

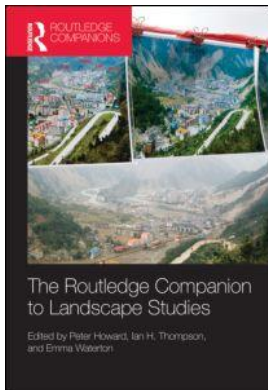
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Access details: *subscription number*

Publisher: *Routledge*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



The Routledge Companion to Landscape Studies

Peter Howard, Ian Thompson, Emma Waterton

Post-industrial landscapes

Publication details

<https://www.routledgehandbooks.com/doi/10.4324/9780203096925.ch34>

Wolfram Höfer, Vera Vicenzotti

Published online on: 06 Dec 2012

How to cite :- Wolfram Höfer, Vera Vicenzotti. 06 Dec 2012, *Post-industrial landscapes from: The Routledge Companion to Landscape Studies* Routledge

Accessed on: 30 Sep 2023

<https://www.routledgehandbooks.com/doi/10.4324/9780203096925.ch34>

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Post-industrial landscapes: evolving concepts

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After two centuries of industrialization, the adaptive reuse of brownfield sites is a major topic for landscape architecture and landscape planning worldwide. Brownfields show great similarities internationally, because industrial production was primarily shaped by economic opportunities and technologies that were not related to local population or the characteristics of a region. By way of a cross cultural comparison between North America (with a focus on the United States) and Europe, this chapter brings to the fore the ways in which the discourses on post-industrial landscapes differ considerably in different cultural contexts. Although the challenges of brownfield sites are similar, the perception and definition of the problems at hand – the ‘facts’ – are culturally determined. We demonstrate this following three lines of argumentation. First, we will argue that even though the sites themselves resemble each other, their perception as landscapes may differ considerably, and consequently the approaches within landscape architecture and planning on how to reuse and develop former industrial sites also differ. Hence this chapter reviews conceptual changes and paradigm shifts in both the North American and the European discourses (taking the German discourse as representative). Second, the heuristic frame of our argument is the thesis that these different interpretations and approaches are a consequence of historically diverse concepts of ‘landscape.’ Finally, we touch on the impact of landscape ideologies on the design and planning of post-industrial sites and sketch the impact of this phenomenon on landscape theory. As one can observe the evolution of a new vernacular character in post-industrial landscapes on both sides of the Atlantic, our text develops the question whether this development leads to a congruence of the different concepts of landscape in North America and Europe.

This analysis is motivated by the belief that a critical understanding of the cultural context allows a certain freedom from traditional and long-established perspectives. It therefore aims at interpreting hermeneutically the cultural meaning of design elements and approaches, and only refers briefly to other highly relevant aspects for the adaptive reuse of brownfield sites which are

dealt with in a growing body of literature from different disciplines: e.g. contamination (e.g. Hollander et al., 2010), social aspects (e.g. Cross, 1992; Kühne, 2007), economic matters (e.g. Jochimsen, 1991), legal issues (e.g. Guglielmi, 2005; Sattler et al., 2001) or questions of historic preservation (e.g. Falconer, 2007). Furthermore, this chapter deals mainly with a specific type of post-industrial site found in urban and peri-urban situations. For a discussion of such sites in rural areas and the cultural interpretation of, for example, derelict strip mines, see Berger (2002); Mindrup and Elberling (1997); Pütz (2002); Schwarzer (2009). An additional fruitful approach is the discussion of old industrial sites as ruins (Edensor, 2005). Considering Europe, we will focus on Germany because it has brownfield site issues which are comparable to those in North America (Guglielmi, 2005; for a more comprehensive analysis of urban regeneration and development of old industrial sites in England, France and Germany, see Couch et al., 2011; Hauser, 2001).

Different answers to a global challenge – strategies for post-industrial landscapes in Germany and the United States

It has been shown in numerous studies how the ideas of ‘landscape’ in Europe and Germany differ from those in the United States (Cosgrove, 1984; Mauch and Patel, 2008; Olwig, 1996; 2005; Stilgoe, 1982). While the diversity within North American as well as European cultural heritage makes it difficult to speak of a general ‘North American’ or even ‘US-American’, ‘European’ or ‘German’ approach, we can identify some general patterns concerning the popular conceptions of designed (and not-designed) landscape. Those patterns reflect sets of values that are at times in conflict, but refer in general to the common narrative of the USA as an immigrant nation (landscape as a presumably virgin land that needs to be conquered) and are thus distinctively different from the European cultural heritage – where landscape is most commonly read as a homeland inherited from the ancestors, demanding stewardship. Taking these different notions of ‘landscape’ as a heuristic, the next two subsections illustrate different perceptions and ways to deal with post-industrial sites in Germany and the US.

Idealized industry, urban-industrial nature and Wildnis

In Germany, brownfield site redevelopment has been discussed since the 1960s. During this time, different strategies of how to deal with these sites have been developed in different phases (cf. Hauser, 2001). These developments have been accompanied by a conceptual change: old industrial sites (*Altindustriestandorte*) have turned into post-industrial landscapes (*postindustrielle Landschaften*). In the following, we will identify three discursive traditions that can also be understood as three different strategies that have fostered the perception of old industrial sites as post-industrial landscapes:

- the idealization of industry;
- the discovery of the specific nature of brownfield sites; and
- the idea of wild nature.

Since the beginning of the Industrial Revolution, ‘landscape’ has played a role as a counterweight to an urban and industrial society (cf. Eisel, 1982; Joachimides, 2002; Olwig, 1996). Since the late twentieth century an interesting change can be observed, which has resulted in an interpretation of industry not as the destroyer of landscape, but as a harmonious part of it. This change has become possible because of the powerful economic structural changes that have

reduced the presence of industrial production. This development has facilitated an *idealization of industry* and industrial work ‘as concrete work, no longer just farming and craftsmanship, but also coal and steel become a determinant for culture and a good life’ (Höfer, 1998: 674), for a harmonious ‘land and people unit’ (Riehl, 1990 [1854]). In such an ‘objectivistic understanding’, these values of a good life are related to the physical object of a (post-industrial) landscape (Kirchhoff and Trepl, 2009: 25 ff.; cf. Wylie 2007). It also became possible to look at these sites with a Kantian distanced view, free of any interests, which has often been described as a precondition for the aesthetic perception of landscape, occurring within the creative mind of the observer (‘subjectivist understanding’, Kirchhoff and Trepl, 2009: 25 ff.; cf. Cosgrove, 1985; Wylie, 2007). The idealization of industry has been the underlying and guiding notion in the design of the Landscape Park Duisburg-Nord in Germany. The park was a key project of the International Building Exhibition (IBA) Emscher Park, a programme of the Land North Rhine–Westphalia between 1989 and 1999 which was designed to initiate restructuring a part of the Ruhr region which has been suffering from economic, environmental and social decline for many decades (Shaw, 2002; Weilacher, 2008). It was the explicit goal of the exhibition to transform the Ruhr region into a ‘cultural landscape for the future’ (Ganser, 1999: 11; cf. Dettmar and Ganser, 1999). In Duisburg-Nord, this aim has been successfully realized by the designers of the park, Latz and Partners. For Peter Latz, industrial relics are not just decorative historic elements but are understood as complex systems originated in the technical and economic demands of the bygone production process. These existing structures are considered as one layer of information in the design process, overlaid with new uses and structures, producing a creative tension and allowing new meanings to emerge (Latz, 2008).

A second strategy that facilitated the change in perception of old industrial sites has been the scientific discovery of a specific urban-industrial nature which has taken place since 1960 in conjunction with the establishment of urban ecology as a sub-discipline of ecology, leading to comprehensive surveys and mapping of the urban-industrial vegetation, in particular in Berlin (e.g. Sukopp and Hejný, 1990; cf. Hauser, 2001). Many of these studies confirmed unexpected species richness on urban and industrial sites, challenging the hitherto existing criteria of nature conservation, which had focused almost exclusively on traditional cultural landscapes. As a reaction to these surveys, botanists, nature conservationists and landscape architects began to talk about nature ‘specific’ and ‘typical’ for urban and industrial sites (e.g. Dettmar, 1999; Kowarik, 1992; Rebele and Dettmar, 1996; cf. Hauser, 2001). Very influential in this regard has been Kowarik’s concept of four kinds of nature in the city, comprising not only remains of pristine nature, nature shaped by agriculture, or intentionally designed nature such as in parks, but also ‘nature of the fourth kind’, i.e., ‘specifically urban-industrial nature’ (Kowarik, 1992). This perception of the vegetation and the industrial sites themselves marks a fundamental change, since it has opened the possibility of perceiving them as unique places with a specific character, i.e. as cultural landscapes.

The third strategy differs from the other two, as it does not aim at enhancing a perception of the old industrial sites as a new form of cultural landscape. Rather, the brownfield sites are conceived as *Wildnis*, i.e., wild nature or wilderness. Within European nature conservation and landscape architecture in general, there is an influential discourse interpreting urban brownfield sites and even smaller areas with spontaneous vegetation as *Wildnis* (e.g. Diemer et al., 2003; Jorgensen and Tylecote, 2007). This interpretation was successfully transferred to old industrial sites (Dettmar, 1999; Hülbusch, 1981; Kowarik and Körner, 2005), expressing fascination for and acknowledgement of the uncommon aesthetics, the messiness or even the sublime qualities (cf. Körner, 2003) of the old industrial sites. Studies that argue for a reading of post-industrial



Figure 34.1 Pictures like this have been used frequently to raise awareness for the uncommon aesthetics of the 'urban industrial nature'. (source: Dettmar, 1999: 142)

sites as a new form of wild nature often combine floristic surveys with what could be called phenomenological studies illustrating that '[w]e have to learn to see before the beauty of the industrial nature opens up' (Dettmar, 1999: 141; see Figure 34.1).

A common feature of all three strategies is that post-industrial landscapes are conceived as a counterpart to the traditional agrarian landscape. Either, as in both the idealization of industry and the discovery of the unique character of the industrial vegetation, the former industrial sites are interpreted as a *new* form of cultural landscape, or the brownfield sites are conceived as a kind of *Wildnis*, thus in explicit opposition to cultural landscape in general (Vicenzotti and Trepl, 2009). Structurally, however, it appears that the cultural interpretation of post-industrial sites is primarily linked to a heritage formed by aspects that shaped also the traditional cultural landscape – idealization of human activity in response to natural resources, a celebration of evolved systems of 'land and people' (cf. Höfer, 1998, 2000). Another trait of the German discourse is that it has focused on the cultural meaning of the recultivation of former industrial sites (cf. Guglielmi, 2005). This becomes obvious when analysing the contributions to one of the earliest conferences dealing with post-industrial landscapes, which took place in 1992 (DGGL, 1992). It is even more significant considering that this conference was happening in the context of the IBA Emscher Park, that is to say those existing contamination issues of the Ruhr area were not overshadowing the discourse on cultural meaning. In this regard, Latz (2004: 150) states that the 'fear of historical contamination has given way to a calm acceptance of the structures'. This calm acceptance, in accordance with an appreciation of the new aesthetics of post-industrial landscapes, is an invitation to understand (contaminated) old industrial sites as systems from an ecological, cultural or economic perspective. Such understanding informs the design and planning process at both regional and site scales and



Figure 34.2 Calm acceptance of the old industrial structures in accordance with an appreciation of their unusual aesthetics can lead to surprising solutions. Berne Park in Bottrop, Germany by the Scottish landscape architect Eelco Hooftman. (source: Wolfram Höfer)

it is now common praxis to explore the visual, spatial and cultural issues of such a site, considering how industrial production has shaped the character of a neighbourhood and how that character can inspire the design of meaningful places for new activities to come (see Figure 34.2).

Clean slate approach, smoke stack nostalgia and Landscape Urbanism

While the German discussion is a continuation of the discourse around the cultural interpretation of landscape and wilderness, and thus follows established paths of academic argument, the American discussion is less focused on the cultural meaning of these sites, but more on their potential economic use and the engineering challenges that come with them. This pragmatic perspective is related to one American cultural interpretation of landscape that regards landscape as a resource for industrial society and not as an idealized counterweight to it. Olwig (2005) describes two fundamental perspectives on American landscape. First, the pragmatic view evident in the rectangularly organized Midwest and, second, the New England landscape which gathers around a 'common' with the iconic white wooden chapel rooting back to an early group of settlers who shared religion and ideals, an ideal vision of the American society. Today such architectural elements allow for a nostalgic view of past times, even if placed arbitrarily in a shopping mall. The Midwestern juxtaposition to that is the abstract rationality of equal spaces. Based on the abstract Renaissance idea of natural law, the rectangular spaces provide equal opportunity for everybody; land outside settlement is an open resource for individual economic success (Olwig, 2005). Having both perspectives in mind, we will outline three main strategies towards post-industrial landscapes:

- landscape as opportunity and how that is limited by environmental hazards;
- a romanticized view of historic industrial relics; and
- a comprehensive approach to post-industrial landscapes in the context of Landscape Urbanism.

Under the first perspective, *land as resource*, brownfield sites are considered as one main opportunity for economic development in metropolitan areas, although afflicted with significant safety concerns. The pursuit of economic success in relation to the limitations of possible liabilities resulting from unsolved contamination issues has a much stronger role in the design and planning discourse than in Germany (Kirkwood, 2001). Comparing brownfield laws and policies in Europe and the USA, Guglielmi (2005) points out that the focus of brownfield remediation in Europe is to foster economic development through urban renewal. In the USA, however, the focus is to improve public health through the reduction of possible exposure to contaminants. These are two significantly different approaches, the first sees derelict land as potential for development; the latter considers brownfield sites mainly as health hazards. 'Due to the fact that U.S. brownfield policy grew out of the Superfund program, with an emphasis originally on environmental cleanup and remediation, the spatial planning aspects of brownfield redevelopment were to a large extent ignored' (Guglielmi, 2005: 1288). Under the liability perspective of present and future landowners, remediation efforts had to be as complete as possible, leading to a *clean slate approach*. The effect was that not only cultural heritage but also spatial qualities of old industrial ensembles were erased. In 1998, Niall Kirkwood (2001) initiated a conference at Harvard addressing the transformation of former industrialized landscapes, defining them as 'manufactured sites.' Compared with an earlier German conference (DGGL, 1992), which was much more focused on cultural meaning, the American discussion provided larger space for environmental law and remediation issues. This reflects the pragmatic perspective on landscape mentioned above.

The second perspective on American landscape, referring to *cultural meaning in a rather nostalgic light*, can be discussed using the Gas Works Park at Seattle as an example. Although the late 1960s and early 1970s brought the potential dangers of contamination hazards to the attention of the general public (and with that the introduction of brownfield laws and the creation of the US Environmental Protection Agency), that period also sparked a new awareness of the aesthetic potentials of post-industrial sites. The 1975 design of the Gasworks Park in Seattle by Richard Haag was a turning point for the interpretation of brownfield sites in North America. Against the original proposal, favoured by the Seattle community, completely to clear all remaining structures and to transform the site into a Victorian-style park, Haag preserved industrial equipment and celebrated it as the centrepiece of a new post-industrial park (Heyman, 1999). 'Haag's aestheticization of the gas works effectively produced an obsolescence narrative that succeeded in winning unanimous approval for his master plan from the city council with the support of the public' (ibid.: 121). At first glance, this seems very similar to developments that occurred later all over Europe, but a closer look reveals a significant difference. Although Haag had originally intended to integrate industrial elements on several layers into the future uses of the park, gradually revealed contamination issues forced the reduction of the Gas Works towers to just decorative elements, fenced in and without any visual connection to the new context of the site (ibid.; Weilacher, 2008). This illustrates how the above-mentioned perspective of *land as resource* triggered the need for an as-complete-as-possible remediation that would protect investors from any future liability. In contradiction to Haag's original intention, it was difficult to maintain the comprehensive industrial heritage. Historic elements, however, were considered useful when transforming old industrial sites into shopping malls and other commercial uses. Cowie and Heathcott (2003) criticize the way in which historic elements like

smokestacks are often just used to decorate the ‘postmodern retail landscape’ with no comprehensible relation to the historic context and are thus devoid of meaning. In fact, the nostalgic New England view of landscape described by Olwig is recurring in smokestack nostalgia. This may appear similar to the ‘celebration of evolved systems’ mentioned above, however, the difference is that this approach is looking at complex systems rather than at single decorative elements.

Recently, a much more comprehensive approach is revealed in the discussion of American *drosscapes*. This term, coined by Alan Berger (2006), does not make a distinction between abandoned industrial sites and other under-utilized urban areas. Berger takes a rather pragmatic position, stating that any healthy economic development produces dross – spaces out of use – even more in a post-Fordist situation. While the Fordist industrial economy, globally interacting, already demanded long-term concentration of capital through large-scale industrial production facilities, a more flexible, transportation-oriented economy creates significantly changed landscapes with large spaces occupied by infrastructure and in-between waste lands (see Figure 34.3). The *drosscape* approach marks a major shift in the American discussion: the discussion of hazards and liability is no longer the dominant topic and aesthetic appreciation and design is not anymore concentrated on a single object but on the design process. This much more comprehensive approach shows parallels with the recent discussion around Landscape Urbanism (see Chapter 37) and Ecological Urbanism (Mostafavi, 2010). In fact, the regional planning approach of IBA Emscher Park is mentioned as a significant exemplar for the landscape urbanist approach (Shannon, 2006; Waldheim, 2006).

For a long time, the American discussion was dominated by liability issues, but progress in research on appropriate remediation techniques and more comprehensive planning approaches (Hollander et al., 2010) provides the opportunity to push the theory discussion beyond these topics.



Figure 34.3 The fenced-in industrial relics at the Seattle Gas Works Park. (source: Daniel Winterbottom)

Synthesis and outlook: the vernacular character of post-industrial landscapes

This brief overview of the discourse on post-industrial landscapes does not claim to be complete; however, it reveals the relevance of the discourse for research on landscape theory in the context of de-industrialization. Future enquiry may develop in several directions: it may

- explore different types of post-industrial landscapes, such as railway lines (Foster, 2010; Qviström, 2012) or waste landscapes (Berger, 2002, 2006; Engler, 2004; Hauser, 1997, 2001);
- investigate case studies of adaptive reuse, focusing on the interplay of economic, land use aspects and the cultural meaning of landscape (Hollander et. al., 2010; Qviström, 2012); or
- building upon our comparison of German and American discussions of post-industrial landscapes explore further how the interpretation of and approaches to them are influenced by the general cultural understanding of landscapes.

A fruitful new question would be:

- if and how does the discourse around post-industrial landscapes, including their perception, design and use, influence in turn the cultural interpretation of landscapes in general?

Launching two theses in response to this question, we wish further to illustrate possible directions for future research. In the German discussion, brownfield sites became post-industrial landscapes because historic industrial elements were idealized and understood as complex structures supporting present uses. The interesting twist is that such elements of industrial production were primarily shaped by forces of global economy, scientific research enabling technological progress, the availability of resources, and efficient transport routes. In the conservative German perception of landscape those elements were not considered to be related to the traditions of local population that shaped the characteristics of a specific region; rather those industrial elements were considered an ugly disturbance of the aesthetic harmony of landscapes as unique places with specific character (Eisel, 1982). The idealization of historic industrial

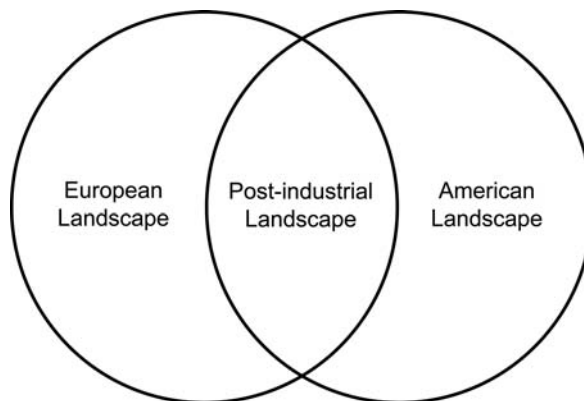


Figure 34.4 Post-industrial landscape as possible point of convergence between the historically different concepts of 'landscape'.

elements transforms the perception of the same elements from ugly disturbance into appropriate design elements. The post-industrial landscape is becoming a new form of cultural landscape. In the USA the discussion is still dominated by liability issues. However, the frequent use of industrial elements as decorative features suggests that there is also an idealization of such relics evolving. Further, recent discussions in the context of Landscape Urbanism suggest a more contextual approach. Hence, starting from the observation that in both Germany and the United States relics of the industrial past are not only valued as architectural pieces, but are increasingly understood in a larger context as landscape elements, one could explore the thesis that post-industrial landscapes might be a conceptual point of convergence for the historically different notions of 'landscape' (see Figure 34.4). Further, we propose the thesis that it could be fruitful to explore this convergence with the notion of the 'vernacular'. Instructive in this regard is the definition of the term 'historic vernacular landscape' by the US National Park Service as a category for the protection of cultural landscapes as:

[A] landscape that evolved through use by the people whose activities or occupancy shaped it. Through social or cultural attitudes of an individual, a family, or a community, the landscape reflects the physical, biological, and cultural character of everyday lives. Function plays a significant role in vernacular landscapes. This can be a farm complex or a district of historic farmsteads along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes.

(National Park Service, n.d.)

Although the National Park Service relates the historic vernacular landscape still to local attributes, i.e. 'an individual, a family or a community', 'industrial complexes', which can be understood as representing the globalized economy, are mentioned explicitly as examples of the historic vernacular landscape. This seeming contradiction calls for further research exploring this new relationship between the global and the local as well as the economic and cultural factors shaping our landscapes. However, it is evident that evolving planning and design concepts both in North America and Europe consider brownfield sites no longer as nuisances but as potential elements of the public realm, as meaningful post-industrial landscapes. Further research in the post-industrial vernacular may contribute to the ongoing development of landscape theory and may provide insights into the interdependence between economic development, the use of the space and the cultural meaning of landscape.

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