 1990s until the early 2010s an "empty space" lay at the intersection of Chausseestraße and Liesenstraße on the site of the former Berlin Wall, separating the central Mitte district that lay in the former DDR, from Wedding within the island city of West Berlin. For the best part of two decades, people arriving at the nearby U-Bahn station of Schwarzkopffstraße, just one stop away from busy streets near to the centre of the city, would emerge into an odd location marked by the juxtaposition of surviving Wilhelmine-era façades in various states of renovation, compact blocks of post-war social housing, an assortment of abandoned factories and other buildings, sections of disused railway infrastructure, and an array of interstitial spaces or *Brachen* scattered in all directions. The sense of openness belied the area's proximity to the centre of a major European city undergoing a transition from a divided Cold War metropolis into the new German capital.

My first encounter with this intriguing site was in the spring of 2004, followed by regular visits over the next ten years. Over time I became familiar with the topography and vegetation of the location as well as its urban "micro seasons", as specific plants came into flower at different times or particular invertebrates made a sudden appearance. In early winter, the frost-covered ground became transformed into a kind of accidental sculpture garden, the withered vegetation revealing sections of rusting pipes, fragments of concrete, or other urban artefacts. By gaining familiarity with the site I found myself increasingly immersed in a form of "urban field ecology" that revealed the distinctiveness of urban nature and the role of specific organisms within novel ecosystems.[3] The presence of mugwort (*Artemesia vulgaris*), for example, an aromatic weed associated with waste spaces, serves as an "indicator species" for ruderal ecologies produced by forms of human disturbance. This plant in turn supports a wide variety of invertebrates, including unusual organisms that have adapted well to urban and industrial wastelands such as the distinctively marked moth *Cucullia fraudatrix*, which I encountered on the site one summer evening, a species first described from steppe-like landscapes in Russia that has gradually extended it range westwards during the post-war period. The combination of species tells a story about this specific site and its relation to wider processes of historical change. The uncovering of these "small facts" serves as a kind of affective encounter with the taxonomic realm of natural history, diverse sources of scientific knowledge, and the assembling of an embodied archive of memories and digital traces in relation to one seemingly unremarkable place. The more closely I studied this Berlin corner the more fascinating it became. I began to recognise the choreographies of human interaction with the site as a kind of vernacular public space in an area that had little in the way of conventional parks or green space.

I would describe my mode of interaction with the site as a kind of "ecological ethnography" since it is difficult to separate my embodied memories from the work that I carried out. There are parallels here with what the anthropologist Tim Ingold terms a "generous attentiveness" (Ingold, 2014, p. 388), but I do not share his restricted definition of ethnographic fieldwork that appears to exclude more affective, experimental, or other-than-human-oriented modes of work.[4] My study is more closely aligned with the work of the anthropologist Dominic Boyer, who describes his own fieldwork in Berlin as a "literary ethnography" (Boyer, 2001, p. 422) marked by the challenge of relating his own phenomenological experiences to an established corpus of analytical work. Another important dimension to my framing of this site — at its moment of erasure — was the opportunity to spend time at the city's leading research centre for urban ecology in early 2013.[5] This gave me an opportunity to better understand how ecologists had conceptualised marginal spaces across the city and also provided me with access to many rare or unpublished sources. My use of the term ecological ethnography thus extends to both field and laboratory (broadly defined). As I will show, however, my project also differs analytically from "multi-species ethnographies" through my parallel emphasis on historical and structural dimensions to the production of urban nature.[6] In developing my argument, I draw on different modes of reflexivity, spanning both method and interpretation, including diverse interactions with the non-human realm.

The investigation of marginal sites resides in a conceptual terrain that is highly interdisciplinary, spanning memory studies, urban ecology, architectural theory, other-than-human geographies, and many other fields.[7] As the architectural theorist Ignasi de Solà-Morales notes, in his classic essay on *terrain vague*, these ostensibly void spaces unsettle existing conceptualisations and normative parameters. "In these apparently forgotten places," suggests de Solà-Morales, "the memory of the past seems to predominate over the present … These strange spaces exist outside the city's effective circuits and productive structures" (de Solà-Morales, 1995, p. 120). Building on the insights of de Solà-Morales, we can argue that these types of marginal sites disturb relations between memory, experience, and the valorisation of space. In this paper, I consider how one marginal space of socio-ecological interest was inexorably, and at times forcibly, reinserted into the speculative dynamics of capitalist urbanisation at multiple scales. My study site provides a vantage point from which to reflect on emerging tensions between a posthumanist emphasis on expanded conceptions of agency and the

underlying material and political dynamics of urban change. My delineation of an ecological ethnography serves as the methodological counterpart to my conceptual synthesis between other-than-human geographies and analytical insights into the production of urban space gained from urban political ecology and cognate fields. I am interested in the shifting contours between fieldwork, analysis, and writing in which writing itself serves as a significant element in the research process. My aim is to enrich the presence of the ecological within an urban political ecology that extends to a variety of post-colonial and other-than-human singularities, thereby unsettling existing taxonomic schema and interpretative idioms.

My engagement with this site revealed incongruities between its tranquil state of ecological exuberance and the violent ruptures of the past (Figure 1).[8] This seemingly banal street corner had experienced successive waves of change: the late nineteenth-century Wilhelmine era of rapid urban expansion; the inter-war phase of maximum density with the "red Wedding" district serving as a focal point for anti-fascist mobilisation; the immediate post-war era of reconstruction, including new social housing projects dating from the 1950s; the period of geo-political division with the site dominated by a *Todesstreifen* (death strip) of barbwire, watchtowers, and "ghost apartments" whose occupants had been forcibly removed; the initial post-unification phase of "spatial emptiness" and demographic upheaval that coincides with the focus of my research; and from around 2009 onwards, an accelerated momentum towards the recapitalisation of the city under which my study site disappeared.

I begin my paper by reflecting on the intersections between ecology, memory, and place as they relate to the loss of ordinary spaces of urban nature. I consider how emerging interest in "eco-nostalgias" might unsettle notions of cultural and material authenticity in relation to cosmopolitan urban ecologies. Next, I turn to difficulties in categorising marginal spaces as part of wider cultural and scientific discourses concerned with ecologies of endangerment in an urban context. Finally, I reflect on the erasure of my study site as an outcome of the strategic alignment between specific strands of ecological rhetoric and the speculative dynamics of capitalist urbanisation.

FIGURE 1 The Berlin Wall, Liesenstraße c. 1981.
Source: Die Deutsche Presse-Agentur

2 | ECOLOGY, MEMORY, PLACE

The city of Berlin has become something of a laboratory for memory studies. The geographer Karen Till, for instance, has explored the heightened emphasis on contested memories "unearthed" through the extensive reconstruction of the city after the fall of the Wall (see Till, 2005).[9] Till emphasises the significance of the German word *Spur*, meaning "trace", that can encompass both affective and material dimensions to the past. She contrasts *Spur* with *Zeugnis*, meaning "evidence" or "testimonial", which connects etymologically with the word *Zeuge* (feminine form *Zeugin*) meaning "witness". The field of "ecological memory" traverses both terms, linking material traces with different modes of observation, combining both human and non-human elements of environmental change. Interestingly, in a German context, an emphasis on *Spuren* ("traces"), or the figure of the *Spurenleser* ("trace reader"), became a distinctive analytical field during the 1970s and 1980s, linking elements of archaeology, art history, botany, and cultural geography into a hermeneutic paradigm focused on the observation and interpretation of spontaneous forms of urban vegetation (see Hard, 1995; Holtorf, 2004). Subtle differences in urban substrates, caused by human disturbance or the independent dynamics of nature, engender the emergence of distinctive socio-ecological assemblages. We can extend the meaning of memory to encompass distributed and multi-perspectival forms of agency involving multiple configurations of human and non-human actors. Urban soils, for instance, hold a form of grounded memory comprising dormant seeds, pollen grains, chemical signatures, and other traces.

For the cultural historian Andreas Huyssen, writing in the late 1990s, Berlin represented a kind of architectural palimpsest refracted through different forms of memory. For Huyssen, an urban palimpsest is clearly more than a cultural metaphor, since an extended use of this term can encompass both memories and material traces along with their varied modes of interaction. His interest in Berlin coincides with a shift of emphasis from textual forms of analysis towards image-oriented frameworks for cultural criticism. Huyssen suggests that an emerging conceptual hiatus could be discerned between the reading of urban space as a kind of text or "conglomeration of signs", as elaborated within existing literary and architectural theory, and an expanded role of culture, history, and memory within urban marketing strategies (Huyssen, 1997). Similarly, the ethnology and gender studies scholar Beate Binder suggests that "One important strategy for coping with the challenges of forced transformation is — at least in European cities — the use of history in order to construct a city's uniqueness" (Binder, 2001, p. 20). "In the context of an expanding service industry," notes Binder, drawing on Sharon Zukin, "culture and the production of symbols are no longer merely the outcome of economic processes but also part of them" (Binder, 2001, p. 21). The new landscapes of post-unification Berlin became part of the cultural dynamics of urban transformation. Of particular interest in this process is the way that Berlin's ambience of "spatial emptiness" has been systematically promoted as part of a culture-led regeneration strategy based around the arts, media industries, and a steady stream of curious international visitors (see Schäfer, 2010). The delineation of a form of "temporary heritage", based on a combination of material ephemerality and cultural spontaneity, is illustrative of a double-coded form of regeneration discourse in which capital has permeated new kinds of extractive frontiers. The void-led renaissance of post-unification Berlin has rested to a significant degree on the valorisation of emptiness as a wellspring for forms of urban "creativity" and entrepreneurial urbanity.

The flourishing of nature in the abandoned landscapes of the former "Wall strip" (*Mauerstreifen*) can be read as an ecological counterpart to what Boyer refers to as "an abundant presence, or rapid becoming" (Boyer, 2006, p. 361) in the cultural and political milieu of Berlin in the 1990s. Yet within a few years, Boyer notes how an initial "sense of futurity" had been "turned inside out" as part of the complexities of articulating a shared sense of German identity amid rapid urban change (p. 361). The *Mauerstreifen* served as the second post-war instance of a large-scale *tabula rasa* for the city (the first having been the extensive rubble landscapes of the immediate post-war years) temporarily detached from both history and capital. In the case of the post-war rubble landscapes (*Trümmerlandschaften*), the greening of these spaces through the spontaneous growth of vegetation was widely perceived as a form of symbolic redemption and visual occlusion (see Gollwitzer, 1952; Lachmund, 2003; Sebald, 2004 [1999]). Similarly, the return of nature to the post-Cold War *Mauerstreifen* marked a symbolic break from the spatial ruptures and authoritarian legacy of the DDR. The greening of these void spaces contributed to a perception of Berlin in the 1990s as a locus of bucolic erasure where traces of the past were beginning to fade from collective consciousness. Yet these new spaces of nature also offered opportunities to re-imagine urban life. Indeed, part of my argument is that the distinctive ecologies emerging within these former spaces of geo-political division became part of a wider reflection on the meaning of urban cosmopolitanism that began to filter through a series of cultural and scientific discourses.

Urban wastelands are by-products of history but hold an ambiguous relation to discourses of historical preservation or existing modes of cultural valorisation. The delineation of ecological memory in an urban context can unsettle idealist or neo-romanticist paradigms. More broadly, the recurring literary trope of the "world without us" spans a variety of

cultural and scientific speculations, both now and in the past. Abandoned spaces marked by the return of nature can represent a kind of "nostalgia for the future" that resonates with Fredric Jameson's emphasis on the co-existence of multiple utopian imaginaries (see Jameson, 2005; see also Graham, 2019). A utopian reading of urban wastelands connects with a wider rejection of the excessive rationalisation of nature under modernity, extending to the almost obsessive removal of spontaneous forms of non-human nature such as "weeds" or other forms of life that are considered out of place (see Hülbusch, 1981; Schultz, 1971). A posthumanist urban utopia would of necessity extend to non-human others, including plants, insects, and other denizens of marginal urban spaces.

Building on the geographer Stephen Legg's reflections on "embodied memory" we can articulate a form of ecological memory that resides within both the human observer and non-human elements of place, such as soil, plants, and other traces of the past. Legg's concern is with the limitations of a memory studies paradigm that is rooted in a distrust of modernity, notably Pierre Nora's *lieu de mémoire*, marked by restricted conceptions of cultural authenticity (see Legg, 2005). A critically reflexive reading of nostalgia provides a potential entry point for an expanded conception of relations between ecology, place, and memory. There is clearly a certain kind of nostalgia in play, for instance, in terms of the cultural valorisation of urban ruins or spatial emptiness yet we encounter two somewhat contradictory manifestations: on the one hand, a yearning for imaginary forms of ecological stasis where "everything must remain the same", irrespective of the site-specific dynamics of environmental change; and on the other hand, a neo-romanticist fascination with entropy, decay, and the melting away of time. The aesthetics of nature in the urban arena is inseparable from a series of "ideological temporalities" that have become more explicit through growing interest in novel urban ecosystems. A wasteland brimming with flowers is a transitory aesthetic phenomenon within the parameters of ecological time even if many cultural and environmental discourses struggle to synthesise the interplay between multiple forms of agency and time.

How might global ecologies intersect with the geography of memory? There is an implicit disjuncture between cosmopolitan and embodied forms of memory within Nora-esque notions of place-bound authenticity. I am mindful here of Legg's emphasis, following Foucault, on the presence of multiple temporalities along with the ideological implications of searching for cultural and historical singularities in relation to the meaning of specific places (Legg, 2005). More broadly, we can point to a destabilisation of the existing contours of memory studies in relation to place, nation, and human agency. Memory, in other words, has become more fluid and consequently more difficult to direct or control. My study site clearly evokes both local and global elements: the geo-political specificities of Berlin and ecological traces of global modernity. The plants I encountered on my study site include species from all over the world, such as *Berteroa incana* and *Sisymbrium loeselii* (from Eurasia) and *Oenothera biennis* agg. (from North America; see Figures 2 and 3). How should we interpret the presence of a global flora within what the historian Jonathan Bach terms "an evolving landscape of colonial memory" (Bach, 2019, p. 59) in a German context? There are interesting parallels here with the anthropologist Sarah Osterhoudt's call for a "political ecology of memory" that traces connections between colonial impacts on landscape change and "the intimate spheres of memory, identity and personhood 'writ small'" (Osterhoudt, 2016, p. 275). The vibrant mixture of plants on my study site clearly underscores the connections of Berlin to global history and unsettles narrowly place-bound readings of cultural and ecological authenticity. These cosmopolitan ecologies perform a didactic role in allowing us to read the urban landscape as a global totality.

An ecological survey of an urban wasteland provides a degree of continuity with earlier forms of botanical reconnaissance and the taxonomic reach of European modernity. The specific "plant community" that I encountered on my study site even has a quasi-Linnaean moniker, within the taxonomic framing of phytosociology, as "Dauco-Melilotion Görs ex Rostański et Gutta, 1971", which is indicative of a characteristic combination of species occurring at a relatively advanced stage of succession on highly disturbed nutrient-poor soils.[10] This supra-species level of taxonomic nomenclature is rooted in early twentieth-century efforts to extend the scientific veracity and practical utility of vegetation science but provides a methodological precursor to the post-war shift from nativist botanical preoccupations towards the emergence of scientific fascination with novel urban ecosystems.

My interest in cosmopolitan ecologies shares conceptual affinities with "cosmopolitan memory" in terms of the reconfiguration of knowledge at different spatial scales (see Levy & Sznaider, 2002; Till, 2005). Yet in both cases we need to be cautious in relation to the meaning of cosmopolitanism in an urban context: the eco-architecture of "The Garden" project (see section 4 below) denotes a very different kind of global sensibility to the "world openness" (*Weltoffenheit*) associated with Weimar Berlin, the cultural efflorescence of West Berlin in the 1970s, or emerging interest in novel biotopes advanced by the Berlin school of urban ecology. Localised manifestations of globalisation mirror the de-territorialisation of specific facets of collective memory as reflected in the declining significance of regionalist or nativist ecologies. Yet a "critical cosmopolitanism" à la Walter Mignolo poses tensions between an emphasis on universalist evaluative frameworks and the particularities of history and meaning in relation to specific sites.[11]

FIGURE 2 The corner of Chausseestraße and Liesenstraße, Berlin (2007). Note the diversity of wild flowers and the pathway formed by public use. Photo by Matthew Gandy

The differentiation between individual and collective memories operates on several levels. My study site resides within my own memory and perhaps in that of a few hundred other people. Yet the site's vibrant ecological interregnum between the fall of the Wall and its eventual erasure scarcely registers within the collective memory of the city as a whole. Am I invoking here a form of "ecological nostalgia" by even emphasising the cultural and scientific significance of this lost site? Can we disentangle the idea of nostalgia from essentially distorted or idealised renditions of the past? The anthropologists Olivia Angé and David Berliner emphasise how the presence of "eco-nostalgias" is entwined with a multi-species sensibility towards embodied forms of memory. I have only to touch or smell the mugwort plant mentioned in my introduction to be instantly transported back to memories of my study site from the mid-2000s. Framed slightly differently, how should we make sense of what the geographer Kathryn Yusoff refers to as "the affective registers of biodiversity loss" (Yusoff, 2011, p. 578) in relation to the disappearance of individual places of memory? Berlin is marked by multiple forms of nostalgia, both private and collective, extending across ecological, cultural, and historical domains, and all marked by an impossibility of return. If my study site marks a nostalgia for the recent past, then this is derived from memories of an ephemeral socio-ecological constellation that holds little connection with collective memory.

What does it mean to discuss a site of ecological interest that no longer exists? An emerging awareness of "spectral ecologies" has begun to reframe some of the affective dimensions to environmental change in interesting ways. The geographer Adam Searle, for instance, building on the insights of Jacques Derrida, has emphasised "the affective force of absence" (2020, p. 167). "Thinking through traces", notes Searle, "is an act of foregrounding that which is absent, the being-there of the not-there" (Searle, 2020, p. 168). Similarly, Derek McCormack, also drawing on Derrida, has stressed how the spectral denotes "the necessary impossibility of the fullness of presence" (McCormack, 2010, p. 643). And Yusoff (2011), adding to this evolving field, explores the multiple spectralities, including representational and taxonomic practices, that stand between the human subject and the other-than-human realm of nature. In thinking through the sources compiled for my essay, I am reminded of McCormack's reference to "a distributed field of affective materials" (McCormack, 2010, p. 650) that is in turn related to, but not reducible to, the technical apparatus of the research process.

FIGURE 3 The corner of Chausseestraße and Liesenstraße, Berlin (2007). The striking blue-flowered plant, *Echium vulgare*, is a characteristic species found on urban wastelands or *Brachen*. Photo by Matthew Gandy

Notions of "spectral geographies", as outlined by McCormack and others, elide with my own interest in "spectral ecologies" in an urban setting.[12] But what kind of efficacy can an environmental absence play in cultural or political discourse? When, and under what circumstances, does an absence truly become an absence?

3 | ECOLOGIES OF ABANDONMENT

How might we broaden our consideration of what aspects of the non-human realm are worth protecting or remembering in an urban context? What kind of resonance might "ecological heritage" denote in relation to specific facets of urban nature? In Berlin, individual trees have been the focus of protection efforts as "natural monuments" (*Denkmale*) since the 1920s, along with specific cultural landscapes of historical significance such as the Pfaueninsel (Peacock island) in the south-west of the city, under legislative protection since 1924 (Stichel, 1927). Writing in 1932, for example, the architect Kuno Becker placed specific emphasis on ostensibly "natural landscapes" such as lakes and forests that were under immediate threat from a combination of urban expansion and public "indifference" (*Gleichgültigkeit*) (Becker, 1932, p. 5). Becker presented urban nature as a kind of respite from the modern city, which he characterised as a "stony desert" (*Steinwüste*), as a place where people can still experience the "primordial feeling" (*Urgefühl*) of sunlight within an "unadulterated Heimatnatur" (*unverfälschte Heimatnatur*) (p. 5).[13] Becker's call to protect fragments of "unspoilt" nature on "social hygienic grounds" belied a deep sense of ambivalence towards modernity and urban life, and an evident elision between an imaginary pre-modern nature and the imposition of socio-spatial order. In the post-war era, however, the emerging discourses of urban ecology were marked by a kind of defensive empiricism that took refuge in the positivist veneer of ethical neutrality. The relative worth of vulnerable biotopes was discussed within a largely descriptive and

enumerative scientific idiom that sought to avoid all forms of ideological sentiment. Since the 1980s, furthermore, there have been systematic attempts in Berlin to extend the protection of nature to novel ecosystems and non-native species, so that the earlier concern with "ecological deception" advanced by Becker and others was effectively turned on its head. It is against this background that we should view the cultural and scientific valorisation of urban wastelands in Berlin and elsewhere as a destabilisation of existing discourses in relation to metropolitan cultures of nature.

In a Berlin context my study site is not a mere wasteland but a *Brache*. Indeed, the site was widely recognised as the largest *Brache* in this part of the city. The etymology of the German word *Brache* (plural *Brachen*) is revealing: the term denotes fallow land, and is rooted in agricultural practice, but in the post-war era it acquired wider resonance for a variety of urban and industrial wastelands. Unlike its agricultural counterpart an "urban fallow" serves as a landscape designation that awaits a sprinkling of capital or human imagination rather than seeds. It is this provisional characteristic that provides a symbolic connection between contrasting urban and rural interpretations of temporary landscapes. In terms of the wider complexities over the deployment of language in relation to marginal spaces, the *Brache* is clearly related to interest in the term *terrain vague* yet the meaning is not reducible to this more abstract concept. What the *Brache* clearly shares with *terrains vagues* and other types of urban wastelands, however, is its status as an architectonic anomaly, in the sense that such spaces are especially vulnerable to erasure.

The use of the word *Brache* in Berlin has evolved in relation to three main types of urban landscapes: first, the extensive rubble landscapes (*Trümmerlandschaften*) emerging in the wake of war-time destruction; second, the variety of anomalous spaces produced by geo-political division such as abandoned or disconnected transport corridors or securitised zones of exclusion; and third, the array of post-unification void spaces associated with the *Mauerstreifen*, industrial restructuring, demographic change, and other developments. My own study site clearly falls within this third and most recent phase of usage for the term *Brache*, connecting with wider discourses over the aesthetic and cultural characteristics of post-industrial wastelands.[14]

From the 1950s onwards, Berlin's *Brachen* became a specific object of scientific curiosity. A series of pioneering botanical studies, led initially by Hildemar Scholz and at a later stage by Herbert Sukopp, had wide-ranging ramifications for the burgeoning field of urban ecology.[15] The Berlin school of ecology, which developed from the 1950s onwards, has consistently emphasised the global characteristics of urban ecological assemblages. Over time, we can discern a shift from a network of individual study sites towards a systematic city-wide research programme that would culminate in what the sociologist Jens Lachmund refers to as the "biotope mapping regime" of the 1980s. Under this programme of work the entire island city of West Berlin was divided into a series of specific ecological assemblages associated with the botanical characteristics of individual sites (see Asmus, 1980; IfÖ, 1983). This distinctive phase of work emerged from advances in urban ecology, grassroots forms of political mobilisation to protect vernacular spaces of nature, and shifting approaches to land use planning, including the increasing influence of ecologists within the decision-making apparatus of the local state (see Lachmund, 2011, 2013). In a sense, therefore, my study site emerged after the most intensive phase of scientific work on these unusual ecological assemblages, and could even be regarded as marginal within its own genres of cultural and ecological interpretation. Ultimately, however, my fieldwork location was not quite interesting enough to garner sustained cultural or scientific attention. This Berlin corner was only of exceptional interest to me, a few regular walkers, and the squatters in nearby buildings. Although the site was known about as part of a wider network of *Brachen* across the city, it had never been the focus of specific protection efforts. In fact, no systematic scientific study of this site was ever carried out by scientists or students based in Berlin.[16]

In parallel with the cartographic impulse behind the study of Berlin's vegetation the ecologist Ingo Kowarik developed a typology for urban nature in which his designation "fourth nature" refers to ruderal urban ecologies associated with spontaneous vegetation. Kowarik derived his typology from the abandoned railway yards at Gleisdreick in the early 1990s, a landscape that is best known internationally through its presence in the film *Der Himmel über Berlin* (*Wings of desire*) (1987), directed by Wim Wenders (Kowarik, 1995 [1991]). Kowarik's use of an urban biotope classification system alongside an idealised typology for urban nature underlines a degree of conceptual synthesis between cultural and ecological dimensions to the study of marginal spaces. Yet the precise role of capital, or the wider ideological configurations of urban nature, has remained consistently outside the analytical frame of the Berlin school of urban ecology.

Urban nature exhibits multiple temporalities. Indeed, I probably encountered my study site at its "peak" in terms of biodiversity, as a place in transition from a flower-rich urban meadow towards some kind of woodland, in this case initially dominated by grey alder (*Alnus incana*) that was already forming dense stands in the north and east of the site. Urban ecological assemblages often reside within an analytical framework that rests on a double temporality, as conceived within the ecological literature, in terms of looking backwards (the notional baseline of a relic ecology) but also forwards (the anticipated ecologies of future cities). Within fifteen to twenty years, most urban wastelands will undergo

a transition towards some kind of forest with very different aesthetic and ecological characteristics (see Kowarik, 2005). These "prospective ecologies" present an enticing scientific puzzle for urban ecologists marked by a shift of emphasis away from retrospective baselines or more familiar kinds of cultural landscapes and an orientation towards the ecological characteristics of future cities. In the case of my study site I encountered diverse temporalities related to human time, such as the specific ecologies created by geo-political division and its aftermath, but also varieties of non-human time and the successional dynamics of an ecological *tabula rasa*.

From around 2009 onwards, and especially since 2015, the extent of urban wastelands in Berlin has been rapidly diminishing. Throughout much of the city, and especially within the so-called S-Bahn ring, the *Brache* has become a kind of relic space associated with the city's recent history. At the time of writing, the last remaining *Brachen* are mostly to be found in more unusable sites such as inaccessible strips of land between infrastructure networks or where uncertainties over ownership have stymied potential development. The few exceptions to this process of erasure are instances where the "musealisation" of individual *Brachen* has taken place through their incorporation into landscape design (see section 4 below). It is curious perhaps that it is precisely at their moment of loss that the *Brachen* have gained wider cultural attention, echoing the anthropologist Renato Rosaldo's (1989, p. 107) elaboration of the "elegiac mode of perception", marked in this case by the ambivalent setting for the restaging of such spaces *within* the wider context of their disappearance from the urban landscape.

4 | ECOLOGICAL ERASURE AND THE STAGING OF NATURE

What does it mean to be gradually excluded from a space of memory as a prelude to its erasure? In the first phase of this process, from around 2009 onwards, I noticed that my study site had been fenced off through a process of "urban enclosure" followed by a ring of advertising hoardings serving as monetised barriers (see Figure 4).[17] Shortly afterwards, the southern end of the site was turned into a car park, while a parcel of land in the north became a petrol station. All around were signs of the gradual intensification of the security apparatus — initially to monitor parked cars but implicitly directed towards any human presence. The tightening control over the site culminated in a police raid in April 2011 to evict the last remaining squatters from apartment buildings adjacent to the site that had been kept empty during the city's geopolitical division and had not yet been renovated.

My former study site has now been turned into a luxury housing development called "The Garden", completed in 2016 and designed by the Berlin-based Eike Becker studio (Figures 5 and 6). This complex of over 150 apartments, costing more than 100 million euros to construct, is illustrative of post-unification Berlin's re-integration within multiple circuits of capital: the project is a joint venture between the Peakside Capital Advisor AG (with offices based in Frankfurt, Munich, Prague, Zug, and Warsaw) and pantera AG from Cologne, with additional inputs from property investment manager Patrizia AG, located in Augsburg, and Dublin-based financial interests. In advance of its construction, promotional materials promised that the project would transform the area into a "lively quarter" (as if there was no life there before). Some of the architectural literature referred to the existing site as a "no man's land", "dog field" (*Hundewiese*), or "desolate area" (*öde Fläche*) in order to emphasise the perceived worthlessness or even threatening attributes of the original place.[18] Investigative reporting from the local blog *Kiezspione* (neighbourhood spy) tried to elicit further details about a project that would eliminate "the last large-scale *Brache* in the neighbourhood".[19] A contributor to *Kiezspione* enquired somewhat laconically how many people might strive for an opportunity to own an expensive apartment sandwiched between a petrol station and a cemetery although it does appear that most units have now been sold (though not necessarily occupied).[20]

The developers promoted the new project as a "secret garden – as diverse as the city, as alluring as nature", using a sales narrative that is naturally oblivious to the kind of nature that previously existed on the site:

> As soon as you walk through the entrance gate and set foot in the courtyard, you will find yourself in a lush, blooming oasis filled with the sounds of children laughing and birds chirping, and you will instantly understand why this place is called The Garden. In this park-like surrounding, one cannot help but be reminded of a secret garden. A private paradise, where you can leave the hustle and bustle of Berlin far behind, without leaving the city centre.[21]

The Garden project evokes an ambience of eco-urbanity for incoming "bio-elites" — a sociological term that holds particular resonance for German gentrification — and the expensive organic food shops have already arrived.[22] We can point to the

FIGURE 4 Advertising hoardings surrounding the site, Liesenstraße, Berlin (2011). Photo by Matthew Gandy

use of ecological rhetoric as a tool of urban marketing yet the project itself is not connected to a wider set of environmental objectives beyond the realm of building regulations. The project exemplifies a form of "generic urbanism" that uses various kinds of ecological motifs such as shade-tolerant plants for the secluded "inner courtyards" (*Hinterhöfe*) based on a faux Wilhelmine style. The Dutch architect Rem Koolhaas, for instance, uses the term "generic city" in an essay published in 1995 to refer to a kind of ahistorical convergence in urban form Koolhaas, (1995). Unlike the new historicism underway in other quarters of Berlin this project has almost no stratigraphic connection to the history of the city or the site. In environmental terms this kind of "eco-design" is founded on the perceived interchangeability of nature and is clearly disconnected from more precise environmental discourses associated with conservation biology, urban ecology, or other fields. The project can be characterised as a kind of architectural monstrosity that has been grafted onto a relatively low-income neighbourhood, contributing towards social as well as ecological forms of displacement.

The contrast between the Garden project and other spaces of nature nearby is instructive, highlighting a series of alternative cultures of nature within contemporary Berlin. A working typology of urban nature in this Berlin neighbourhood might now encompass five forms of human intervention: the *preservation* of nature (in the local cemetery), the *maintenance* of nature (extending to street trees), the *management* of nature (exemplified by the linear strip of public space adjacent to the Panke, a tributary of the River Spree), the *replacement* of nature (with the building over of my study site), and the *re-enactment* of nature (marked by the inclusion of a "wasteland aesthetic" in the landscape design for the nearby Park am Nordbahnhof).

FIGURE 5 Billboard in the Chausseestraße for The Garden project, Berlin (2011). Photo by Matthew Gandy

Indeed, this last dimension — the *re-enactment* of nature — illuminates a new phase in the interface between urban ecology and metropolitan cultures of nature. Just as my study site was being erased a contrasting discourse of valorising similar spaces was emerging nearby through the creation of Park am Nordbahnhof, completed in 2009.[23] The final design of this park, led by the Berlin-based Fugmann and Janotta studio, had evolved significantly since their original winning submission for the architectural competition held back in 1995. In particular, a change in funding shifted the emphasis towards the need for a "compensation landscape" to be created in exchange for the destruction of urban nature elsewhere in the city. The landscape architect Till Rehwaldt (2012) describes how the spontaneous vegetation on the original site, along with vernacular patterns of public use, has been effectively institutionalised in both formal and atmospheric terms. Rehwaldt refers to an "exemplary intertwining (*Verschränkung*) of aesthetic ideologies" (Rehwaldt, 2012, p. 58) that provides connections to both nature and history. The final design for the park placed particular emphasis on "near nature" (*naturnah*) features, including the presence of steppe-like grasslands with distinctive tufts of *Calamagrostis* and other unusual plants in an urban context.[24] In certain respects, this new park design might be likened to Svetlana Boym's concept of a "restorative nostalgia", as a form of active reconstruction, in contrast with the "reflective nostalgia" of unfulfilled longing (Boym, 2001). Her interest in the "off-modern" emphasises a more complex set of cultural appropriations that can combine multiple temporalities with the singularities of place (see Boym, 2008). This staging of urban nature, including the maintenance of open grasslands, holds a ghostly relation with the more distant Slavic landscapes in the East that were perceived as a source of ecological threat by the nativist botanists of the inter-war era.[25] In essence, we encounter a form of "cultural objectivation", to use Jan Assmann's phrase, enacted through a form of aesthetic mimicry, that reconstructs a specific moment of ecological memory at the interface with collective forms of vernacular and specialist knowledge (Assmann, 1995, p. 129). The *re-enactment* of nature in Park am Nordbahnhof, incorporating remnants of the former *Brachen*, exemplifies de Solà-Morales's interest in alternative architectonic formulations:

FIGURE 6 Posters in the Liesenstraße for the Garden project, Berlin (2011). Someone has written on a poster that "Diese Grünfläche machte Berlin, zu dem was es ist" (This green space made Berlin what it is). Photo by Matthew Gandy

> How can architecture act in the *terrain vague* without becoming an aggressive instrument of power and abstract reason? Undoubtedly, through attention to continuity: not the continuity of the planned, efficient, and legitimated city but of the flows, the energies, the rhythms established by the passing of time and the loss of limits.
>
> (1995, p. 123)

5 | CONCLUSIONS

In November 2014 the history of this street corner was momentarily revealed by a large-scale art installation. To mark the twenty-fifth anniversary of the fall of the Wall, the 15.3 km line that divided the city was temporarily illuminated by over 8000 helium-filled balloons. The *Lichtgrenze* (border of light) project, devised by the artists Christopher and Marc Bauder, rendered the city's recent history visible at nightfall. At the time of the installation, the organiser of the event, Moritz van Dülmen, estimated that around half of Berlin's residents would have never directly experienced the divided city (see Eddy, 2014). The *Lichtgrenze* installation consequently marked a kind of cultural watershed between direct and indirect forms of memory.

Traces of the former Wall in this neighbourhood have now been minimised to a narrow line of bricks or steel that has been set into the ground, performing the role of an easily overlooked architectonic transect. In the nearby Bernauerstrasse, by contrast, there is an elaborate memorialisation involving a series of large-scale murals, an

installation of steel rods along sections of the former *Mauerstriefen*, and a variety of educational resources. In essence, the significance of one site is being actively sustained through a process of collective memorialisation whilst the other site lies scattered within fading individual recollections. This contrast is illustrative of the sociologist Jennifer Jordan's emphasis, in a Berlin context, on the tension between remembering and forgetting, and in this case, the fragile intersections between different elements of geopolitical and ecological memory.[26] If we are concerned with the putative authenticity of specific sites of urban nature we must contend with dynamic socio-ecological assemblages in a state of flux: it is ultimately the process rather than the formation that might form the natural focus of a critically reflexive memory studies idiom directed towards traces of nature in the urban arena. The use of selective mowing regimes, for instance, can provide a dynamic portal into the kinds of flower-rich ruderal ecologies that have symbolised precise moments in the history of the city.

This corner of Berlin is now almost unrecognisable in comparison with the early 2000s, apart from the isolated row of post-war housing blocks, now caught under the incessant glare of the luxury housing project's security lighting at night. This neighbourhood now comprises a mix of infrastructure installations, government offices (notably the new secret services complex on the Chausseestrasse), and an extending zone of "loft living" driven by speculative urban development that is contributing to the city's growing housing and rent crisis (see Radomsky, 2021). Clearly, my notion of an architectural monstrosity, encompassing both aesthetic as well as structural dimensions, does not elide with the "promises of monsters" thesis in relation to forms of cultural and technological hybridity. The emancipatory monster of the posthuman imaginary is an "unstable assemblage of categories that were never intended to be fused" (Hellstrand et al., 2018, p. 153), whereas in this case we must contend with a deliberately crafted form of eco-capitalist hybridity that represents a simultaneous form of aesthetic and political monstrosity.[27]

In writing this paper I have been exploring the conceptual borderlands between scientifically oriented ethnographic insights and the kind of structuralist analytics offered by urban political ecology and related fields. I have sought to connect the affective realm of marginal spaces with the multiple temporalities of urbanisation as part of a wider reflection on the cultural and political dynamics of urban nature. My concern with loss, memory, and the multisensory sphere suggests new lines of critical dialogue between the environmental humanities — broadly defined — and the material traces of modernity, the ideological parameters of historical materialism, and the co-existence of alternative ecological imaginaries. Indeed, the materiality of ecological memory invites further reflection on multiple configurations of agency in relation to everyday spaces of urban biodiversity. There remains a zone of indeterminacy between existing conceptualisations of the multispecies city and the underlying determinants of urban form.

I want to emphasise that my use of the term "ecological ethnography" in relation to my study site is distinct from the kind of "postcritical horizontalizations" that have characterised some of the existing work within multispecies ethnographies and more-than-human geographies.[28] The post-positivist and structuralist dimensions to my analysis also differ from existing paradigms in urban ecology, including the Berlin school, and lie closer to the intellectual terrain of urban political ecology. Yet urban political ecology in its turn has not shown sufficient curiosity towards the cultural and material complexities produced by the spontaneous dynamics of urban nature.

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Data sharing is not applicable to this article.

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ENDNOTES

[1] In his essay de Solà-Morales draws on the insights of Odo Marquard (1986) to develop a post-Heideggerian hermeneutics that "seeks to transcend the split between aesthetics and ethics, between experience of the world and action on the world" (de Solà-Morales, 1995, p. 122).

[2] My translation. The original text reads: "Lücken sind die Wunden der Stadt und ihre Chancen, ihre Schandflecke und ihre utopischen Orte."

[3] My interaction with the site drew me to a range of specific literatures on urban botany and related fields. It became clear that the Berlin school of urban ecology, associated in particular with the Institute of Ecology at the Technical University Berlin, had played a critical role in the development of urban ecology as a distinctive scientific sub-field. My initial reflections on the site are contained in Gandy (2011). For specific examples of contributions from the "Berlin school" of urban ecology see, for example, Kowarik (1995 [1991]), Sukopp (1990), and Zerbe et al. (2003). For the significance of Berlin within the wider historiography of urban ecology see Gandy (2022) and Lachmund (2013).

[4] On tensions over different approaches to ethnographic fieldwork that extend to the non-human realm see, for example, Ballestero and Winthereik (2021), Pitrou (2015), Shryock (2016), and Wang (2012).

[5] In the early months of 2013, I was a visiting scholar in the Institute of Ecology at the Technical University Berlin.

[6] Part of the pretext for the emergence of multispecies ethnography has been a disciplinary rapprochement within anthropology as well as a questioning of human exceptionalism. See, for example, Kirksey and Helmreich (2010) and Ogden et al. (2013).

[7] There is now a growing literature on the cultural and ecological significance of urban wastelands. See, for example, Gandy (2013), Jorgensen and Tylecote (2007), Stoetzer (2018), and Vicenzotti (2014). Notable cultural interventions in a Berlin context include Alex Toland's installation *Galerie der Wildkräuter* (*Gallery of Weeds*) held at Berlin's Gleisdreieck between 2006 and 2008 and Lois Weinberger's *Brandenburger Tor* dating from 1994.

[8] In addition to war-time destruction and geo-political division the Chaussestrasse was also the scene of a major uprising by striking steelworkers in June 1953 that was only put down with Soviet military support and the imposition of a city-wide curfew.

[9] Till draws in particular on the concept of "places of memory" developed by the sociologist Avery Gordon (see Gordon, 2008 [1997]). Memory, writes Till, "is the self-reflexive act of contextualizing and continuously digging for the past through place" (Till, 2005 p. 11). Other key contributions include Brian Ladd, who emphasises the metonymic significance of the Wall during the Cold War era, followed by its very limited cultural memorialisation after the city's reunification (see Ladd, 1997). On Berlin's rubble landscapes see also Brantz (2017), Durth and Gutschow (1988), Fichtner (1977), and Jackisch (2014).

[10] This species association forms part of the EUNIS habitat classification system. I would like to thank Ingo Kowarik for his assistance with the interpretation of my original photographs taken at the site. On scientific tensions over the analysis of vegetation patterns see, for example, Kwa (2018) and Neumann (2017).

[11] See Mignolo (2000). More recently Mignolo has revisited his earlier essay to emphasise what he terms "cosmopolitan localism" (Mignolo, 2010 p. 127).

[12] On the emerging field of "spectral geographies", see also Frers (2013) and Wylie (2007). The key works of Jacques Derrida that have influenced this area of work include Derrida (1994 [1993]), (1995), and (2016 [1974]).

[13] Becker's invocation of the *Heimat*, as an idealised German landscape, is clearly framed in opposition to the modern city. His use of the term *Steinwüste* resonates with Werner Hegemann's contemporary description of Berlin in his book *Die versteinerte Stadt* (see Hegemann, 1930). On the history of idealised modern landscapes in Germany see, for example, Lekan (2004), Rollins (1997), and Waldenfels (1985).

[14] On the shifting significance of *Brachen*, especially in relation to post-industrial wastelands, see Genske and Hauser (2013).

[15] Key contributions to the post-war emergence of the Berlin school of urban ecology include Kunick (1974), Scholz (1956, 1960), and Sukopp (1971). In one of my interviews with Herbert Sukopp I asked him whether it was sad to lose key study sites, to which he replied: "Yes. But I am also a Berliner and an urbanite, so I tell myself that this is the usual sequence of development for a city. It is indeed a bit sad, sometimes even tragic, but also simply urban" (my translation). Interview with Herbert Sukopp (6 February 2013).

[16] Ingo Kowarik, personal communication with the author (27 October 2021).

[17] On the dynamics of urban enclosure see, for example, Jeffrey et al. (2012) and Vasudevan (2017).

[18] *DBZ (Deutsche Bau Zeitschrift)* (2018) "The Garden Living, Berlin" (7 August). See also *Eike Becker_Architekten. Superferenz*. Berlin: Hatje Cantz, 2012.

[19] *Kiezspione* (2011) "Hundewiese statt The Garden" (18 March) (accessed 10 November 2021).

[20] *Kiezspione*, "Hundewiese statt The Garden".

[21] The Garden website (accessed 10 April 2014). See also Nina Greve (2018), "Die Garten in der Stadt", *DBZ (Deutsche Bau Zeitschrift)* (11) (accessed 20 November 2021) and Jericho (2013).

[22] See, for example, *Süddeutsche Zeitung* "Die Bio-Elite verschärft die Ungleichheit", Interview with Elizabeth Currid-Halkett by Claus Hulverscheidt and Nakissa Salavati (1 October 2021).

[23] "Park am Nordbahnhof eröffnet", Pressemitteilung, Berlin.de, Das offizielle Hauptstadtportal, 13 May 2009 (accessed 18 March 2013). See also Kowarik (2019, 2020) and Prominski et al. (2014).

[24] Sybille Agricola unterwegs, "Landschaftsarchitektur 2011" (accessed 27 November 2021). The on-line article cites an excerpt from the jury's statement for the award of the 2011 German landscape architecture prize to Park am Nordbahnhof.

[25] On inter-war ecological fears over the "Slavic contamination" of the landscape by alien plant species see, for example, Gröning and Wolschke-Bulmahn (1987).

[26] See Jordan (2006), who emphasises the precise combination of actors and circumstances that have enabled specific sites to be memorialised.

[27] Heidi Sohn, for instance, insists on the architectural monster as a kind of "chaotic zone of indiscernibility" (Sohn, 2021, p. 81).

[28] On the tensions between horizontal and vertical modes of criticism see Kornbluh (2020).

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