

EDITORIAL 3

ARTICLES

Forging a Career: Roland W. Robbins and Iron Industry Sites in the Northeastern U.S.
 Donald W. Linebaugh 5

“The Beer That Made Klondike Famous and Milwaukee Jealous”: The O’Brien Brewing and Malting Company Site, Klondike City, Yukon
 David V. Burley and Michael H. Will 37

“... as important and vital to successful mining, as the sap is to the tree”: The Dorrance Colliery Fan Complex, Wilkes-Barre, Pennsylvania
 David L. Salay 55

IA and the 20th Century City: Who Will Love the Alameda Corridor?
 Matthew W. Roth 71

Experimental Industrial Archeology: Imitation in Pursuit of Authenticity
 Patrick Malone 85

Fragments Shored Against the Ruins: Industrial Archeology and Heritage Preservation
 Thomas E. Leary and Elizabeth C. Sholes 95

Analysis and Interpretation of Artifacts in Industrial Archeology
 Robert B. Gordon 103

REVIEWS

<i>The Works: The Industrial Architecture of the United States</i> , by Betsy Hunter Bradley Richard O’Connor 112	<i>Irrigated Eden: The Making of an Agricultural Landscape in the American West</i> , by Mark Fiege Jeffrey A. Hess 120
<i>Cast-Iron Architecture in America: The Significance of James Bogardus</i> , by Margot Gayle and Carol Gayle Carol Poh Miller 114	<i>Russian Rail Transport, 1836–1917</i> , by the faculty of the St. Petersburg State University, trans. by John C. Decker Lance E. Metz 122
<i>Building the Georgian City</i> , by James Ayres David A. Simmons 116	<i>Going Underground: Tunneling Past, Present and Future</i> , edited by Jeffrey K. Stine and Howard Rosen Ralph B. Peck 123
<i>Cotton, Fire, & Dreams: The Robert Findlay Iron Works and Heavy Industry in Macon, Georgia, 1839–1912</i> , by Robert S. Davis Jr. Mark R. Finlay 117	<i>Ground Penetrating Radar: An Introduction for Archaeologists</i> , by Lawrence B. Conyers and Dean Goodman Ervan Garrison 124
<i>Connecticut’s Ames Iron Works: Family, Community, Nature, and Innovation in an Enterprise of the Early American Republic</i> , by Gregory Galer, Robert Gordon, and Frances Kemmish Edward S. Rutsch 118	<i>Practical Evaluation Guide: Tools for Museums & Other Informed Educational Settings</i> , by Judy Diamond Ed Salo 126
<i>Canal History and Technology Proceedings</i> , vol. 18, edited by Lance E. Metz. Mark R. Finlay 119	<i>The Iron Bridge</i> , by David Morse Stuart B. Smith 126

CONTRIBUTORS 128

COVER: Perspective of Guibal Fan and Pittston Engine. See “The Dorrance Colliery Fan Complex, Wilkes-Barre, Pennsylvania,” pp. 55–70.

IA and the 20th Century City: Who Will Love the Alameda Corridor?

Matthew W. Roth

The organizers of the symposium "Whither Industrial Archeology" asked me to reflect on the future of the field. Rather than risk the dubious exercise of prediction, I have taken the approach of asking how industrial archeology has benefited me as my research interests have moved beyond the locales that have defined the field up to now. I intend to sketch out the utility and the limitations of industrial archeology in comparison with some other approaches that have been used to interpret the fascinating city of Los Angeles. Los Angeles is a rich subject for these encounters because it has provided the empirical basis for many recent methodological and theoretical arguments. Industrial archeology has not only provided me with a vital means to study Los Angeles, but has also helped to establish a critical perspective toward other strategies of urban studies. I wonder, too, how industrial archeology might advance those other approaches, and I suspect that the further extension of the field into broader arenas of scholarship might well depend on such connections.

Thus, my question: Does anyone who does not already read this journal care about the future of industrial archeology, or whether there even is a future for it? A certain institutional momentum will sustain something called industrial archeology—the Society for Industrial Archeology, Historic American Engineering Record, the graduate programs, museums centered on industrial artifacts, and laws and regulations that mandate a certain amount of attention be accorded to the mills and bridges of the industrialized world. The field also coheres around the subject matter, those objects and places that draw us together as a community of interest. But is industrial archeology a mode of thought that is not defined simply by the subjects of attention? Is it a mode of thought that engages productively with other approaches that touch on our subjects? To rephrase the question: Not just, does anyone care about industrial archeology, but does anyone care about industrial archeology because it helps them in their own endeavors?

Looking at Los Angeles

The present-day visual reality of Los Angeles skews the scholarly approaches to its history. Los Angeles is vast, sprawling, and generally unattractive in its public places.

Also, since the 1920s, its boosters and detractors alike have seen Los Angeles as novel, producing the sunshine-and-noir dichotomy that is based on what is said about the place rather than on the place itself.¹ This combination of an extremely difficult place to comprehend that is encrusted with layers of polemics has produced an antimaterial bias in the interpretations of Los Angeles. For me, industrial archeology provided a different way to see and to research the city, which, in turn, leads to a critique of some of the theoretical reflections that have sprung from study of Los Angeles.

The size and the surface imagery of Los Angeles make metaphors of incomprehensibility particularly appealing to its interpreters.² Fredric Jameson's manifesto of postmodernism as the "cultural logic of late capitalism" elevates incomprehension to a vast psychosis foisted on a prostrate public by mobile capital that seeks to conceal its own potency. His central image is the Bonaventure Hotel in downtown Los Angeles, a cluster of glass-wrapped towers, designed by John Portman, that would be recognized by anyone familiar with Atlanta's Hyatt Hotel or Detroit's Renaissance Center. Jameson decries the lack of easy access from the sidewalk and the lack of readily assimilable visual cues to guide the visitor around the interior, which are certainly valid criticisms of this cold and massively scaled space. The hotel further becomes the paradigm of "postmodern hyperspace," because it has "succeeded in transcending the capacities of the individual human body to locate itself, to organize its immediate surroundings perceptually, and cognitively to map its position in a mappable external world." Jameson refutes this assertion by his own description of the Bonaventure, which locates the hotel precisely within the city and maps its interior in splendid detail. Apparently unaware of contradicting himself, he shows how the hotel can, in fact, be understood by analyzing its components and the spatial relationships among them. Comprehending the Bonaventure seems more alike than different from the process of understanding, say, the industrial city of Lowell, which can appear at first sight as a bewildering jumble of colossal factories, but which resolves into a knowable set of historical episodes after reading the inventory by Historic American Engineering Record or scanning the interpretive maps by the National Park Service. The incomprehensibility of the Bonaventure

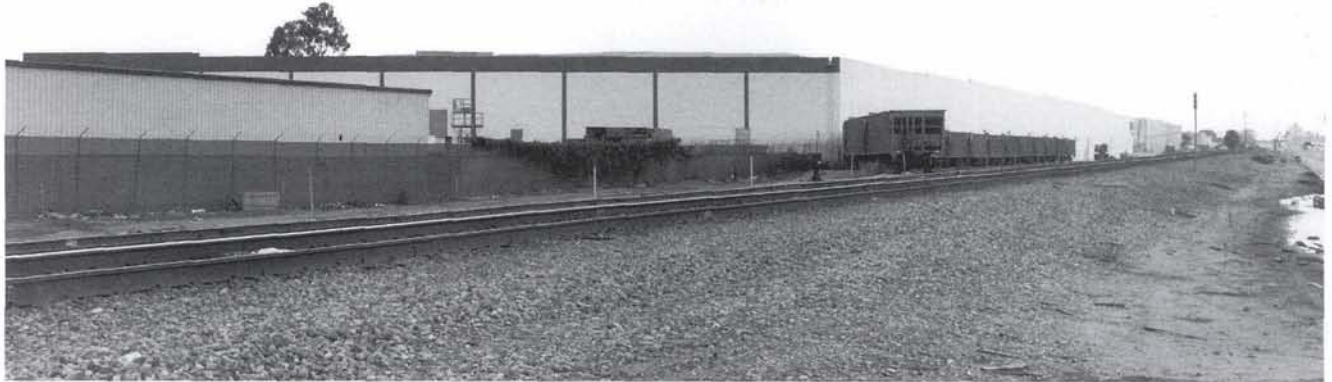


Figure 1. *Skeels, Inc.* 19300 Alameda Street. Photo by author.

has more to do with the author's agenda than with the subject. He enlists an ugly and exploitative structure into claims about the insidious cultural effects of multinational capital, while overlooking the exercise of observation-based analytical skills that provide a valuable means to counter the very effects he decries.³

I can only offer my deepest gratitude that Jameson, typical of visitors who mine Los Angeles for book projects, did not cast his gaze on the Alameda Corridor, a 22-mile-long landscape of production that is one of the region's largest industrial districts.⁴ What allegations of anonymity would he have built around images of blank-walled factories along railroad sidings (see figure 1)? Or about a restaurant frequented by factory workers, where the bunker-like exterior is surely conducive to bleating about the anomie of urban life (see figure 2)? The Alameda Corridor is hard to love, as hard for me as for a high-brow intellectual tourist like Jameson. My earliest memories are framed by the brick factories of industrial New England, where now, after 30 years of industrial archeology-based attention, the factories are appreciated not only for their historical significance but also, to some extent, for their aesthetic qualities as well. It is difficult to imagine a time when tilt-up concrete walls and corrugated steel siding (see figure 3) will bask in a similar glow of appreciation like that which washes over the well-worn brick of Lowell. But 50 years ago, who would have predicted a national park for Lowell? Though I cannot predict the future of industrial archeology, I do hope that it includes coming to terms with places like the Alameda Corridor.⁵

No postmodern pilgrimage to Los Angeles would be complete without mentioning the freeway system, which, along with the Bonaventure, is a mandatory stop. Jean Baudrillard viewed the Los Angeles freeways as a

giant, spontaneous spectacle of automotive traffic. A total collective act staged by the entire population, 24-hours a day. By virtue of the sheer size of the layout and the kind of complicity that binds this network of thoroughfares together, traffic rises here to the level of a dramatic attraction, acquires the status of symbolic organization ... Pure statistical energy, a ritual being acted out—the regularity of the flows cancels out individual destinations.⁶

That last sentence always struck me as ridiculous on the basis of common sense—that individual destinations do not matter, as if people jumped in their cars and plied the freeways just to be part of the postmodern parade. Beyond that, such preoccupation with appearances, with presentist impressions, is directly undermined by the industrial archeology approach that points us toward the specific circumstances, individuals, and actions that produced every foot of freeway—to see the freeways, not just as Baudrillard does, but under construction as well.

My first impressions of Los Angeles were not that different from those of the postmodernists, and I had qualms about ever understanding it. I could see how the city's rapid growth to such massive size has challenged its interpreters and contributed to the attraction of metaphors such as conspiracy (this cannot represent the exercise of informed choice) and irrationality (this can only be understood as an urban organism out of all meaningful control). The perplex-



Figure 2. *Red Front Bar & Grill, 21312 Alameda Street.* Photo by author.



Figure 3. *Fibernatics Molded Products, Greenleaf and Alameda Streets.* Photo by author.

ing physical reality of the place has also spawned theories that assert its novelty, such as the “postmodern geography” and “thirdspace” of Edward Soja.⁷ However, as soon as I gained some basic familiarity with the city’s history, I began to think of it as Lowell, or something like a larger version of Lowell plopped down in a Mediterranean climate. We have all heard and read the story of the Boston Associates seeking to profit from a flow of raw materials, labor, and capital centered on Lowell, and how the canal system was the first element in realizing those ambitions. A city built by civil engineering? Not exactly, but one where a grasp of the engineering animates our understanding of the socio-economic, political, and cultural changes that constitute the history of the city. With respect to 20th-century Los Angeles, it is crucial to understand the implications of the two largest civil engineering projects on Earth around 1910: the Los Angeles, or Owens Valley, Aqueduct, which opened in 1913, and the Panama Canal, which opened in 1914.⁸ These were the first pieces of a skeletal understanding of Los Angeles: two massive canal projects that tended to concentrate continental and even intercontinental flows of resources in Los Angeles. A city built on civil engineering? Not exactly, but one where a grasp of the engineering provides a sure entry into the pace and scale of 20th-century growth. It becomes possible to perceive the place in tangible, comparative terms. The surface glitter and dross does not disappear, but it does begin to reflect underlying spatial and temporal patterns that do not require novel theories to explain.

The Lowell analogy also operates in at least one other way. It is true that Los Angeles boosters in the first third of the 20th century were energetic and effective in pursuit of immense growth. When the Owens Valley Aqueduct opened, it supplied eight times the water that the city needed, and that mismatch in scale has supported the declaration that here was a uniquely ambitious metropolitan vision at work.⁹ That might be true when compared with the provision of water service in other cities of the United States, where population growth in the late-19th century tended to produce shortages and retroactive fixes.¹⁰ But when we make a comparison with the Lowell canals, which provided more power than there were mills to use it for 25 years, Los Angeles begins to appear like a chapter in a national story of metropolitan ambition rather than some unique metastasizing giant.

Rebutting interpretations of Los Angeles’ incomprehensibility, superficiality, or novelty is a little like shooting fish in a barrel, but there is more to postmodernism than Jameson, Baudrillard, and Soja. If there is a marvelous future for industrial archeology, it will have to extend its geographic reach to places like Los Angeles, and it will have

to contend with these other approaches to interpreting places like Los Angeles. As its name implies, postmodernism constitutes a reaction, principally a reaction to the narratives of modernity and progress. Postmodernism critiques the so-called Enlightenment project, or the attempt to construct “meta-narratives” that produce the illusion of a universal human history. Postmodernism revels in the hybridity, fluidity, and fragmentation of human experience. Important keys to understanding what is meant by postmodernism can be found in the kinds of criticism that postmodernists level at other interpretations. One of them is often phrased as “totalizing,” or the construction of falsely universal explanations. The other is “essentializing,” or the assumption that an attribute that is shaped by circumstances, such as race or gender, somehow represents a timeless and unchanging characteristic.¹¹

These can be useful concepts even to those who do not fly the postmodernist flag. As a necessary step in my research on road and freeway development, I read much of the secondary literature on transportation in Los Angeles and thought that it was overly directed toward such concepts as “the modern city,” which seemed to spring from after-the-fact rhetoric more than historical reality, thus totalizing a complex picture.¹² I had also looked around the place and saw a transportation infrastructure that was extremely diverse chronologically and apparently the result of highly contingent behavior over a span of decades, rather than the simple acting out of one or another universal idea. When I went into the city and state records to determine the origins of some of these structures, I found that there was no one good explanation. Valid generalization about this infrastructure would have to find a way to embrace highly localized spatial circumstances and rapidly shifting political alliances. It was industrial archeology that gave me a measure of comfort with the goal of comprehending this complex historical reality, especially the bridge surveys that Bruce Clouette and I had conducted in three New England states.¹³ The historical bridge survey covers a wide geographic area, but, unlike geography or even cultural geography, it does not produce totalizing arguments because it is thematically focused and relentlessly site-specific. Unlike the broader architectural survey, the bridge survey concentrates on a particular kind of human activity associated with certain institutions, professions, and linguistic characteristics. My work based on bridge-survey methodology connected with such postmodern precepts as the emphasis on localized practices and the identification of specialized knowledge used as a strategy to command resources and organize behavior, and these tactics drawn from postmodernist analyses helped to interpret the kinds of data associated with research in industrial archeology.

The implications for a relationship between industrial archeology and other approaches like postmodernism go beyond such pragmatic applications. As a collection of methods and insights that moves toward understanding complex technological environments, industrial archeology also delivers a critique of postmodernism. To practice industrial archeology, we have to believe that the largest and most intricate human product—the industrial city—can in fact be understood, and then we have to fulfill that expectation. In contrast, postmodernism tends to view the industry and infrastructure associated with modernity as a monolithic and mysterious product of capitalist dynamics. A sure sign of this tendency is the use of the term “Fordist” to characterize the industrial “modernism” of the past, that is, to characterize the conditions to which we are now somehow “post.” Fordist, however, is a rhetorical convenience, and the term crosses over into factual error when applied broadly to American industry. The techniques and systems pioneered under Henry Ford were highly specific to the Model T, and only one among many types of production regimes in American factories (albeit an extreme and highly publicized one).¹⁴ To critique postmodernism in its own language, it tends to essentialize the industrial past.

To those who practice industrial archeology, it is difficult to make that mistake, because careful consideration of material evidence alerts us to differences in industrial practice. We have developed typologies and chronologies of mill construction, of manufacturing techniques, of infrastructural characteristics. At the same time, however, we must be extremely cautious that we not let the interpretation of objects and places define the end point and the sole purpose of our study. If we do, we have simply supplied a premise that validates postmodernism. We have said, in effect, here is industry in all its material and institutionalized might. It is a subtle challenge to uphold the interpretive value of material evidence while connecting it with scholarly undertakings that do not depend on such interpretive value. Yet, I think we have to accomplish that to provide a positive answer to the question posed at the top: Does anyone care about industrial archeology because it helps them in their own endeavors?

Looking at Objects

Antimaterial bias might be particularly pronounced in relation to Los Angeles, which, as home to the entertainment business for so long, has been subject to a disproportionate amount of imagery and representation. But this bias also has a broader basis in scholarship, thus increasing the challenge of applying material evidence to discussions that

reject such methods. Consider one of the basic texts in American economic history, Thomas Cochran’s *Frontiers of Change*. Cochran sought to explain the emergence of capitalist industrialism in the United States before 1840, and to undermine the synthesis of Alfred Chandler, whose interpretation of business history concentrated on the growth and durability of giant firms.¹⁵ Cochran’s alternative might at first seem valuable in an effort to expound the importance of industrial archeology, because he adopted what he called a “geo-cultural” approach, drawn from the anthropological foundation of Anthony Wallace’s work. But when it came to incorporating objects into his study, Cochran stated that the spinning jenny and the steam engine were “false clues” in the effort to understand industrialization.¹⁶ It was the mindset and the aspirations of the participants that demanded our primary attention. False clues! Cochran thought that emphasis on the hardware of industry mistook the symptom for the cause. He wanted to trace industrialization to a culture of acquisitiveness that was not necessarily based in class differentiation, to a system of values manifested in a legal structure of private property and contractual obligation, and to an approach to problem solving that produced tools and machinery in seemingly endless scope and variety.

Whether or not we agree with this assessment of the causes of industrialization, we can take issue with the diminution of material evidence. We can respond by observing that the spinning jenny and the steam engine are not false clues. They are simply ... clues. Not answers, but tangible results of experience that enable us to frame questions. The kind of quest for fundamental meaning attempted by Cochran is thoroughly compatible with industrial archeology, if we want it to be. In the statement of purpose that opened the first issue of the journal *IA* in 1975, Ted Sande summarized the goals of industrial archeology with the question: “What does the industrial site mean?”¹⁷ Such a simple and powerful question does not limit us to material evidence, but it is time to update the question. To parallel Cochran, we do not ask simply “What produced the spinning jenny?” That would reproduce the same deterministic vision that Cochran saw in Chandler. Our central concern now is more like “From what complex of experience and adaptation did a particular spinning jenny emerge, what else can we learn about those processes, and how did that spinning jenny shape subsequent experience?”

Cochran was not alone in relegating material evidence to a position of relatively low significance. I don’t know that Lewis Mumford ever purposefully engaged in what we would call industrial archeology, but his works on architect-

ture, on cities, and on the theme of technology and civilization applied observational methods along with documentary research. He also proceeded from a question that participants in industrial archeology can surely appreciate: "How did it come about that for the past millennium the material basis and cultural forms of Western civilization have been so profoundly modified by the development of the machine?"¹⁸

How disquieting then that, in the mid-1960s, Mumford suggested late in his career that technology and its objects were in no way fundamental to consideration of the human condition. Instead, he argued, the basis for manipulation of the environment and cultural formation lay in proficiency at naming plants and other natural phenomena, discriminating among them, and then prescribing behavior through the development of language to preserve and transmit that knowledge.¹⁹ Mumford had changed his mind. More than 30 years earlier, he had ended the magisterial *Technics and Civilization* on an optimistic note. He saw the spirit of humanity expressed in its machines and believed that knitting technical capability together with what he called "psych[ologic]al and social interests" foretold a glorious, humanistic future.²⁰ By the mid-1960s, that hopefulness had yielded to an unrelenting pessimism about technology, which arose as Mumford toured the bombed-out cities of Europe after World War II, considered the implications of atomic weapons, and observed the urban redevelopment and highway construction just then cutting through the cities of the United States.²¹ This technological pessimism produced not just the recasting of his own thinking, but also a reconsideration of those who accorded to technology a central role in human culture and society.²² If technology was indeed so central, then destruction and chaos loomed as inevitable outcomes; Mumford felt the need to find some other past than the one that led to such a future. Like many others, Mumford saw democracy and socialism locked in a death struggle that made both of them inadequate as humanistic means to shape the development and application of technology. Karl Marx had to be mistaken, wrote Mumford, "in giving the instruments of production a central place and directive function in human development."²³ Seeking an alternative to the ideological struggles of Cold War geopolitics and an intellectual basis for hope in the human future, he concluded that technology does not matter; consciousness and language do.

To support this negation of technics as a factor in culture, Mumford deployed a withering critique of material evidence. It was criticism of an archeological discipline that, in his view, concentrated on the bones and shards that

proved recoverable, while ignoring the thousands of years of cognitive and linguistic development on which toolmaking capability depended. Ironically, Mumford associated this antimaterialist turn in his thinking with the conception of cultural determinants in the structural anthropology of Claude Levi-Strauss.²⁴ I say ironic because the structuralism of Levi-Strauss has also provided a significant part of the theoretical basis for the interpretation of objects.²⁵

I submit my earlier question one more time, with an added twist: Can anyone care about industrial archeology because it helps them in their own endeavors if someone of the stature of Lewis Mumford has disavowed both its subjects and its methods? To answer that positively, we have to break apart the industrial from the archeology. The magnitude of social resources represented by industry and industrial cities over the past few hundred years requires no further justification for our attention. I am less comfortable, however, to limit our methods in the way that the journal presently describes them in the Instruction to Authors: "An emphasis on the importance of physical evidence keeps industrial archeology in the archeological realm of inquiry and understanding."²⁶ I would not suggest that physical evidence is unimportant, but as stated with reference to Cochran's critique of material data, perhaps it is worth emphasizing that objects might provide more questions than answers, that they are less valuable standing alone than they are when put into interaction with other ways of knowing.

Such a decentering of the objects brings industrial archeology more fully into engagement with the linguistic origins of structuralism and with the subsequent approaches to the study of culture that have advanced structuralism beyond the templates of Levi-Strauss.²⁷ Within anthropology, the artifact has become "less a text to be read than a story to be told ... about the social impact of the actions of people and their manipulation of objects."²⁸ In literary scholarship, ethnohistory, and many branches of history, culture has come to be understood as something that does not blindly govern behavior but is also modified by behavior. Cultural norms are not fixed but are always seen forming or breaking apart. Culture is not only prescriptive, but performative too: something that is defined as it is acted out, and something that, in turn, can be perceived in the context of social relations. This approach, far more supple than the structural causation of Levi-Strauss, allows, even requires, that we perceive the changing uses of objects and environments, not just their production.²⁹ Much of the best work that comes under the heading of industrial archeology already operates like that, such as Laurence Gross on Watkins Woolen Mill, Thomas Leary on Bethlehem Steel's

Lackawanna Plant, and David Simmons on the Boyer riveting hammer.³⁰ Developing this approach more fully and explicitly is, I believe, one way to increase the importance of industrial archeology to scholars in related fields.

This is not a prediction because it is already happening. I was delighted to see the creative application of industrial archeology in one of the leading journals of American history, a recent article entitled "The Kiss" by the labor historian Kevin Boyle.³¹ In 1955, during pre-Christmas festivities on the trim line at the Dodge Main plant in Detroit, a male African-American worker and a white female worker exchanged a brief kiss. Recriminations from other workers began immediately, hostilities escalated, other departments became involved, and before routines were resumed, the whole line was shut down for much of the shift. Boyle uses that incident as the departure to investigate the overlapping trajectories of class, race, and gender in automobile work. He follows an explicit poststructuralist agenda in the examination of working class subcultures. "Too often," wrote Boyle about workingclass historiography, "Subcultures have become determinative, workers playing out the roles assigned to them as members of a group."³² By peering closely into this one small conflict, he shows those subcultures under stress and change. Boyle's mapping of the trim line and adjacent parts of the plant is fundamental to his accomplishment. He is able to discern the personal space, or its lack, that characterized different jobs, including the physical proximity to other workers. He is able to determine how different people met in different spaces in the plant, and the different kinds of conversations that took place at the trim line, adjacent to it, in the restrooms, in the stairwells, and in the offices of union and company officials. This mapping of social space is possible through the use of Charles Hyde's Historic American Engineering Record recording project of the Dodge Main plant, which serves as the crucial means to sort and interpret the mass of data that Boyle draws from company and union documents. The space of the factory serves not as a neutral stage where events occur, but as a shaping force in the events under scrutiny. It is impossible to imagine how Boyle could have produced that article without the industrial archeology-based insights.

I have tried to suggest how industrial archeology has been useful baggage for me in navigating some of the intellectual currents of the late-20th century. In all its variety, the texture of industry fulfills the postmodern insistence on the heterogeneity of experience. At the same time, the texture of industry offers a critique of postmodernism by defeating the notion of a monolithic industrial order against which

postmodernism poses itself. Industrial archeology also has much to gain by making explicit its existing connections to theoretical formulations from a wider disciplinary base than we currently claim, and to further extend those connections.³³ The Boyle article demonstrates how detailed attention to objects and environments can contribute substantially in poststructural approaches to the history of the industrial period.

Varieties of Memory

Like all baggage, a defining characteristic of industrial archeology as used here is that I carried it from one place to another, in this case from New England to southern California. Thus to frame these remarks about a possible future for industrial archeology, I turn to the role of place in scholarship and, particularly, the formation of scholarly practice within the experiences of individuals in certain places. In these matters, I find that industrial archeology can intervene in another of the discussions that occupy professional historians today—the relationship between history and memory. This discussion is not necessarily one that historians would have chosen. We have been pulled into it by the public attacks known as the culture wars.³⁴ While the shrillness is a waste of energy, there is nothing wrong with careful deliberation about our choices and what legitimates them. Our work is a cultural product too, and as long as we do not fall into the abyss of an endless discourse about nothing but discourse, we can benefit by subjecting it to the scrutiny we accord to other cultural formations.

With roughly a generation of work in place, the material culture of industry is a new subject for scholarly literature in North America. Raymond Williams has shown how the appearance of new subjects in literature not only signals material changes, but carries a moral dimension as well. The yeoman and artisan emerged as new character types in the poetry and drama of 18th-century England after market agriculture pushed them off their farms. Before that, they were invisible in literature, "dissolved in the landscape," but they could no longer be viewed as one with the land after they had been evicted from it. The countryside of yeoman farmers and small-shop artisans also symbolized a golden past in comparison to the cities of the present, which were portrayed as shabby, crowded, impersonal, and corrupt. The yeoman and the artisan stood for something partly real and partly imagined, but definitely lost, and that sense of loss ripened into regret.³⁵ Similarly, in the industrial communities of North America in the 20th century, the material evidence of industry captured our interest when we could no longer assume that it would be there

forever, and a pervasive sense of loss distinguished this attention to the objects and places associated with manufacturing history. The implied comparison was not between rural virtue versus urban vice as in Williams, but between a more worthy industrial past versus a less worthy present. This regretful sense of a lost industrial era also fits well into the views of analysts of postmodernism such as David Harvey, who associated the onset of the "condition of post-modernity" with sudden industrial decline in the early 1970s, precisely when industrial archeology arose as a formal practice in the United States.³⁶ Industrial archeology came about at a time when one industrial era was regretfully perceived to be receding into the past.

That was exactly when industrial archeology began to appeal to me, in 1974, in Patrick Malone's undergraduate course on technology and material culture in America. I could dig out the syllabus and find the date when he lectured about the textile industry and up on the screen appeared a series of slides showing big brick mills. They were probably in Lowell, but could have been on Dyer Avenue in Cranston, Rhode Island, where I spent my youth. I remember thinking, this guy is talking about places I know, in effect, about me. I hasten to add that I am not posing as some workingclass avatar; I am from the middle class, with a mother who was a school social worker in Providence and a father who was a toolmaker and manufacturing engineer. But mills like the ones on that screen constituted the milieu of my early life, which became the visible parts of my social imagination.

I express my intellectual and emotional connections with the industrial past through industrial archeology, but that is not the only way it is done. The same concerns are reflected in the fiction of Philip (no relation) Roth, as in this description of his social imagination:

[Newark] appears as the lost city, the stained swirling nightmare of out-sized machines and vast industrial landscapes that every American of urban origins remembers in his dreams. Gone now or rotting out of recognition, the city was a playground and memory palace, in whose interstices its children made their lives while imagining it into the shapes of a romantic future the preceding generations could never have conceived. For millions of Americans, the once-again displaced descendants of migrants or immigrants, the ruined streets and dead factories represent the wasteland into which youth and hope have vanished.³⁷

These places resonate powerfully because they are intertwined with our own early efforts to make sense of the world around us. The stories of our own lives are sketched against these community histories marked first by the vast material infrastructure of the urban industrial northeast,

then the decline of production, employment, and (as that other Roth would have it) youth and hope as well.

If the narrative of industrial development and decline adequately captures where we have been as individuals and as a field, there is no reason why it must continue to define where we are going. The tactics of regional comparison and adjustment in scale have enabled me to see Los Angeles in Lowell terms, but there are limits to that approach too. Los Angeles complicates the narrative of industrial decline in the United States. The Los Angeles metropolitan area remains an industrial powerhouse with the largest manufacturing workforce in the nation during the last census (see table 1). In the midst of massive contraction in the aerospace sector that once led the region's industrial production, the manufacturing workforce in Los Angeles still exceeded the combined total of Chicago and Detroit. The percentage of industrial employment in Los Angeles was virtually the same as Chicago's, and in the Detroit area, only the sectoral inertia of the automobile industry pushed the percentage higher. Since 1990, Los Angeles has continued to add industrial jobs at a rate of between three and four percent per year, comparable to recent experience in Chicago and Detroit, but far exceeding those other metropolitan regions in the actual number of people so employed. Nor is there a dominant sector in Los Angeles, where employment growth has occurred across an extensive range of industries, from garments to specialized industrial equipment, from agricultural processing to electronics.³⁸

Regional resource endowments account for such local industries as the production of oil-drilling and refining equipment and the processing of agricultural commodities, and Los Angeles has a valid claim to be an indigenous home of aircraft production.³⁹ Nonetheless, starting with the branch plants of tire and automobile producers in the 1920s, greater Los Angeles has been a site of expansion and relocation for many industries that started elsewhere. Along the Alameda Corridor today, we can see the metal fabricating industries that once enriched Philadelphia and Cleveland; the textile industry once predominant in eastern New England (see figure 4); the production of specialized alloys that once flourished in Connecticut's Naugatuck Valley (see figure 5); the forging plants of a Newark, Buffalo, or Detroit; and the specialist auxiliary enterprises (see figure 6) of a thriving manufacturing sector.

From the standpoint of Lowell or Pittsburgh, Los Angeles could represent an off-stage scoundrel in the drama of industrial development and decline. Scholars interpreting

Employment Sector	United States		Los Angeles		Chicago		Detroit	
	Number	%	Number	%	Number	%	Number	%
Manufacturing	20,462,078	17.7	1,355,644	22.2	775,237	21.9	517,267	26.5
Health, education, government	24,854,264	21.5	1,192,106	19.6	727,789	20.6	441,391	22.6
Wholesale & retail	24,556,692	21.2	1,442,639	23.7	842,364	23.8	459,629	23.5
Agriculture, extractive, construction	11,053,558	9.6	142,444	2.3	35,248	1.0	20,850	1.1
Transp., communication, utilities	8,205,062	7.1	289,044	4.7	217,015	6.1	77,586	4.0
Business & personal services	9,246,158	8.0	671,129	11.0	315,181	8.9	171,914	8.8
Finance, insurance, real estate	7,984,870	6.9	540,850	8.9	341,053	9.6	131,465	6.7
Other professional service	9,318,520	8.1	462,963	7.6	285,927	8.1	132,488	6.8
Total	115,681,202	100	6,096,819	100	3,539,814	100	1,952,590	100

Source: U.S. Census, 1990 Census Data, Database no. C90STF3C1, Summary Levels: Nation and MSA
 URLs: <http://venus/census.gov/cdrom/lookup/950749067> (US), 950749185 (LA), 9507500623 (Chi), 950749357 (Det)

The CMSAs include all or part of the following counties:
 Los Angeles CMSA: Los Angeles, Orange, Ventura, San Bernardino, and Riverside counties
 Chicago CMSA: Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry, and Will counties
 Detroit CMSA: Wayne, Oakland, Monroe, Macomb, St. Clair, Lapeer, Livingston, and Washtenaw counties



Figure 4. Union Texprint, Inc., 19400 Alameda Street. The sewer pipes piled in front of the building are for the upgrades of utilities infrastructure connected with the grade-separation project underway in the corridor. Photo by author.



Figure 5. *Magnesium Alloy Products Co., 2420 Alameda Street.* Photo by author.

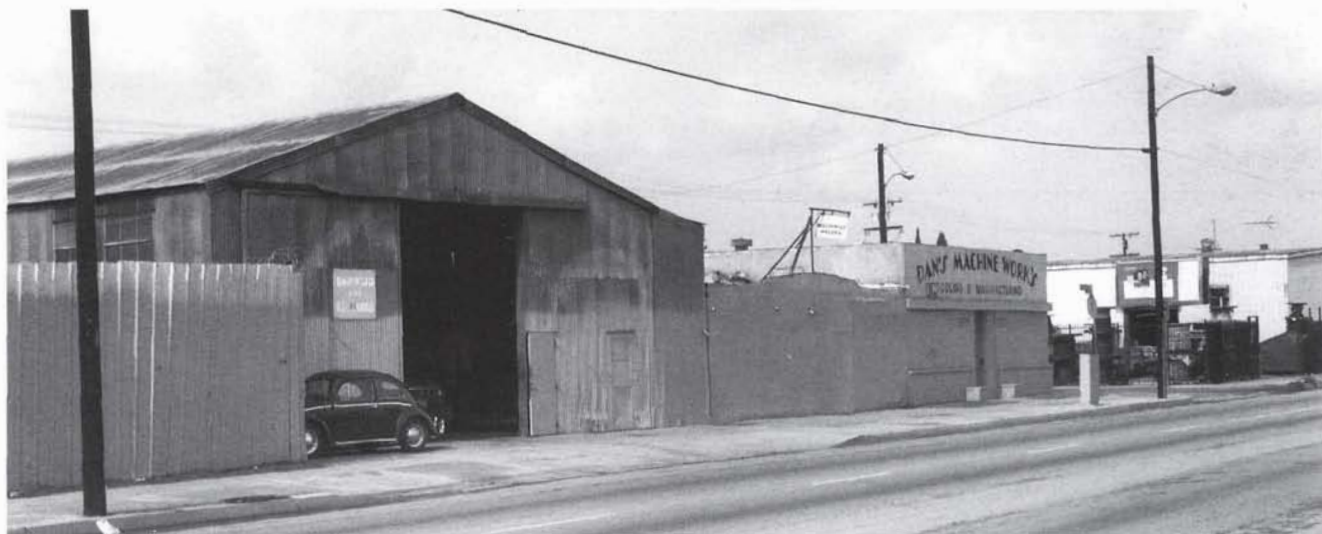


Figure 6. *Dan's Machine Works, 13201-13205 Alameda Street.* Photo by author.

the northeast have no obligation to analyze industrial life in another place so far removed from their focus of study, but the sense of loss in one place can unintentionally paint the centers of mid-20th-century manufacturing growth, like Los Angeles, as less worthy than their predecessors, and the workers of Los Angeles merely as low-paid, nonunion immigrants who made easy victims for freebooting corporate bosses. But as scholars of Chicano/Chicana history have shown, the experience of these workers can be read according to the negotiated agency and community formation that have been used to interpret workingclass history in earlier-established industrial cities. What else might we learn when we also examine the artifacts and

environments of their working lives? Surely industrial archeology can help write histories of working people in Los Angeles in ways that will challenge the problematic categories of immigrant, person of color, or wage slave, just as it helped Kevin Boyle show the contingency of race, class, and gender at Dodge Main.⁴⁰

Looking into these factories is one possible future for industrial archeology, but who will love the Alameda Corridor? A generation before my exposure to industrial archeology in Professor Malone's class, Henry-Russell Hitchcock had incorporated the mills of Rhode Island into an architectural history that was otherwise preoccupied

with colonial houses.⁴¹ In the late 1930s, when Hitchcock was writing, industry in Rhode Island had already begun its ebb into history, at the same time that Los Angeles' industrialization was beginning to accelerate. I wonder how much the intellectual generation of Hitchcock and Mumford were reacting to Los Angeles, if their quest for significance in the industrial order then subsiding in the northeast was a way to exclude something they found distasteful elsewhere. Certainly Mumford hated Los Angeles, and the pessimism that drove him to avert his gaze from the material culture of technology was in part his reaction to Los Angeles, which he described in 1961 as "an undifferentiated mass of houses, walled off into sectors by many-laned expressways."⁴² For all his brilliance, Mumford did not give Los Angeles a fair shake, and such casually negative dismissal by someone who was so insightful about so much else has been a handicap for students of the city. Postmodernists and other theorists are driven to invent novel approaches to the place because they have little to build on: our intellectual inheritance has omitted Los Angeles by peddling presentist impressions like Mumford's in the guise of reasoned analysis.⁴³ Los Angeles needs industrial archeology as much as industrial archeology needs Los Angeles.

Conclusion

In its questionable claim that the empirical circumstances of the late-20th century differ in kind from the past, the premise of postmodernism will sooner or later become marginal as the passage of time provides the context to assess the period of our own lives. Can industrial archeology in the United States avoid a similar fate, or will it wither into a scholastic oddity because it failed to transcend a narrative of development and decline that could not be applied beyond the places where industrial archeology emerged as a field of study? How can industrial archeology benefit my students from the Los Angeles area if, like postmodernism, its view of them and their families is that they exist outside of history? Or if the narrative of industrial development and decline implies that their parents are the beneficiaries of jobs that rightfully belong to more deserving workers in the Merrimac or Monongahela valleys?

Is there a Henry-Russell Hitchcock out there who will plant a seed that can flower into keen interpretation of such places as the Alameda Corridor? Who can see in these objects and places something significant about herself? Who can not only analyze these environments but place them in meaningful relationship with the stories of historical actors who populated these factories? Such historical

actors are likely to be darker-skinned than our accustomed subjects, likely to speak Spanish or Korean or other languages besides English, and more likely to see the Alameda Corridor as a place of hope in their own lives, rather than as a destination for the runaway shops of the formerly industrialized northeast.

A valuable future for industrial archeology should include their stories, and I will try to guarantee a small part of that future in much the same way that the field captivated me, by showing images of the Alameda Corridor. With luck, and with affirmative action, I will have students from Carson, Compton, Lynwood, Southgate, Watts, and south Los Angeles, the communities that border the Alameda Corridor. If some of those students react to those images with the combination of recognition and curiosity that the Lowell images kindled in me, I will have the pleasure of helping to pass the field into their hands.

Notes

The author thanks Fred Quivik and the symposium committee for the invitation to participate; Judith McGaw and Fred Quivik for their comments on the draft of the lecture upon which this essay is based; the participants at the symposium in Lowell, particularly Gray Fitzsimons, Charles Hyde, Patrick Malone, Patrick Martin, Marilyn Palmer, and Barrie Trinder, for their thoughts on the lecture; and, for additional critique in revising for publication, Philip Ethington and Philip Scranton.

1. For an overview of this literature, see Mike Davis, "Sunshine or Noir," in *City of Quartz: Excavating the Future in Los Angeles* (1990; reprint, New York: Vintage, 1992), 15–98.
2. Arthur Krim, "Los Angeles and the Anti-Tradition of the Suburban City," *Journal of Historical Geography* 18, no. 1 (1992): 121–38, examines an extensive sample of these depictions.
3. Fredric Jameson, "Postmodernism, or the Cultural Logic of Late Capitalism," *New Left Review* 146 (July–August 1984): 53–92, quoted words on p. 83.
4. There is long record of pejorative representations of LA based on observations that are highly limited in geographical scope. The English architectural historian Reyner Banham, who inclined in the other direction, toward unabashed affection for the city, complained about the "pedestrian litterateur who finds the place a stinking sewer and stays only long enough to collect the material for a hate-novel," and the "visiting academic who never stirs out of his bolt-hole in Westwood [the neighborhood of UCLA] and comes back to tell us how the freeways divide communities"; Banham, *Los Angeles: The Architecture of Four Ecologies* (1971; reprint, Hammondsworth, England: Penguin Books, 1990), 243. Contemporary photographers, such as Robbert Flick, John Divola, Camilo Jose Vergara, and Catherine Opie, have turned their lenses toward the hard-to-love places of Los Angeles, generally with the effect of accentuating and, at times, exaggerating the scale of structures and vistas that dwarf the human body, or

- the seemingly implacable streetscapes and facades that do not appear welcoming to the refined sensibilities of the occasional visitor; this genre of photography is explored in Kevin Jon Boyle, ed., *Rear View Mirror: Automobile Images and American Identities* (Riverside: Univ. of Calif. Riverside/Calif. Museum of Photography, 2000).
5. Alameda Street runs south from the vicinity of downtown Los Angeles to the harbor in San Pedro. The street was preceded by a railroad built in the 1860s by local interests and later taken over by the Southern Pacific. The Atchison, Topeka and Santa Fe built its tracks from the downtown area to the harbor parallel to the Southern Pacific tracks, ultimately giving the corridor two double-tracked mainlines. The street itself took shape through dozens of individual construction projects involving the city, the state, and the other municipalities along the route that were, or still remain, outside the city boundaries of Los Angeles. In the immediate post-World War II period, the state Division of Highways made Alameda into a divided street, with the railroads running down the center and separate two-way roads on either side of the tracks; dozens of east-west streets crossed the tracks at grade. In its earlier developed portion, immediately east of downtown Los Angeles, Alameda was the spine of the city's first industrial district; new industrial facilities followed the railroads south toward the harbor, creating a linear concentration of industrial use. The boundaries of this industrial area are not distinct because manufacturing and warehouse uses have spread west and (particularly) east from Alameda, especially in its southern stretch. Today, "Alameda Corridor" generally refers to the \$2.2 billion project currently underway to isolate the rail lines from the street traffic by placing the tracks below grade and bridging them at every intersection. I am using the term as shorthand for this linear feature of street and railroads flanked on both sides by a nearly continuous line of factories, warehouses, and small shops or supply facilities serving industrial customers. See "Alameda Corridor," s.v., in Leonard Pitt and Dale Pitt, *Los Angeles A to Z: An Encyclopedia of the City and County* (Berkeley: Univ. of Calif. Press, 1997), and Elizabeth Hayes, "LA's Bumpiest Ride," *Los Angeles Business Journal* 5 (November 1999).
 6. Jean Baudrillard, *America* (1986; trans., Chris Turner, London: Verso, 1988), 52-4.
 7. Edward Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory* (London: Verso, 1989) and *Thirdspace: Journeys to Los Angeles and Other Real and Imagined Places* (Cambridge, Mass.: Blackwell, 1996). Without bothering to trace how LA became the way it is, interpreters such as Soja notice the lack of what is assumed to be a traditional urban center in the manner of a New York, London, Chicago, or Amsterdam and base their claims of novelty upon that. Deeply empiricist works such as Greg Hise, *Magnetic Los Angeles: Planning the Twentieth-Century Metropolis* (Baltimore, Md.: Johns Hopkins Univ. Press, 1997) offer a more persuasive interpretation, in Hise's case based in part on the role of industrial suburbs in the spread of settlement in greater LA. The textile economy of eastern New England in the first half of the 19th century possibly offers a germane comparison of geographically separate but economically and politically linked communities, with capital centered in Boston and Providence supporting the development of mill villages in the Merrimac, Blackstone, and Quinebaug valleys. See, Peter Molloy, *The Lower Merrimac River Valley: An Inventory of Historic Engineering and Industrial Sites* (Washington, DC: HAER, 1976); Gary Kulik, *Rhode Island: An Inventory of Historic Engineering and Industrial Sites* (Washington, DC: HAER, 1978); Matthew Roth, *Connecticut: An Inventory of Historic Engineering and Industrial Sites* (Washington, DC: HAER, 1981); and Steven Hahn and Jonathan Prude, eds., *The Countryside in the Age of Capitalist Transformation: Essays in the Social History of Rural America* (Chapel Hill: Univ. of North Carolina Press, 1985).
 8. The Owens Valley Aqueduct is one of the best examples of how representations of LA substitute for data-dependent examination of its history, in our time largely due to its retelling in the movie *Chinatown* (1974), which displaced the events from 1905-13 to the 1930s and told a compelling story of stylish characters entwined in conspiracy and betrayal. Abraham Hoffman, *Vision or Villainy: Origins of the Owens Valley-Los Angeles Water Controversy* (College Station, Tex.: Texas A&M Univ. Press, 1981) provides a meticulously documented rendering of the aqueduct's history and traces the origin and elaboration of the conspiracy-based account.
 9. Kevin Starr, *Material Dreams: Southern California through the 1920s* (New York: Oxford Univ. Press, 1990), 60. It may seem odd to place Starr alongside the postmodernists because his work belongs to the genre of American Studies that emerged in the 1960s and 1970s, which sought to identify the overarching essence of a time and place. Such totalizing exercises are one of the approaches criticized by postmodernism (more below). However, Starr and the postmodernists hold in common the fallacy of metropolitan novelty that afflicts many accounts of Los Angeles (and other cities too). For spelling out this fallacy, thanks to Philip J. Ethington and Martin Meeker, "Saber y Conocer: The Metropolis of Urban Inquiry," in *From Chicago to Los Angeles*, ed. Michael J. Dear (Beverly Hills, Calif.: Sage Publications, 2001).
 10. The classic treatment is Nelson M. Blake, *Water for the Cities* (Syracuse, Calif.: Syracuse Univ. Press, 1956); also see Eugene P. Moehring, "Public Works and the Patterns of Urban Real Estate Growth in Manhattan, 1835-1894," (PhD dissertation, City Univ. of New York, 1976).
 11. Any brief description is bound to be insufficient for such a broad set of ideas as postmodernism, which has influenced many disciplines including philosophy, literature and literary criticism, architecture and architectural criticism, geography, sociology, political theory, cultural theory, and many branches of history. It is not certain that postmodernism represents a genuinely different critical sensibility from its many precedents, or, as my subsequent remarks suggest, that it describes a genuinely different set of empirical circumstances that distinguish the late-20th century from prior periods. One substantial divide worth noting is between the postmodernists such as Jameson and David Harvey who attempt to update Marxism as a means to explain "the condition of postmodernity," and theorists such as Jacques Derrida and Jean-Francois Lyotard who find that the Marxist categories of capital and labor have become increasingly meaningless in comparison to such means of social organization as technocracy and bureaucracy. Michel Foucault, also viewed as a seminal postmodernist, can be characterized as a neo-Marxian, but he rejected what he saw as the rigid causality of Marxist thought in favor of a greater emphasis on the individual that Foucault drew from Nietzsche. The principal works informing this summary are Jameson, "Cultural Logic," (see n. 3); David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Cambridge, Mass. and Oxford, UK: Blackwell, 1990); Jean-Francois Lyotard, *The Postmodern Condition: A Report on Knowledge* (1979; trans. Geoff Bennington and Brian Massumi, Minneapolis, Minn.: Univ. of Minn. Press, 1984); Gary B. Madison, ed., *Working Through Derrida* (Evanston, Ill.: Northwestern Univ. Press, 1993); Michel Foucault, *Power/Knowledge*, ed. Colin Gordon (New York, 1980); Joyce Appleby, Lynn Hunt and Margaret Jacob, "Postmodernism and the Crisis of Modernity," in *Telling the Truth about History* (New York: Norton, 1994), 198-237; and Ethington and Meeker, "Saber y Conocer" (see n. 9).

12. For instance, Scott Bottles, *Los Angeles and the Automobile: The Making of the Modern City* (Berkeley: Univ. of Calif. Press, 1987).
13. See *Connecticut's Historic Highway Bridges* (Hartford, Conn.: Federal Highway Admin. and Conn. Dept. of Transportation, 1991), and *Historic Highway Bridges of Rhode Island* (Providence, R.I.: Federal Highway Admin. and R.I. Dept. of Transportation, 1990); the Vermont survey is not published.
14. An excellent example of this use of "Fordist" is found in Harvey, *Condition of Postmodernity*, passim (see n. 11). There are few better ways to grasp the historical variety of scale and method in American manufacturing than to peruse the back issues of *IA* or the series of Historic American Engineering Record inventory publications. See esp. Patrick M. Malone, "Little Kinks and Devices at Springfield Armory, 1892–1918," *IA* 14, no. 1 (1989): 59–76, which, in its use of a report on the Armory by a Ford engineer, suggests the differences between the methods at Springfield and those that the engineer was accustomed to seeing at Ford Motor Co. Henry Ford's extensive promotion of his own accomplishments and his success at inserting his own views into efforts to define mass production has left a documentary record that might seem to support the identification of "Fordist" with "industrial." Those who accept that identification can be criticized for failing to interrogate their evidence adequately. Of course, artifactual data is a prime means to pursue that interrogation, but not the only one. For a refutation of the universality of Fordism that relies primarily on documentary rather than material evidence, see Philip Seranton, *Endless Novelty: Specialty Production and American Industrialization* (Princeton, N.J.: Princeton Univ. Press, 1997).
15. Thomas C. Cochran, *Frontiers of Change: Early Industrialization in America* (New York: Oxford Univ. Press, 1981). Cochran believed that Chandler committed the fallacy of looking at the companies like General Motors and US Steel that dominated the national economy in the 1950s, when Chandler was sketching out his grand project and then reading backward to frame a historical interpretation in which the only significant elements were those that led directly to the rise of large firms. For a recent analysis of the different views of Cochran and Chandler, see Richard R. John, "Elaborations, Revisions, Dissents: Alfred D. Chandler Jr.'s, *The Visible Hand* after Twenty Years," *Business History Review* 71 (Summer 1997): 151–200, with comparison of the differences between Chandler and Cochran on pp. 181–83 and 198.
16. Cochran, *Frontiers*, 5–7 (see n. 15).
17. Ted Sande, "A New Adventure," *IA* 1, no. 1 (Summer 1975): v–vi.
18. Essential works by Mumford include *Sticks and Stones* (New York: Horace Liveright, 1924) and *The Brown Decades* (New York: Harcourt, Brace & Co., 1931) on architecture, *The City in History* (New York: Harcourt, Brace & World, 1961) on urbanization, and *Technics and Civilization* (New York: Harcourt, Brace & Co., 1934) on technology and culture. Quotation from *Technics and Civilization*, 3.
19. Lewis Mumford, "Man the Finder," *Technology and Culture* 6 (Summer 1965): 375–81; Lewis Mumford, "Technics and the Nature of Man," *Technology and Culture* 7 (Summer 1966): 303–17.
20. *Technics and Civilization*, 423–35, quoted on p. 427 (see n. 18).
21. There is no better entry into the apocalyptic Mumford than the essays from 1951 through 1962 collected in *The Highway and the City* (New York: Harcourt, Brace & World, 1963).
22. In the introduction to the 1963 edition of *Technics and Civilization*, Mumford decried the "savage demoralizations" evident in the recent technological past (iv), and he later wrote the two-volume *The Myth of the Machine* (New York: Harcourt, Brace & World, 1967, 1970) in the effort to identify the regressive tendencies inherent in technics since ancient times.
23. "Technics and the Nature of Man," 304 (see n. 19).
24. "Man the Finder," 379 (see n. 19); "Technics and the Nature of Man," 309 (see n. 19).
25. The centrality of structuralism in material-culture methodology is hardly a controversial point, but for a recent overview of the issue, see Rita P. Wright, "Technological Styles: Transforming a Natural Material into a Cultural Object," in Steven Lubar and W. David Kingery, *History from Things: Essays in Material Culture* (Washington, DC: Smithsonian Institution Press, 1993), 242–69, esp. pp. 243–50.
26. "Instruction to Authors," *IA* 24, no. 1 (1998): inside back cover.
27. The linguistic theory of Ferdinand de Saussure is the earliest expression of structuralism as the explanation of behavior through the analysis of cultural templates; see Aletta Biersack, "Local Knowledge, Local History: Geertz and Beyond," in Lynn Hunt, ed., *The New Cultural History* (Berkeley: Univ. of Calif. Press, 1989), 72–96, esp. pp. 85–91.
28. Wright, "Technological Styles," 245 (see n. 25); also see Arjun Appadurai, *The Social Life of Things: Commodities in Cultural Perspective* (New York: Cambridge Univ. Press, 1986).
29. Poststructuralist literary scholarship is significantly associated with Raymond Williams and the Birmingham School and such notable works by Williams as *Culture and Society* (New York: Harper & Row, 1966), *The Country and the City* (New York: Oxford Univ. Press, 1973) and *Keywords: A Vocabulary of Culture and Society* (New York: Oxford Univ. Press, 1985). The Melbourne school of poststructuralist ethnohistory emerged in such works as Marshall Sahlins, *Historical Metaphors and Mythical Realities: Structure in the Early History of the Sandwich Islands Kingdom* (Ann Arbor: Univ. of Mich. Press, 1981) and Sahlins, *Islands of History* (Chicago, Ill.: Univ. of Chicago Press, 1985); Greg Denning, *Islands and Beaches: Discourses on a Silent Land, Marquesas, 1774–1880* (Honolulu, Hawaii: Univ. Press of Hawaii, 1980); and Rhys Isaac, *The Transformation of Virginia, 1740–1790* (Chapel Hill: Univ. of N.C. Press, 1982). Within history, the emergence of poststructuralist approaches is associated with the so-called "linguistic turn" in the field, in which discursive rather than material processes are seen as a fundamental means to identify and analyze such phenomena as race relations and nation-building; see the essays in *Reviews in American History* 26 (March 1998), a special issue on "The Challenge of American History," esp. Michael Kammen, "An Americanist's Reprise: The Pervasive Role of Historiographical Problems in Historical Scholarship Concerning the United States since the 1960s," 1–25, and Timothy J. Gilfoyle, "White Cities, Linguistic Turns, and Disneylands: The New Paradigms of Urban History," 175–204.
30. Laurence F. Gross, "The Importance of Research Outside the Library; Watkins Mill, A Case Study," *IA* 7, no. 1 (1981): 15–26; Thomas E. Leary, "The Work of Rolling Rails in the 32-Inch Mill at Bethlehem Steel's Lackawanna Plant: Industrial Archeology and Labor History," *IA* 16, no. 1 (1990): 39–54; David A. Simmons, "'The Continuous Clatter': Practical Field Riveting," *IA* 23, no. 2 (1997): 5–20.
31. Kevin Boyle, "The Kiss: Racial and Gender Conflict in a 1950s Automobile Factory," *Journal of American History* 84 (September 1997): 496–523.
32. *Ibid.*, 499.
33. Robert B. Gordon and Patrick M. Malone, *The Texture of Industry: An Archaeological Approach to the Industrialization of North America* (New York: Oxford Univ. Press, 1994), 15, notes that industrial archeology in the United States has not been characterized by a high degree of theoretical engagement.
34. Though the loudest arguments have concerned the *Enola Gay* exhibition at the Smithsonian Institution, the authority of historians in rela-

- tion to other interest groups and the operation of broader social memory has been a matter of some controversy since at least the mid-1980s; see Appleby et al., *Telling the Truth*, 1–12, 271–309 (n. 11), and Gary B. Nash, *History on Trial: Culture Wars and the Teaching of the Past* (New York: A. A. Knopf, 1997). On the *Enola Gay*, see the forum in the *Journal of American History* 82 (December 1995), esp. the introduction by David Thelen, 1029–35, and in the same issue, see Richard H. Kohn, “History and the Culture Wars”: 1036–64; Martin Harwit, *History Denied: Lobbying the History of the Enola Gay* (New York: Copernicus, 1996); and Edward T. Linenthal and Tom Englehardt, eds., *History Wars: The Enola Gay and Other Battles for the American Past* (New York: Metropolitan Books, 1996).
35. Williams, *The Country and the City*, quoted words on p. 46 (see n. 29); the country as golden past versus the city as pessimistic present is addressed throughout the book, but especially in chapters 2 and 3.
36. Harvey, 121–40 (see n. 11).
37. Robert Stone, “Waiting for Lefty,” *New York Review of Books* 5 (November 1998): 38.
38. For data on employment between 1994 and 1997, see U.S. Census, County Business Patterns <<http://tier2.census.gov/cgi-win/cbp>>. This data is not compiled into the county-weighted Consolidated Metropolitan Statistical Areas available in the decennial census. For the years 1994 and 1997, I used the largest counties in the CMSAs (Los Angeles County, Cook County, and Wayne County) for the data on growth in industrial employment. In 1994, Los Angeles had 645,704 manufacturing jobs and in 1997 had 668,505 for a 3.5 percent gain; Cook: 403,593 to 422,368, a 4.6 percent gain; Wayne: 181,100 to 187,028, a 3.3 percent gain. Note that the number of manufacturing jobs in Los Angeles continued to exceed the combined total of Cook and Wayne. In 1990, the New York CMSA had 1,249,091 manufacturing jobs, the second largest industrial workforce among U.S. urban areas after LA, but only 14.3 percent of the New York metropolitan-area workforce.
39. On oil-related industrial growth, see James C. Williams, *Energy and the Making of Modern California* (Akron, Ohio: Univ. of Akron Press, 1997) and Fred Viehe, “Black Gold Suburbs: The Influence of the Extractive Industry on the Suburbanization of Los Angeles, 1890–1930,” *Journal of Urban History* (November 1981): 3–26. On processing of citrus, H. Vincent Moses, “G. Harold Powell and the Corporate Consolidation of the Modern Citrus Enterprise, 1904–1922,” *Business History Review* 69 (Summer 1995): 119–55, and the special issue of *California History* (Spring 1995) on Citriculture and Southern California. Though citrus is a necessary part of the history of agricultural processing in southern California, the output of the state’s Central and Imperial valleys also includes enormous volumes of nuts, vegetables, and fibers, and much of that output is processed or packaged in greater Los Angeles; a comprehensive history of this sector is yet to be attempted. Nor have the region’s aviation and aerospace industries found their interpreters, but for an overview, see “Aerospace” and “Aircraft Industry,” s.v., in Pitt and Pitt, *Los Angeles A to Z* (see n. 5).
40. Chicano/Chicana studies have a slightly longer record than industrial archeology, dating from the late 1960s. The intersections of class and ethnicity are one of the main themes in this literature, notable recently in the multiple prize-winner by George J. Sanchez, *Becoming Mexican-American: Ethnicity, Culture and Identity in Chicano Los Angeles, 1900–1945* (New York: Oxford Univ. Press, 1993). The job lives of agricultural workers have come in for substantial attention, not least because the farmworker struggles led by Cesar Chavez helped to stimulate the emergence of Chicano/Chicana consciousness and the academic efforts to contextualize and advance that consciousness. Industrial workers have received less attention to date, and even those studies that directly consider the work lives of Mexicans in Los Angeles tend not to enlist material evidence in the effort to interpret workplace changes, such as Luis Leobardo Arroyo, “Industrial Unionism and the Los Angeles Furniture Industry, 1918–1954,” (PhD dissertation, UCLA, 1979). Thanks also to Professor Arroyo for enlightening discussions on Chicano/Chicana history.
41. Henry-Russell Hitchcock, *Rhode Island Architecture* (Providence: R.I. Museum Press, 1939). In contrast to Klein, Dolores Hayden, *The Power of Place: Urban Landscapes as Public History* (Cambridge, Mass.: MIT Press, 1995) attempts to recover the social history embedded in some of the places of Los Angeles, and even in some remnant shards of places. Chapter 5, “Workers’ Landscapes and Livelihoods,” addresses some of the workplaces that have been buried or obscured by 20th-century development (e.g., agriculture, early petroleum extraction). It does not include large-scale industrial settings like the Alameda Corridor except perhaps by inference as part of the vernacular landscapes of work.
42. *City in History*, 510 (see n. 18).
43. Norman M. Klein, *The History of Forgetting: Los Angeles and the Erasure of Memory* (London: Verso, 1997) explores the physical destruction of historic landscapes in LA in relation to purposeful erasure of memory in the realms of public policy, popular culture, and literature. I mean to extend his insights by noting as well that scholars like Mumford have also razed or at least shunned the evidence of history in LA.