Creating New Expressive Landscapes from Old Industrial Infrastructure using Critical regionalism and the Industrial Picturesque

Part 1: The Outsider’s Perspective by David Hopman, ASLA, PLA

Studying elements of critical regionalism in built works involves looking for regional elements used in creative ways, rigorous imaginative transformation of those elements, the utilization of contemporary thinking and technology, unique design features that provoke critical thinking, and the creation of “bounded domains and tactile presences”\textsuperscript{i} that address the experiential aesthetic concerns of landscape architects. The discussion below illustrates ways that the elements of critical regionalism have found a successful expression in a park in Denver, Colorado. Northside Park was designed by Bill Wenk and Associates and shows the flexibility of a critical regionalism methodology by exhibiting both characteristics of critical regionalism and of the industrial picturesque.

The Industrial Picturesque

The rationale and history of picturesque aesthetics have been explored by many writers such as Allen Carlson, Elizabeth Meyer, Steven Bourassa, and in an excellent article in \textit{Landscape Journal} by Susan Herrington: “Framed Again: The Picturesque Aesthetics of Contemporary Landscapes”.\textsuperscript{ii}

The picturesque is an element of detached aesthetics, focused on the visual, as opposed to the engaged or fully experiential model.\textsuperscript{iii} Picturesque means literally “picture like” and indicates a mode of appreciation by which nature and culture are imagined as artistic scenes. At the height of the movement in the 18\textsuperscript{th} and 19th centuries, gentlemanly contemplative observation would be undertaken both with the unaided eye and with a ‘Claude Glass’. The small, blackened pocket mirror, named after the artist Claude Lorraine, reduced the tonal values of whatever landscapes it was pointed to as its convex shape simultaneously brought more of the scene into focus. The observer saw only picturesque scenery and ignored other aesthetic concerns as, for example, the squalor of the rural poor.\textsuperscript{iv}

Figure 1: Tintern Abbey on the Welsh/English Border as projected by Claude Glass and captured by webcam. Installation by C. S. Matheson and A. McKay.

These subjective and romantic scenes traditionally referred back to literary and artistic works for their meanings. The concept can be traced to the French painter Claude Lorraine (1602-1682) who influenced the work of the artist William Gilpin (1724-1804), the writer and landscape designer Uvedale Price (1747-1829), the scholar Richard Payne Knight (1750-1824) and the 18\textsuperscript{th} century landscape designer Humphry Repton (1752-
Since that time the concepts have been tied to romantic garden design and the values of tourism with the kinds of images seen in travel brochures, calendar photos, and postcards. This romantic pictorial tradition, halfway between the beautiful and the sublime is applied here to two former industrial sites that have been transformed into Gas Works and Northside Parks.

The term ‘industrial picturesque’ is defined by what Rick Darke has called “the contemplative power of controlled dereliction” as opposed to the pictorial implications of industry portrayed by, for example, the Italian futurists, the Russian constructivists, or the artistic industrial photography of Margaret Bourke White. These illustrations celebrated the expressive forms of the then contemporary industry in the early to mid 20th century. However, part of the power of the industrial picturesque comes from the same sublime awe at the scale and complexity of industrial constructions.

Just as most people think of places in terms of the physical reality, so technology is often understood as physical hardware. This view can discount both the social forces required to create the industrial artifacts of technology and the appropriation by society of the artifact as an element of regional identity. The sociologists Donald MacKenzie and Judith Wajcman explain that technology includes three principal qualities: “human knowledge, patterns of human activities, and sets of physical objects.” Knowledge is required to build the object, to operate it, and to determine its relation to natural resources. Patterns of human activities refer to regional practices for solving complex problems through, for example, professions and trades. The sets of objects that are the focus of the industrial picturesque are the things themselves and are useless without the local knowledge base and the local people that use them. This integration of object, site, and culture can bind artifacts of industry to a local population in a way that goes beyond the purely scenographic picturesque. However, over time, the objects will tend to become more purely aesthetic as the memories, both positive and negative, of their original use fades.

The questions moving forward are more about how the aesthetics of the reused sites are designed and the creative performative ecological solutions that mitigate their pollution, and less about the concept or validity of using the sites in the first place. There is a consensus among many landscape architects that the aesthetics, cultural value, and perceived authenticity of derelict industrial infrastructure make it suitable and desirable as a basis for new designed landscapes. The balance between preserving cultural features for their expressive potential, as exemplified by Gas Works Park, and using them in new ways for their creative potential, illustrated by Denver Northside Park, illustrates the value of critical regionalism for addressing the reuse of industrial artifacts and other regional precedents.

**Gas Works Park**

Gas Works Park is described in order to compare an industrial picturesque design that is not critical regionalism with one that is. Gas Works Park is the first and still one of the best known examples of the industrial picturesque in the United States. The highly influential and celebrated park is on the 20-acre site of a former power generating plant in Seattle, Washington. The Gas Works Park project, designed by Richard Haag, began in 1971 and was completed to its present form in 1988. It marks the beginning of the widespread understanding and acceptance of the industrial picturesque in the United States. The construction and popular success of Gas Works Park was an important indicator of the increasing importance of cultural rules and local history. The industrial history celebrated in the park slows down the transformation of the Seattle landscape to a pace more easily appropriated by the local population as opposed to the clean slate approach to the park design that was originally expected at the site and is most often still employed on degraded former industrial sites.
Haag chose to preserve several of the original components of the factory site, calling them “a memorial to Rube Goldberg engineering.” As possible uses for the most iconic elements of the park, the six large gas generating towers, Haag envisioned “… a walk-in cloud chamber, a camera obscura, planetarium, vertical museum, tactile chamber, exploratorium, vertical gymnasium, super-scale fountains, tree-mendous planting urns, games un-invented, and metaphysical demonstrations of hidden dimensions.” Any of these visions could have led to a critical regionalism design methodology as the site was creatively transformed. Unfortunately, none of the ideas have come to pass and today the rusting forms shown in figure 2 are surrounded by security fences and can only be appreciated as picturesque relics at a distance.

Meyer has written that “the monumental structures at Gas Works park, once the source of technological sublime rapture, now seem less consequential, more of a part of a cast of characters than sole performers within the park.” My experiences of the park are similar. With a few exceptions, the park reads as a well designed space with carefully framed views and a good sequence of movement in a sculptural setting of historic mechanical structures. The rusting artifacts have aesthetic power, but feel distant and inaccessible. Because the park never achieved the balance of new and historic uses that Haag envisioned, it is most iconic for its picturesque qualities and does not fulfill the promise of critical regionalism.

Northside Park: The Outsider’s Perspective

Northside Park is proposed as an example of a project that embraces both the aesthetics of the industrial picturesque and the elements of critical regionalism. Northside Park, completed in 1999, was designed by Bill Wenk, FASLA, and developed as part of the city of Denver’s initiative to build a series of parks along the South Platte River corridor. The park is an adaptive reuse of an abandoned sanitary sewer plant. Through the employment of the “design by subtraction,” method, elements of the derelict sewer plant structure were removed or modified to function within the park’s program. Grading and drainage were manipulated to alternately conceal and to reveal the massive treatment plant structure and to further define park spaces.
Figure 4 shows the treatment plant prior to construction. It is easy to imagine how the strong picturesque forms of the existing structure could have been the driving design determinants. Figure 5 shows how the design has transformed the treatment plant into an entirely new landscape with passive and active programmatic elements, environmentally future viable features, and expressive forms that echo its industrial past.

Visiting this park for the first time was a very intense aesthetic experience for me that cannot be duplicated photographically. The site is impossibly flat with a huge 360 degree horizon that encompasses both the Rocky Mountains and the city of Denver Skyline. The infrastructure remnants read as carefully constructed large scale sculptural objects brought into sharp focus by the intense sunlight present at Denver’s 5200 foot elevation. Wenk purposely removed any cultural artifacts that could have provided a sense of scale to these concrete structures such as fences, furniture, or lighting, thus provoking both the defamiliarization and subsequent critical thinking that are elements of critical regionalism. Notice in figures 7 and 8 that the scale of the sculptural forms is only revealed when a figure is seen directly adjacent to them.

Figure 9 shows how the edges of two new soccer fields on the site have been defined by making the rim of the old settling tanks into curved bench seating. This entirely new use is not immediately apparent to park visitors and will be experienced as a deeper level of understanding over time when they sit on the benches and after they read the interpretive signs that explain the history of the park.
A more predictable and less creative solution for reuse of settling tanks was designed at Landschaftspark Duisburg Nord in Germany. This world famous example of the industrial picturesque keeps the settling tanks intact as preserved expressive picturesque landscape elements. The contrast between Northside Park and Duisburg Nord clarifies the contrast between the ethos of looking backward and the ethos of looking forward with expressive echoes of the past. The result is a unique park experience that builds on the cultural and picturesque precedents of Gasworks Park by creating a personal creative interpretation at Northside Park of the industrial past.

Summary of elements of critical regionalism in Northside Park.

1. Elements of Critical Regionalism Found in Northside Park;
   a. *A critique of the perceived excesses of modernism, functionalism, and enlightenment rationality*; Northside Park is designed to evoke an aesthetic experience much more powerful than the programmatic or functional elements, such as soccer fields, would otherwise evoke.
   b. *A critique of the romantic/commercial approach to regionalism*; The Denver skyline and the Rocky Mountains are addressed as distant views but no attempt is made to transfer experience by reproducing familiar icons of the region.
   c. *An embrace of the postmodern emphasis on place, rather than space*; Both place and space are addressed. However, the experience of the place is actually enhanced by the open ended and ambiguous control of space that reinforces the severely planer landscape in Denver.

2. *A desire to create landscapes that balance a celebration of regional diversity with the benefits of universality*; the regional elements are enhanced with contemporary park development methodologies, safety issues (both ADA and CPTED)\textsuperscript{xiii}, and all the contemporary infrastructure that goes into a park design in the United States.
a. An embrace of regionally defining physical, environmental, social and cultural elements; The expressive industrial forms are creatively reused, the flat topography of the site is celebrated, and the regional context of the Rocky Mountains, other industrial users in the area, and the city of Denver are a strong part of the experience of the place.

b. A desire to make the landscape an object for intellectual contemplation as well as sensual pleasure; The sculptural forms are deliberately defamiliarized. The large scale and unique design of the forms provokes contemplation.

c. A distrust of grand design solutions and an embrace of incrementalism; The park is a unique project that stands on its own and not a lesser part of a much larger development.

d. A desire to create a bounded space where the excesses of endless megalopolitan development and a consumer driven culture are resisted. The unique creative expression of Northside Park makes it a highly imageable space with a strong district presence.

3. Elements not found of the problematic design aspects that critical regionalism is intended to address.
   a. Academicism
      i. The project is not a pure form driven endeavor that would be just as, or even more effective if it were placed in another context.

b. Eclecticism
   i. It is a unique response to site and program as well as the creativity of the designer and not a facile expression that “anything goes.”

c. Kitsch
   i. It is not a gimmicky, artificial regional expression designed for purely commercial reasons.

d. Historicism
   i. Northside Park is not a historical recreation without reference to modern technology, programming, and the hand of the designer that has the potential to move culture forward.

Conclusion

The industrial picturesque is an aesthetic that looks backward with expressions of nostalgia, history, memory, decay, melancholy, the passing of time, and the sublime. By using a critical regionalism methodology, Bill Wenk addresses industrial infrastructure more as an echo and less as the literal preservation, recreation or interpretation of history. James Corner (1999) has described an approach to landscape design that is a dialogue between a designer, the landscape, and those encountering it; with the explicit notion that all three are undergoing continuous change. This notion is in concert with the reconceptualization that is a hallmark of critical regionalism, combined here with the industrial picturesque.
Part 2: The Insider’s Perspective By William Wenk, FASLA, PLA

It is often the goal of designers to create memorable landscapes that are strongly connected to place. Despite that desire, pragmatic requirements for use, especially for public parks, suggest familiar forms and materials that are easily maintained and often result in landscapes that are predictable, often uninteresting, and typical of thousands of public parks across the country. With public parks, cost is almost always an issue and the taxpayer expects the most recreational value for their money. The above scenario is the special curse of parks that include athletic playing fields or that are highly programmed with other specific expectations for use. Clients often have a limited imagination as to the possibilities beyond what they’ve seen in hundreds of other municipal parks.

Use and function have always been one of the most, if not the most important form giver for public landscapes. Public parks, even in the most mundane settings, are an opportunity to broaden the possibilities for recreation and leisure in public landscapes. Fortunately, a great number of contemporary parks and public places, especially in urban settings, have been conceived of in ways that expand the potential for recreation and leisure. It is the designer’s special challenge, and opportunity, to bring their individual perspective and sensitivity to other criteria, such as place and region, that are useful for the design of public landscapes, including those that are derelict and damaged. Derelict and damaged landscapes seem to have more latitude for creativity, and expectations for change, which further encourage creative design exploration. Possible reasons include the negative economic value caused by cleanup requirements, their more open-ended functions due to the difficulty of seeing their use potential, and their lack of a constituency willing to take ownership of the site because the landscape is so damaged and derelict. In other words, these places can only get better.

Use and function are critical to the community taking ownership. The reduction of costs, the maximization of use and function, and the encouragement of the community to make use of, to value, and to become stewards of these places is an additional burden on a site and on the designer. The Northside Park site, before it was built as a park, had no constituency or neighborhood to support it.

Industrial relics are compelling places because of their monumental scale, and embedded history related to their past use. However, a decommissioned sewage plant has special challenges. To overcome the perceived stigma of its past, Northside Park must feel safe, be highly useful, and attract people who have a park as a destination, and who may come to love it for both its uses and its unique aesthetic qualities. It was our intent as designers to strike a balance between traditional recreational use, preservation of the site’s past as a monumental industrial artifact, and the creation of landscapes spaces that are comfortable and safe places to enjoy the special openness and solitude of the site. It should be a park that is flexible enough to adapt to new uses over time, and to evolve as a place of recreation that is integral with natural processes and resources associated with the adjacent river corridor, pond, and urban watershed outfall. There were three critical functional factors that drove the design:

- Full demolition of the plant would have been prohibitively expensive,
- there was a need to provide at least two soccer fields as recreation for a nearby neighborhood, and
- habitat restoration and expansion of open space were important goals as part of the enhancements to the Platte River Greenway.

An important component of then-Mayor Wellington Webb's initiatives along the Platte River was to encourage redevelopment as part of the river’s revitalization. Industrial development around Northside Park—with the park as a catalyst for redevelopment—was a highly desired outcome of multiple initiatives. The intent was to expand parks and trails along the river that would in turn, promote redevelopment. To further gain support for his initiatives, the mayor solicited input from residents of nearby neighborhoods, over one half mile away and across a busy highway, who expressed a desire for more athletic fields.

Most active industrial uses have moved elsewhere. In addition to large areas of vacant land, adjacent uses include an active slaughterhouse that could be a discouragement to traditional park and recreation uses. Because of
the area's isolation, the homeless populate the River's edge, and very few people choose to stop in this area to relax and enjoy the area's special qualities. In spite of these drawbacks, the site has tremendous views of downtown Denver and the mountain panorama to the west. The park is immediately adjacent to the Platte River, and to a regional storm water detention pond to the north which, although polluted with heavy metals, serves as a significant wildlife habitat resource along the Platte River. It is a place apart. The city’s activities seem to be at a distance, even though they are close by. Even in its previous derelict condition, it had a certain beauty and solitude that was special. Graffiti artists created beautiful murals because of the sites remoteness, and its open-ended qualities.

In many ways, the site embodied the special qualities of Denver's high plains environment. While on the site you could get a sense of the vastness of the high plains, and their lack of human scale. The sky dominates, and you can see the horizon. You could experience the sublime qualities and clarity of light of the high plains, and get a sense of the contrast between the vastness of the plains, and the humanly scaled elements that existed within the monumental wreckage of the abandoned plant. It was exhilarating to explore the wreckage, which was at once frightening, exciting, and brought a sense of adventure that is hard to find in ‘safer’ urban environments. Nature was creeping into the treatment plant's edges, heightening its sense of mystery, and the passing of time.

In many ways, the mixed emotions that the site elicits are probably similar to those experienced by Michael Heizer or Robert Smithson when Western landscapes inspired them to build their iconic and monumental art in remote regions of the West that has been so influential on the work of our profession. These artists, and others, have inspired the design of Northside Park. Just as these artists responded to the Western landscape, the sheer scale and presence of the sewage plant and its remote setting demanded a robust response that adapted the structure to a new use, without destroying its essential qualities.

Significant aspects of the park design were influenced by its location adjacent to the South Platte River, and the continuing evolution and development of the Platte River Greenway. The Platte River Greenway has evolved, over the past 40 years from a regional trail of limited reach threaded through industrial lands, to a regional network of trails, parks, and revitalized and redeveloped commercial and residential neighborhoods. An important goal of the Greenway has been to expand the public lands along the river. Industrial development had constrained the River to the channelized cross-section with little or no public access. The ownership of lands beyond the immediate limits of the abandoned sewage plant, the adjacent regional detention pond, and emerging interest in improving nonpoint source water quality of urban runoff prompted early design decisions. Rough sketches demonstrated how removing a concrete channel that routed an adjacent urban watershed through the park could create an asset by replacing it with a natural corridor that links the park more strongly to the adjacent regional detention pond, and to the River. The concept was immediately accepted, and the boundaries of the Park expanded because of the strategies’ multi functional/multi-benefit value.

The Northside sewage treatment plant languished as an abandoned piece of infrastructure because of the high cost of its demolition. It was only with Mayor Webb's initiative, and the desire to improve the image of the area and expand the Greenway, that the creation of a park was considered. Cost was a driving factor. Part of the high cost of demolition was removal of materials from the site, in part due to the robust construction of much of the structure. Part of the initial site investigation was an analysis of various structures on the site, some of which were relatively easily demolished such as existing administrative and processing buildings. Other parts of the complex, primarily the vast network of tanks, conduits, and basins that were used to treat the sewage, were structures that were primarily of cast in place concrete and built for extreme structural loading. This permitted partial demolition and modification because of their stout construction which also made them extremely difficult and costly to demolish and remove completely.

To reduce cost, the goal was to minimize demolition of cast in place elements when possible, except where needed for the construction of a minimum of two soccer fields. Most or all construction materials were to be recycled on-site, except for steel, which would be sold for salvage. A strategy of burying demolition rubble by
concealing portions of the plant, as well as demolishing and exposing other portions of the plant to convey and treat stormwater became one of the primary strategies for site design. Initial design concepts explored the feasibility of park users climbing to the top of the structures that would remain. However, handicapped accessibility and the need for railings and other protective elements removed that as an option. The alternative, to strip all sense of human scale from the structures, ended up being the preferred option because of cost and risk. There was a great deal of discussion about the potential for visitors to climb on the structures. Many forms were derived from the need to isolate the structures in order to make them less accessible for climbing. Safety was also a consideration as part of concealing and revealing. Holes were cut in large monolithic walls, in areas that were not slated to be wetlands or more natural, in order to limit the potential for hiding places. A number of structures uncovered during demolition were left intact because they had visual interest, and didn't interfere with stormwater or the recreational functions. In other areas, only portions of structures were demolished which created sculptural elements that add to the diversity and visual interest. Groves of trees were planted to define a human scale, and to encourage informal park uses such as picnicking, and relaxing. During demolition and grading, walls that were in areas that could be used for picnicking, observing soccer games, or taking in the views were left at seat height to encourage informal gatherings. In gathering areas, cuts through walls to improve safety were made at seat wall height.

Most forms in the park were conceived of as an extension of the geometry of the plant structure. Severe geometry, taut surfaces and ground planes predominate. Landforms were often modified following demolition to take advantage of specific elevations and forms that emerged following demolition of adjacent elements. Turf is used extensively to emphasize the sculptural quality of the concrete forms, and to lend a sense of familiarity to the park. The natural area created by diversion of stormwater through the park is confined within the strong geometry of fragmented structures and geometric landforms that further integrate remnant artifacts and the park landscape.

An original design intent called for natural areas to be developed as part of stormwater conveyance and to evolve as part of a complex wetland and riparian landscape that limits access to certain areas of the park. This would prevent graffiti on large wall surfaces, and create a natural landscape with inherent and attractive qualities making for a richer park experience for those visiting the park to view wildlife on the adjacent pond. These natural areas were buffered from areas that were intended for more traditional park uses, in order to promote safety.

Conclusion

A few years ago, my wife and I were bicycling along the Platte River trail, and stopped at Northside Park. Another cyclist came up to us and asked, in a frustrated tone of voice; "What is this place? Is it some sort of memorial?!!" We told the cyclist it was a sewage treatment plant, transformed into a park. There are now interpretive panels—heavily vandalized—that describe the history of the park. Northside Park is a place that draws you in, and demands a response. It makes you observe and form an opinion about the place. The park contributes greatly to the improvement of water quality from the urban watershed that passes through it, has become an important destination for observing wildlife, and has greatly expanded the habitat values of the River corridor. The park’s unique qualities have been honored by a national ASLA design award. A visit to the park is a memorable experience, but it often doesn't feel safe to linger there. The qualities that make it a special place, it's lack of scale, layers of history and use, and integration of natural and urban forms and processes aren't enough to overcome its isolation. Although the graffiti of rival gangs suggests that it's contested ground, and a place to avoid, the dramatic transformation of the industrial corridor that the park is located within suggests things might change. A series of mixed-use neighborhoods are rapidly transforming the area. They are an eclectic mix of ongoing industrial uses, artist studios and design oriented businesses and startups related to the digital economy that is extending from central Denver along the River and will soon reach the area of the park. Plans are in progress immediately across the river from the park for a dramatic transformation of the Denver Stock Show complex that will expand its use from a single use annual event
to include an agricultural research campus. It is a district that has embraced its industrial past as a way to establish its new urban identity. Northside Park fits perfectly within this new model for urban transformation. It can be a catalyst for development and a place that is loved and respected by the neighborhoods that may soon be at its edges.

Speaker Bios

Bill Wenk, FASLA, PLA, is founder and President of Wenk Associates, Inc., a Denver-based landscape architectural firm. For over 30 years, he has been influential in the restoration and redevelopment of urban river and stream corridors, the transformation of derelict urban land, and the design of public parks and open spaces. He and members of his firm were responsible for the design of Northside Park.

David Hopman, ASLA, PLA has energetically pursued a faculty role bridging practice and research since accepting the position as a professor in the Graduate Program in Landscape Architecture at The University of Texas at Arlington in 2004. The courses he teaches reflect his research interests in plant materials and ecology, ecologically performative landscapes, landscape aesthetics and critical regionalism, and computer visualization.

Objectives

1. Learn two contrasting approaches to the adaptive reuse of industrial infrastructure: Industrial Picturesque and Critical Regionalism
2. Learn how “design by subtraction” was used to reduce construction costs, preserve a sense of place, and create a new unique creative vision for the site at Northside Park in Denver, Colorado.
3. Learn how Stormwater treatment and stream restoration were used as formal and environmental elements.
4. Learn how the park was used as an armature for large-scale redevelopment of the surrounding district.

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8ii Campbell, Craig. “Seattle’s Gas Plant Park”. Landscape Architecture. (July 1973) 338-342
8iii Ibid, 342
8iv Ibid, 342
10 Wenk, Bill. 2006. Unpublished interview with Bill Wenk, FASLA
11 Americans with Disabilities Act and Crime Prevention Through Environmental Design