



THE PERSISTENCE OF TIME

Vernacular Preservation of the Postindustrial Landscape

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Figure 1. Calumet & Hecla industrial core, circa 1910, Calumet, Mich. (Michigan Tech Archives)

Formal historic preservation is a professional and sanctioned approach to the conservation of our historically significant built cultural heritage. Postindustrial landscapes are, by definition, functionally and materially obsolete, and in many cases derelict and decaying. While they hold historical significance, these sites are often not widely perceived as valuable contributors to our heritage. Yet these landscapes persist. We argue that the material persistence of these features is the result of generally unrecognized processes of informal material conservation.

In this paper, we outline a new framework, *vernacular preservation*, an ontology for heritage professionals to use in considering how to approach and recognize nonformal interventions that result in the protection of heritage resources. Here, we use the postindustrial landscape of Michigan's Keweenaw Peninsula—a former copper-mining district—to illustrate how vernacular preservation differs from formal historic preservation, reviewing the process of vernacular preservation and how it is activated in practice.

Vernacular preservation constitutes perhaps the most traditional, common, and widespread mechanism of material conservation of the historical built environment yet has been largely invisible, little discussed, and undertheorized by the heritage preservation community. Understanding this preservation process begins by acknowledging its existence and by extending the heritage dialogue to include these underrepresented historical properties and their important role in defining postindustrial landscapes. We conclude the paper with a discussion on how this novel approach to thinking about preservation extends broadly to the field and should be given greater attention.

Contemporary historic preservation practice in the United States follows a rigorous and bureaucratic approach to the protection of select historic resources and is ultimately reliant on the expertise of architects, historians, planners, and others. This preservation methodology, conducted by professionals working within strict regulatory parameters, ensures high minimum standards for the conservation of the built cultural heritage. This process and act of conservation is known commonly as “historic preservation.” Here, we refer to historic preservation as *formal historic preservation* to emphasize its basis in a formal protocol, guided by policy and legislation. In this paper, we outline an alternative mechanism that similarly results in the material conservation of the historical built environment, *vernacular preservation*.

Vernacular preservation is a pragmatically driven, locally responsive, and informal process that, despite its nonexpert and unofficial nature, contributes consequentially to the legibility and meaning of the historic landscapes. It is important to note here that it is the *process* of preservation that is vernacular, rather than the subjects, that is, vernacularly preserved buildings, structures, and sites are properties that have been repurposed in a manner that is inconsistent with their original, specific functions and that is often wholly

incompatible with the Secretary of the Interior's Standards for Rehabilitation. By formal standards, these properties have been rendered ineligible for historic preservation designation and are often overlooked or even dismissed by preservation professionals. This oversight is a missed opportunity for preservationists; we aim to begin the conversation in this paper.

Few buildings, structures, and sites (herein referred to as "sites") from our past are significant in and of themselves. Furthermore, both normal maintenance and dereliction obscure whatever significance they may have once held. There are also many historical properties that persist without the benefit of formal conservation and official heritage designation. Often, these properties do not readily conform to the established criteria of heritage significance and integrity.

In this paper, we outline a new framework for heritage professionals to use in considering unofficial interventions that result in the protection of heritage resources. To illustrate how vernacular preservation differs from formal historic preservation, we examine current and past practices in the postindustrial landscape of Michigan's Keweenaw Peninsula—a former copper-mining district. We conclude the paper with a discussion on how this novel approach to thinking about preservation extends broadly to the field and should be given greater attention.

The Particular Case of Postindustrial Landscapes

Postindustrial landscapes, or those historical landscapes shaped and evolved by the workings of now-absent industry, are notably underrepresented as subjects of formal historic preservation—yet many historical industrial sites persevere. In this paper, we argue that the persistence of these features results from generally unrecognized processes of informal conservation, which we have termed "vernacular preservation." This unofficial but highly effective approach to preservation, despite its nonexpert and unofficial nature, contributes significantly to the conservation of a breadth of cultural landscapes that change over time. This process is particularly well represented in postindustrial landscapes, as will be demonstrated here with examples from the once-vital landscape of extraction found in Michigan's "Copper Country," the Keweenaw Peninsula.

While commonplace in the postindustrial landscape, these apparently inconsequential and often heavily modified historical properties have received comparatively little attention from preservation professionals. Acknowledgement of these places, when it does occur, often regards their state as a temporary condition that precedes either abandonment and eventual ruin or resurrection through formal historic preservation. Here, we propose that many sites in the postindustrial landscape persist in a quasi-stable state perpetuated through pragmatic, locally responsive, and informal reuse; that is, through vernacular preservation.

The pressures facing rural postindustrial sites are different than those in the more familiar urban postindustrial sites such as Detroit or Pittsburgh. Those caring for the industrial heritage sites of North American postindustrial cities regularly face population

pressure-induced challenges such as redevelopment, gentrification, and “not-in-my-backyard” responses to the size, appearance, and legacy toxins that are commonplace in former industrial sites.¹ In contrast, many rural postindustrial sites, our case study included, have experienced only a decline in population since peak industrial activity. With abundant land and no significant population or development pressure, many industrial vestiges remain.

There are several interrelated attributes of historical industrial sites that make them particularly strong candidates for vernacular preservation and, as such, that serve as an excellent case study. There are obvious physical qualities that facilitate a variety of reuse activities: industrial buildings, for example, are often capacious, exceptionally robust, and spatially flexible, as demonstrated by the familiar repurposing of historical brick warehouses to serve as offices, loft apartments, or shops. In addition to these physical attributes, however, industrial landscapes—in particular extractive landscapes—are fundamentally unlike nonindustrial landscapes. In many cases, remnants that appear to be individual features (viewed in the context of the contemporary postindustrial state) are actually interdependent components of once-vital industrial systems so vast that their historical connections are obscured by time.

Two key insights follow this understanding. First, any isolable part of an industrial system is unlikely to be individually significant and, second, virtually all sites comprising the postindustrial landscape experienced—even over their productive lifetimes—continual material, if not functional, evolution. That is to say, many, if not most, of these properties are without significance or integrity and simply do not qualify for formal historic preservation. Pragmatically speaking, this is just as well; there is no feasible way to formally protect an entire postindustrial landscape—there are simply too many parts, spread over too great an area of land, often under separate ownerships or even jurisdictions without sufficient resources for formal historic preservation. It is not necessarily meaningful to privilege one iteration of an industrial landscape over others, even those that occurred after the original function of the site was lost or had ended. The heritagization of the postindustrial landscape is ultimately reliant on a network of complex systems and cannot be understood on the basis of any one, or even any few, individual components.

Formal Historical Preservation

Professional historic preservation activities follow highly structured and regulated procedures. Architects, historians, craftspersons, preservationists, and other professionals operate under federal, state, and local legislation and are guided by a coherent body of standards that collectively trace their lineage to the National Historic Preservation Act of 1966. *Historic Preservation*, in common usage, refers to a suite of official and prescribed policies and practices designed to protect and prolong the life of heritage sites. To differentiate these sanctioned preservation efforts from other mechanisms that also result in the physical conservation of the built world, we consider the activities of professional preservationists as comprising *formal historic preservation*.

Implementation and Application

The institutional origins of contemporary historic preservation in the United States can be traced to popular reaction against the widespread destruction of historic sites that accompanied mid-twentieth-century urban renewal and the construction of the Interstate Highway System.² The National Historic Preservation Act of 1966 (NHPA) established a suite of regulations primarily intended to slow the dramatic and alarmingly rapid loss of historic sites at the hand of these developmental threats. Formal historic preservation has evolved significantly since then, and today the field is able to draw on a robust body of procedure operating at multiple levels of government.³ The heart of this body is the National Register of Historic Places (NRHP), assembled and administered by the National Park Service (NPS) in accordance with the NHPA. Historic preservation, as defined by the act, is concerned with the “identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, research, interpretation, and conservation” of historic properties;⁴ “historic properties” as defined in this legislation are limited to those resources eligible for or listed on the National Register of Historic Places.⁵

Listing on the NRHP is a complex, closely controlled, and official process, wherein eligibility is conclusively determined by a professional assessment of the *significance* and *integrity* of an historic resource as evaluated in accordance with established criteria. The preparation of a nomination to the National Register demands substantial sustained effort and, while not technically required, benefits from experienced or professional guidance to construct a thorough historical narrative and to convincingly demonstrate the significance and integrity of a proposed historic property. A submission is reviewed at the state level and, if approved, is forwarded to federal review for consideration. If accepted by the Keeper of the National Register of Historic Places, the property is inscribed on the Register Listing,⁶ or (since 1972) the determination of eligibility for listing is the crucial step for a property’s formal historic preservation, as official designation opens the doors to legal and financial obligations and opportunities.⁷

Once listed, a historic property may be subject to one of four approved treatments as detailed in the Secretary of the Interior’s Standards for the Treatment of Historic Properties: preservation, rehabilitation, restoration, or reconstruction. While these standards are advisory for preservation, restoration, and reconstruction work, they are regulatory for rehabilitation, the treatment that is most closely aligned with vernacular preservation. Rehabilitation is the process of “making necessary changes while retaining the characteristics that make the place important” and is considered to be the most influential of the four treatments, given the availability of tax credits for a successful, approved project.⁸

The standards for rehabilitation are regulatory and subject to enforcement, a process that is necessarily subjective, at least to some degree: the application of any set of uniform rules, such as the standards, requires the expertise and judgment of experienced practitioners. Generally speaking, preservation of existing features, especially those that have significance to adjacent historic sites and are visible to the public, are prioritized.⁹ Rehabilitation work also requires a thorough and nuanced understanding of other treatments,

notably preservation and restoration. While the specifics must always be evaluated on a case-by-case basis, retention of historic fabric is a hallmark of formal historic preservation.¹⁰

The Challenges of Applying Formal Historic Preservation Principles to the Postindustrial Landscape

The rules, regulations, and recommendations that guide formal historic preservation work are not static. The kinds of sites eligible for formal recognition as having historic and interpretive value for the present have increased dramatically in the past half century.¹¹ However, despite the accommodating nature of the perennially evolving field, it is important to emphasize that preservation professionals remain beholden to definitions and statutes—even as they change over time.

Recall that a *historic property* as defined in the NHPA must be a historic resource (district, site, building, structure, or object) included on, or eligible for inclusion on, the National Register of Historic Places.¹² This statutory definition means that if a resource is deemed ineligible for listing in the National Register, it is not technically a historic property and therefore not, strictly speaking, subject to the purview of the professional preservationist.¹³ This means that there is a vast swath of the historical built environment that is largely overlooked by preservationists in their professional practice, even though these buildings may be valuable in other ways.

In spite of the expansion of historic preservation's scope, industrial heritage remains insufficiently considered in official preservation thinking.¹⁴ This concern was recently highlighted by the 2016 *U.S. World Heritage Gap Study Report*, which states that “sites of invention, industrial heritage, and technological evolution are . . . very under-represented on the U.S. World Heritage List.”¹⁵ This lack of official endorsement is certainly not due to a shortage of potential sites, but rather to the challenges in making them formally recognized under current standards. And while numerous professional associations (including the Vernacular Architecture Forum, the Society for Industrial Archaeology, and the Alliance for Historic Landscape Preservation) have for decades focused on establishing best practices for the preservation, interpretation, and policy protection for a variety of sites such as those discussed here, there remain significant challenges to their long-term formal protection.

As opposed to house museums, for example, landscapes are composed of features that are constantly changing, making the very means of their preservation more difficult than the more traditional, fixed, preservation modes that may be imposed on any individual building or structure.¹⁶ Compounding the challenge, “culturally significant landscapes . . . don't fit very readily into the well-understood taxonomy of 'building, site, district, structure, and object' used by the National Register.”¹⁷

The vernacular nature of these landscapes only compounds the challenge of constructing compelling arguments for their preservation within the current preservation system; because they often encompass the histories of numerous owners and users over time, and may represent the values of diverse cultural groups, vernacular landscapes are especially difficult to address within established historic preservation guidelines.¹⁸ Of the

many obstacles facing postindustrial landscape preservation, one of the greatest is neither mechanical nor procedural, but *perceptual*. Postindustrial landscapes imply a functional obsolescence and, in many cases, are derelict and decaying. Despite their past significance, these sites are often not widely perceived as valuable contributors to our heritage. There is a sense that the postindustrial landscape is, as Anna Storm describes, often too ruined, modified, or complex to be easily recognized from a heritage perspective.¹⁹

Postindustrial landscapes are among the most illustrative examples of cultural landscapes, as—due to the very nature of industrial activities—the resultant topographies can simultaneously exhibit multiple layers of time with particular clarity, and each presents a place-specific intersection of nature and culture.²⁰ An additional element of industrial sites that has only recently begun to be considered as an integral component of their heritage value is the waste material produced during their operation. Historian Fredric Quivik argues convincingly that “wastes from the mining industry are more than just visual, physical, or chemical presences on the landscape; they embody powerful and important cultural meanings as well.”²¹ Although concerns for human and environmental health and safety are paramount, approaches to remediation often neglect the historic and interpretive value of industrial sites.²² The acknowledgement of the heritage value of waste only underscores the importance of preserving and interpreting historic industrial sites holistically; for any given postindustrial landscape to communicate its history meaningfully, preservation efforts should not be limited to its most important or iconic buildings or factories, but must extend to include a diversity of elements, including perhaps its waste. That is, components of the industrial past can communicate their heritage value in the present with the greatest resonance when they are preserved and interpreted as constituents of a greater landscape.²³ Vernacular preservation is itself a function of the evolving cultural landscape and is a process that contributes meaningfully to deeper understandings of heritage.

Vernacular Preservation

Although postindustrial sites seldom qualify for official recognition, many of them persist as active components of the living postindustrial landscape. This nonprofessional or *vernacular preservation*, as we outline here, is the result of informal conservation, driven by pragmatic local needs and activated by practical attributes of postindustrial resources—in particular, those that leverage their latent value toward reuse, rather than neglect or abandonment.

Vernacular Preservation, Neglect, and Abandonment

The National Register of Historic Places lists more than ninety thousand properties, a figure that includes around 1.4 million individual resources (including sites, districts, buildings, structures, and objects), found in virtually every county in the United States.²⁴ While impressive, this inventory includes only a tiny fraction of the historical resources woven into the fabric of the national cultural landscape. Postindustrial sites of historical significance that are not included are usually regarded as inhabiting an unstable state of

being—that is, their status is a temporary condition that necessarily precedes the more widely acknowledged states of ruin or resurrection.²⁵ However, if this were true, the historical built environment would be comprised solely of the products of official conservation and ruins—or resources en route to one or the other. Clearly, this is not the case, as we conduct our lives surrounded by the material residues of our past, and few could be uncomfortably worked into one of these classes. This state must, therefore, be less transitory than suggested, stabilized by forces that have not been adequately addressed by heritage professionals. The missing agent, we argue, is the pragmatic, local, informal—in other words, *vernacular*—preservation of historical sites. The gap in existing preservation thinking filled by this factor is bracketed by a number of established concepts that are related to, yet distinct from, vernacular preservation: *ruin*, *abandonment*, and *preservation by neglect* are all familiar, if peripheral, terms used to describe the state of extant heritage resources that have not been the subjects of formal historic preservation efforts.

Abandoned resources require little by way of description. Without care or maintenance of any sort, a property is subject to the natural processes of weathering and decay. In the common sense of the term, particularly when applied to buildings, the state of abandonment represents the antithesis of preservation; the process is neither active nor intentional and ultimately may result in total loss. The National Register has long maintained that “the present use of a building does not affect its eligibility for listing.” This claim does not, however, extend to cases of disuse (such as vacancy or abandonment), as structural deterioration may compromise eligibility, as outlined in the statement that a “building [may be] beyond the point of rehabilitation and therefore beyond the point of making a lasting contribution to the community, State or Nation.”²⁶ Examples of such ruinous sites that nonetheless have received designation include Bodie State Historic Park, comprised of the preserved ruins of a nineteenth-century gold-mining camp in California that is maintained in a state of “arrested decay,” or the remains of a fourteenth-century Hohokam compound in Arizona today known as Casa Grande Ruins National Monument. This strangely divergent perspective, in which a ruinous state can either disqualify a site on the basis of insufficient integrity or serve as the basis for interest in the site, is limited to the evaluation of *buildings*, however, and is directly contradicted by the allowances afforded to *sites*: “a site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.”²⁷ While it is clearly important to carefully select the appropriate category when writing a nomination, the crucial point here is that the NRHP is not categorically opposed to listing abandoned and ruined buildings, if strong justifications can be made for their historic significance and integrity.²⁸ Despite being bypassed by the demands of the Secretary of the Interior’s Standards for the Treatment of Historic Properties, both ruins and abandoned buildings can have a presence and standing within the purview of professional preservation.

Defined by exclusion more than by any real commonality, those places described as the unwitting beneficiaries of “preservation by neglect” make a mixed bag; the phrase itself

is not a legal or academic term, and its definition is more inductive than deductive. There are but a handful of published papers that employ the term in any capacity, all of which merely reference the phrase in passing; further, none of these papers define the expression, suggesting that it has sufficient common currency to obviate the need. This possibility is supported by the term's ubiquity in Weblogs and online newspaper articles, with a simple Google search returning hundreds of unique hits. One blogger describes a "large square old farmhouse that has not been updated" as benefiting from "preservation by neglect," while another writes, "because there's no reason to tear down a building if there's nothing to replace it, Buffalo has benefited from 'preservation by neglect.'"²⁹ One author acknowledges the need for such a term in his description of the historic mansions of Cuba, explaining that "they're not being torn down, though a lot are dilapidated and falling down. . . . I call it preservation by neglect."³⁰ Finally, an architectural historian provides a definition on her blog: "'preservation by neglect,' is a term used to describe the way an old building is preserved by disrepair, thus [conserving] the building's original or historic features."³¹ What these brief and representative quotations make clear is that while it is a term that is used casually, it is also used consistently and meaningfully, including by historians and preservationists. This idea, that historical sites may be preserved passively, by default, simply by virtue of being unmolested over time, is an important argument for this paper. However, unlike these passive and unplanned preservation accidents, vernacular preservation is *not* "preservation by neglect": it is an active and engaged undertaking that results, almost unavoidably, in the material conservation of the industrial heritage.

The Stabilizing Forces of Vernacular Preservation

Historical resources that are the beneficiaries of vernacular preservation are typified by a lack of perceived heritage value. They persist through time as a result of their continued usefulness rather than efforts designed to preserve their historical meaning. Vernacular preservation does not meet the high bar set by the Secretary of the Interior's Standards for an approved rehabilitation treatment; rather, the sites are beneficiaries of a kind of practical preservation, and their persistence is a function of their continued utility.

The term *vernacular preservation* bridges a conceptual void and provides an explanation for the kind of temporal endurance of heritage resources that have traditionally been considered to be typologically unstable—on the edge of ruin or resurrection. In his essay on the pragmatics of historic preservation, Richard Francaviglia employs the term *active preservation* to describe those heritage resources conserved through the familiar processes of formal historic preservation and introduces the term *passive preservation* to denote the state of remote, economically stagnant historic landscapes that have been overlooked by progress.³² Francaviglia recognizes the preservation validity of simple persistence over time (akin to "preservation by neglect"), but writes that passively preserved landscapes exist in a sort of limbo, ultimately subject to one of two fates: either disappearing if the economy worsens or being "transformed by progress" if the economy improves.³³ Both of these trajectories, it seems, draw a landscape toward one extreme or another: either toward oblivion, by demolition or the natural processes of unmediated decay, or toward

preservation by rehabilitation. Francaviglia notes, “only if sentiment or economic incentives are strong enough will they be actively preserved.”³⁴ This suggestion that all paths forward for passively preserved landscapes result in loss—through acute neglect, demolition, or metamorphosis—does not examine closely the stabilizing forces of ongoing use. That is to say, while they exist, historical resources are maintained by *something*. Most of the historical built world dwells in this unexplored gap, filled, we argue, by vernacular preservation.

Neatly intersecting with Francaviglia’s passively preserved landscapes (and by extension those that have been “preserved by neglect”) are those categorized by Anna Storm as *ruined*, a term she uses to describe abandoned and decaying industrial sites in remote or rural areas that are not subjected to pressures of development.³⁵ In the same work, Storm introduces the term *reused* to describe the rehabilitation of redundant industrial sites.³⁶ These reused sites correlate to Francaviglia’s actively preserved sites and are what we describe as the subjects of formal historic preservation. There is, however, a distinction to be made. Rather than suggesting that passively preserved landscapes exist in an unstable limbo, Storm proposes a third class of postindustrial landscape, the *undefined*, to describe “places and processes that are not acknowledged as important from a memory or heritage perspective . . . [and that are] left outside the arena of contemporary heritage recognition.” She notes that these sites “are marked by a lack of identity and an integral potential to gravitate toward one or both of the other two categories.” That is, they are in neither a reused nor a ruined state.³⁷

Still, neither of these taxonomies has a place for vernacular preservation. While Francaviglia’s passive preservation acknowledges that the absence of attention may allow a building to persist over time in its (more or less) original form, it stops short of incorporating a discussion of factors that may perpetuate this state, instead characterized solely as a transitory state. Conversely, Francaviglia’s concept of active preservation is limited to the processes of incentivized conversion, discounting wholesale those historical sites that have been informally altered to serve new purposes. If active preservation is predicated on financial or sentimental value and leads to a stable state, while passive preservation describes an uncertain and temporary state that precedes only ruin or rebirth, then persistent resources that fit neither class soon simply fall out of the conversation altogether.

Similarly, Storm’s reused buildings are often gentrified by their new uses and new tenants, and their industrial heritage reduced to aesthetics.³⁸ Almost unavoidably, Storm’s perspective favors professional efforts and requires a significant amount of capital investment—again excluding vernacular preservation from the conversation. Further, despite introducing the previously invisible category that she refers to as *undefined* to the ongoing heritage discourse, and noting its ambivalent destinies, Storm does not grant this category a stable status; these undefined sites, she writes, evolve either toward formal reuse or to ruins.³⁹ Again, there is no place here for the ongoing informal use of the postindustrial landscape. Simple abandonment only partially accounts for the persistence of the past in the present. To understand the overwhelming majority of what remains, it

is important to examine the role of additional, unexplored forces at work stabilizing these landscapes, and their product: vernacular preservation.

Case Study: Vernacular Preservation in a Landscape of Extraction

Michigan's Copper Country was historically a vibrant industrial landscape comprised of interconnected sites; today, its postindustrial shadow offers evidence of those extensive networks only as isolated nodes and broken paths, apparently devoid of significance and lacking integrity. The remaining scattered remnants are, however, significant elements of an otherwise largely vanished historical landscape. Many of the redundant industrial buildings, structures, and paths are often modified to accept new uses. The physical changes affecting many historical industrial remnants are a testament to the value these buildings and sites have as active elements of the living postindustrial landscape. Here, we present three case studies of sites located in the postindustrial landscape of Michigan's Copper Country to illustrate the process of vernacular preservation.

Historical Context

The Keweenaw Peninsula's 1992 designation as a National Historical Park recognized the site's natural and cultural significance and its role in American industrial history. Early explorations of the area by Euro-Americans found evidence of what proved to be the largest deposit of unalloyed, native copper in the world. Industrialized copper mining began in the 1840s as thousands arrived to seek their fortunes. Unlike gold, however, copper can only be a profitable enterprise when mined at a large scale—a risky, and costly, undertaking virtually requiring corporate investment and oversight. Soon, rail and waterways were constructed to connect the mines, mills, smelters, and towns; this infrastructure wove an intricate network of interconnected people and places, leading the area to become the epicenter of Michigan's Copper Country (fig. 1).

Over the next century, the copper industries were required to continually shift in response to changing market conditions, profitability, and labor disputes. Companies built new neighborhoods when more workers were needed, added amenities when workers grew restless, and constructed expressions of corporate pride when times were especially prosperous. While copper operations in the Keweenaw ultimately ceased in the late 1960s, the landscape continued to evolve. The successive pulses of growth are evident in the landscape, and this complex imprint continues to assert its influence today, thanks largely to the effects of vernacular preservation—and to the factors that lead to it.

Critical Variables for Vernacular Preservation

Buildings that benefit from vernacular preservation are largely characterized by their continued usefulness in the postindustrial landscape. We conducted archival research and interviews with property owners in the Keewenaw Peninsula to understand the factors that contributed to the persistence and continued usefulness of various buildings. We discovered continuous usefulness is contingent on three key characteristics or variables: *situation*, *space*, and *construction*.

Situation is more complex than the location of a building and includes the important connections, both historical and contemporary, to other places and the relationships between them. These connections dictate to a large degree the flow of ideas, materials, people, and products between places. Given the diversity of uses that redundant industrial buildings are put to, there can be no single situation that serves all equally well. While a property's situation is often considered to be the primary determinant of its desirability, this can only be meaningfully evaluated in the context of the building's potential use. Different functions have different ideal situations that, importantly, change over time: many once-central industrial buildings now are remotely situated in today's postindustrial landscape. For others, postindustrial urban development such as highways, suburban sprawl, and energy infrastructure may place the building in a prime situation to increase its likelihood of vernacular preservation.

Space, or more broadly, a building's spatial attributes including footprint, useable area, and enclosed volume, largely circumscribe the possibilities for its use and reuse. As with *situation*, different uses require different spaces but generally speaking, a building must be large enough to accommodate its intended functions, while small enough to afford manageable operation and upkeep. Industrial buildings in particular possess a positive spatial quality that encourages vernacular preservation, as technological shifts in extraction and production drove the design of spaces that were flexible in form and function. This spatial adaptability is associated with expansive, uninterrupted volumes, as well as the large building envelope penetrations required by industrial processes to admit light, machinery, or materials.

The remaining critical variable identified here is that of a building's *construction*. For most contemporary uses, a building's construction is not a priority, as long as the enclosed space can be adequately controlled to meet programmatic requirements, such as providing adequate light and air, thermal comfort, and energy efficiency. The owners and users of most new buildings care only that these needs are met, while the underlying (and often invisible) building construction is not a consideration. For a postindustrial building to provide the utility that endears it to the processes of vernacular preservation, however, the original fabric of the building itself may be a crucial variable; the evolving uses of a building may highly value or even rely on the retention of the building's construction.

The Powerhouse

In 2001, Michigan Technological University partnered with the cities of Houghton and Hancock to create the Michigan Tech Enterprise SmartZone, a collaborative business incubator designed to foster the commercialization of emerging technologies. One of the first tasks was to find an appropriate workspace that would attract and retain identity-conscious tenants who demand an excellent *situation*. The optimal site would command a prominent location, provide impressive views of its surroundings, and be within walking distance of the university district and urban amenities. This ideal was met by a former electrical powerhouse, a beautiful sandstone building just a mile from campus overlooking



Figure 2. The Powerhouse, Houghton, Mich. (Photo by John Arnold)

the downtown core and offering splendid views to (and highly visible from) the iconic bridge connecting the region's primary population centers (fig. 2).

Erected in 1890, the coal-fired electric power plant was enlarged several times over the decades to meet the needs of a growing local population before it was ultimately taken offline and vacated in the early 1960s. Around that time, a number of related buildings and rail sidings on the site were removed. Today the SmartZone Powerhouse Building is the sole remnant of what had been a far larger complex. Spared the destruction that befell its less-useful neighbors, the large masonry building was eventually purchased and stabilized by a local contractor, who conducted extensive exterior renovations before making it available for purchase in 2003.

While the building's *situation* may have been the first consideration of its new owners, it was not their only concern. The opportunity to build out unfinished *space* to meet new specifications is a valued attribute to any new occupant. Its original design as a powerhouse featured a three-story open plan devoid of columns. The cavernous volume offered astonishing spatial flexibility. In terms of *construction*, the original, locally sourced sandstone shell exhibits an undeniable and uncommon beauty that demonstrates regional pride and a refined appreciation for aesthetics; an overhead gantry crane retained at the second level hints that there is some value attached to the material historicity of this iconic building. All of this together has produced one of the "nicest office buildings within one hundred miles."⁴⁰



Figure 3. Rockwood Concepts, Mohawk, Mich. (Photo by John Arnold)

While the building is currently called The Powerhouse, the salable product was never its heritage, but rather its *situation*, *space*, and *construction*. The contractor who renovated the building demonstrated no interest in pursuing formal designation or enlisting the assistance of preservation professionals, and there was no perceived advantage to following approved rehabilitation guidelines. The Powerhouse owes its persistence to its inherent ability to meet the key factors necessary to its continued utility, and hence, to its vernacular preservation.

Rockwood Concepts

Rockwood Concepts is a multifaceted company whose properties include a rustic furniture manufactory, log-home sales center, natural-stone distributor, and shingle recycling site. These diverse subsidiaries are collectively housed in a pair of connected buildings. One building is an enormous trussed concrete box and the other is an even larger brick-infill steel-frame structure. Together these are well suited to accommodate change over time, not only in terms of their *space*, which features open plans and high ceilings, but also in terms of their *construction*, as visible structural systems make modification both easier to plan and to execute (fig. 3).

These two buildings, a dry house and a hoist house, were originally components of the Ahmeek Mining Company's surface operations for its number three and number four

shafts, first opened in 1908 and in operation until 1968. Shortly after their closure, the site was bisected by the rerouting of a nearby freeway. At that time, a number of steel buildings on the site were demolished.

In 2004 the property was purchased by a new owner who removed the infill brickwork from the highly visible street façade of the hoist house, revealing an elevated concrete deck and eight bays delineated by the intricate steel structural frame. The building soon found new purpose as a loading dock for the sale of landscaping material, and shortly thereafter consigned a bay to serve as a collection point for used asphalt shingle recycling. The simple and inexpensive modification, while irreconcilable with traditional preservation principles, actually increased the property's immediate utility and economic viability, and by so doing ensured that the buildings—albeit greatly modified—would continue to exist. This fairly dramatic alteration to the appearance of these historical buildings were sure to be noticed by passing motorists, as the site's *situation* was the third critical criterion considered in its selection for continued use. As the main thoroughfare between population centers to the south and prime vacation properties to the north, Rockwood Concepts is seen by thousands of potential customers a day. Furthermore, as this highway is also the largest and most direct route along the spine of the Keweenaw Peninsula, the site is exceptionally well positioned to accept bulk deliveries of heavy materials and arrange for their redistribution.

The owner cultivates an abiding interest in the history of the property and is eager to share his knowledge of it. However, very much like the contractor involved with the renovation of The Powerhouse, he is very wary of the costs and perceived restrictions associated with formal historic preservation, reporting that while he had been approached in the past, to him, “it just didn't seem viable,” in context of the information presented, which to the owner sounded very much like, “well, you've got to come up with \$200,000 first, and we *might* reimburse you.” He continued by describing his reluctance to conform, in that he would “have to bring it up to such standards, and you can't deviate.”⁴¹ He greatly values the independence and the programmatic and physical flexibility afforded by these redundant industrial buildings and can see no benefit in their inscription to the National Register. Instead, it is this pragmatic approach toward the malleability of the *space* defined by the shells of these postindustrial buildings that holds the key to their ongoing usability and, therefore, their vernacular preservation.

The Copper Country Curling Club

First formed in 1993, the Copper Country Curling Club spent its first two decades renting rink space at several regional venues. However, each place ultimately fell short of consistently providing the high-quality ice conditions that curling requires. In 2005, the club made the decision to secure a facility that could meet its specific needs. The programmatic requirements were quite clear: any potential building must be large enough to house the regulation curling sheet, as well as a small gathering area for players. Spatially, these are not difficult demands to meet; the real challenge is that the playing surface is, of course, ice. As a small club of sixty members, operating expenses needed to be minimized, and



Figure 4. The Copper Country Curling Club, Calumet, Mich. (Photo by John Arnold)

constructing and operating a refrigeration plant was simply not financially viable. A cost-effective alternative is the use of “natural ice,” if it can be maintained in appropriate and relatively constant interior environmental conditions. A redundant industrial building provided an elegant solution, the *construction* of which was critical to its selection for use.

Like most of the area’s industrial buildings, the Calumet & Hecla drill shop is constructed of so-called “poor rock,” a local name for the material extracted from the earth but discarded before milling due to its low copper content (fig. 4). This waste rock is composed of extremely robust basalt and is an excellent building stone for projects that don’t require finely dressed masonry. As its name suggests, the c.1885 building was originally used for repairing mining drills, but it was vacated in 1968. Like so many disused industrial buildings in the area, it soon found use as a storage facility. Unlike others, however, this building was owned by a local municipality. When its tenant ceased making payments for its use, the stored contents were auctioned off and the building made available to new uses.

The two-foot-thick stone walls of the drill shop were never insulated, and the building was not well sealed against air exchange. Instead, workers relied on cheap and abundant steam heat, amply provided by the nearby industrial boilers powering the mining operations. When the mines shut down, so did the heat. The Curling Club inherited the use of a cold, rough building, replete with unfinished dark stone and underlain by an earthen



Figure 5. Vernacular preservation in action. (Photo by Emily Rogers)

floor. Many potential users would balk at the prospect of resurrecting such an edifice, but for the purposes of the Curling Club, it was extremely well suited by virtue of its *construction*. The dirt floor readily received a level concrete topping slab, poured up to and meeting the poor rock walls. In December, this slab is flooded with two inches of water and dammed against exfiltration by packed snow thresholds; in May, the ice thaws and seeps harmlessly away. The club is proud to host what is surely the most environmentally friendly regulation ice, thanks to “a very unique interior that isn’t matched anywhere” in the United States; “those walls, being solid rock, have fantastic thermal mass,” and virtually ensure four months of continuous use, as the thermal mass of the stone buffers against several days’ of above-freezing temperatures.⁴² This clever reuse leverages the robust and raw *construction* of this redundant industrial building to wonderful advantage.

Unsurprisingly, there are numerous other underutilized industrial buildings in the Copper Country that are constructed of similar materials and in a similar fashion; again, it was the additional considerations of *space* and *situation* that led to the selection of the drill shop from the available candidates. The plan dimensions of the building are nearly perfect to house two adjacent regulation sheets of ice, with space remaining for a seating area for spectators, an enclosed clubhouse, locker rooms, and a storage area (fig. 5).

Despite its active and ongoing employment, the use of this historical industrial building as a natural ice rink for curling does not meet (or even approach) the high standards

of formal historic preservation. Indeed, it is largely due to the lack of competing pressures from formal historic preservation interests that the Curling Club has been able to embrace and inhabit the drill shop. This practical perspective on a historical building's capacity to accommodate change over time in the living postindustrial landscape is the heart of vernacular preservation.

Conclusion

The innumerable remnants of the human-built world are found virtually everywhere; historical cultural landscapes are extensive and pervasive in the United States, even in many areas that may initially appear to be untouched wildernesses. Only a tiny minority of the countless resources occupying these landscapes—including those formally classified as buildings, structures, objects, sites, and districts—are listed on the National Register. The overwhelming majority of these places have not been altered or maintained with even a remote awareness of the Secretary of the Interior's Standards, nor even formally recognized at a state or local level.

The established system of formal historic preservation deserves abundant credit for its demonstrated capacity to change over time. However, despite its expanding purview, academic and professional conversations regarding the nature of preservation itself remain generally limited by the parameters established by the criteria and standards initiated by, and legislated in, the NHPA of 1966 and its subsequent iterations. The field of historic preservation is understandably reluctant to investigate—without significant external influence—the innumerable properties considered to be ineligible for listing vis-à-vis the national standards of significance and integrity; there are likely many thousands of properties that may in fact be historically consequential but fail to meet the established thresholds that would garner them notice by heritage professionals. Such places, including the numerous otherwise overlooked components of postindustrial landscapes, are as a matter of course bypassed entirely by the existing formal system.

Individual insignificance and lost integrity are not relevant considerations when seeking to understand deeply interwoven industrial landscape systems. Indeed, the physical evolution of many obsolete industrial resources is a testament to the value these buildings and sites have as active components of the living postindustrial landscape. The legibility and meaning of the postindustrial landscape relies on the continued presence of even scattered remains to bear witness to the astonishing scale and extent of the historical industrial enterprises that profoundly shaped and continue to influence today's postindustrial landscape.

Unburdened by adherence to the regulations of formal historic preservation, including those that guide rehabilitation for adaptive use, innumerable historical sites persist as components of continually evolving cultural landscapes across the United States. Many of the myriad sites of the postindustrial landscape that initially served specific industrial functions have been repurposed in a manner inconsistent with the role for which they were originally designed. These places are neither ruins nor abandoned, and while these places in no way follow official standards for material conservation, they are hardly

neglected. In an important sense, significant preservation is taking place, albeit in an unofficial fashion that is not currently professionally recognized. These crucial contributors to the cultural landscape have been subjected to the pragmatic, local, and informal processes of vernacular preservation and deserve the closest consideration of heritage professionals, not only in their own right, but as candidate recipients of meaningful material support and protections.

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