
Designing History: An Integrated Studio Approach

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INTRODUCTION

In architectural education, the idea of the “integrated” studio is nothing new; structures, materials and construction, and environmental controls are routinely combined with design in a studio setting intended to provide students with a more unified approach to practice. Typically absent from such partnerships, however, is history. Nearly two decades ago, Stanford Anderson, sensing the “increasing divorce between the discipline of the history of architecture and the discipline of architecture,” organized a session at the annual meeting of the Society of Architectural Historians to explore the ongoing “relations” between the two. The response, Anderson noted, was impressive but also worrying, since most contributors were inclined to view them as completely separate undertakings.¹ The passing of time has only made the situation worse: historians teach history and architects teach design and *ne’er the two shall meet*. Lost in the middle are the students who are required to take history courses but never told how this material can be applied during their professional careers.

This paper has a simple objective: it reports on an effort at the University of Utah’s School of Architecture to team-teach a history and design studio course, one that would bring historical analysis to bear directly on the students’ design process. Because studio “integration” in the school characteristically excludes history, we found it necessary to teach two parallel courses, one in history and the

other in design, rather than joining them together in a single studio offering (a partition that greatly impacted the outcome of the project). Thomas Carter’s Architecture of the American West history class and Anne Mooney’s graduate design studio, Running Headers

Towards a New West, were the vehicles for the collaborative experiment. The point of intersection was Butte, Montana, a city of considerable historic and architectural importance because of its connection to the western mining industry. At one time Butte, located on top of what historians have described as the “richest hill in the World,” was the second largest city west of the Mississippi, second only to San Francisco. Carter’s students, as part of their general survey of western American building traditions, focused their term research on Butte’s historic architecture, while Mooney’s used Butte as the site for their studio design projects. The first section of this paper looks at the general disconnect between history and design pedagogies; we then describe at some length how the two courses were organized, how the work was conducted, and what results were attained; and finally suggestions are offered for taking this experiment further by more effectively combining the work into a single studio.

What we have found is that students tend to prioritize learning in a way that isolates “design” from vitally important aspects of the “design process,” most notably the ability to place themselves and



Figure 1. Image of Butte, Montana looking south

their buildings within the landscapes in which they live and work. If we are truly interested, as a recent ACSA report recommends, in “interdisciplinary design projects,” then we must construct studio situations in which such interdisciplinary work can be introduced and legitimized.²

MAKING HISTORY RELEVANT

The biggest obstacle to unifying the architecture curriculum lies in the area of history (we will use history throughout to refer to architectural history). History courses in architecture schools have traditionally been viewed as “service” courses whose function is judged both subordinate to and separate from the design sequence. They provide students with an overview of the chronological development of architecture as a profession and usually emphasize changing formal/stylistic movements set against the larger backdrop of the history of civilization.³ At its best, such history stresses the fundamental connection between culture and architecture, forging in students’ minds a bond between people and their buildings.⁴ At its worst, it becomes, as Dell Upton has suggested, simply a subliminal, legitimizing story, one that reinforces the profession’s fragile sense of self-esteem by repeatedly showing how its story exemplifies the “triumph of high culture [the university-trained architect] over low [the craft tradition of the building trades]”⁵

Either way, the fact remains that history lies outside the pale, a second-class player in architectural edu-

cation. The ascendancy of modernism in the 1950s and 60s (years that also witnessed the rapid expansion of architectural schools across the country) only exacerbated the problem, replacing an older Beaux Arts appreciation for historical research with a newfound presentism that questioned more than ever the place of history in the design curriculum.⁶ The movement in recent years toward “contextualization” has kindled increased interest among students in everyday landscapes, both past and present, but there exists no effective system for transferring information from the history classroom into the studio.⁷ Historians do not have the time, training, or for that matter inclination to add design components to their lecture classes and seminars, and for their part the same goes for design instructors—they are not trained to become historians. In the end, whatever opportunity we may have for interdisciplinary crossover is missed, and again students are left with no clear understanding of the connections between history and studio.

Recently, architectural historian Abigail Van Slyke has argued for what she called “a history that works.”⁸ What she means is that for history to be viewed as a tool students can add to their design kit, they need to believe that it can lead to some kind of action, that it has some obvious relevance to their work as architects. For architectural historians, the research process leads to a particular end, a piece of writing, a book or an essay. The past is interpreted (an action) that ends in a product (in this case a scholarly publication). For architects, the historical research process may be intrinsically interesting, but it lies outside the scope of their immediate need, which is to design and build buildings. Finding a “history that works” for design students is to find a way to link historical research to the design process itself. In short, we need to bring history into the studio.

Unfortunately, when this happens at all these days, it is usually in the form of “precedent” study. Precedent studies, routinely substituted for historical research, are characteristically superficial (students select several examples of building types that address issues similar to their own, etc.) and invariably focus on the formal rather than the impact a work of architecture may have on the cultural identity and cultural experience of a people or place. In the studio, such studies are not really doing historical research of the kind that can make a mean-

ingful difference, for they fall short of tapping into the underlying social and intellectual currents that constitute everyday life. One of the strengths of the design studio is that it addresses the need for students to engage themselves emotionally in their work. History must become part of the equation.

For this to happen, we believe two things must take place. First, architecture students must be made to recognize their intimate connection to history. Design is a form of landscape intervention: when architects design and build a building they are inserting both the building and themselves into the historical fabric of a place. In this way, contemporary architects are no different than those of other eras, as they design and build they make history—and bring meaning to the built environment. Second, architectural educators can develop “applied” history studios like the one attempted last fall, settings where students can incorporate the results of their historical research directly into the design process. If they see their role in making history (and embrace its symbolic implications), and if they can see how history can in fact “work” for and not against them, then we will have come a long way in creating a more humane profession.

An Integrated Approach

During the fall semester of 2008, architectural professor Anne Mooney and historian Thomas Carter decided to conduct an experiment in design studio/history class “togetherness”. Each instructor felt that something was missing in their courses: for Mooney it was the lack of a substantive historical research component in the design process; for Carter it was the perceived irrelevance of historical research to the design process. Perhaps, they thought, by coordinating the work in their two classes they could not only elevate the level of interdisciplinary discourse in both but also, in keeping with the priorities of a professional school (which is after all to train architects), intensify the possibilities of new architectural expressions grounded in a series of specific historical and contemporary conditions. The site for this experiment was Butte, Montana.

Butte contradicts basic assumptions of what the West is about—an aspect of the town that made it particularly attractive as a study/building site. For one thing it is intensely urban. Butte began life in the 1860s as a rambunctious silver mining

camp, but quickly (within twenty years) became a full-fledged industrial city, complete with a sophisticated downtown commercial district, numerous mansion houses for the local elite, and a series of ethnically- and racially-defined neighborhoods all set within a network of hoist houses and head frames. This above-ground infrastructure serviced an expansive underground landscape—literally hundreds of miles—of mine shafts and stopes. The discovery of the world’s richest deposit of copper in 1882 completed the economic transformation of the town and region; by 1920 Butte had a population of nearly 120,000 and along with the adjacent city of Anaconda, constituted one of the most heavily industrialized areas of the United States. The shift in the 1950s to open-pit mining prolonged the life of the city, but only slightly. By the 1970s, a dramatic drop in the price of copper precipitated a crisis in the industry. The pit officially closed in 1975 and the city quickly fell into decay—the bust followed the boom with a vengeance.⁹

Today Butte stands as a mere skeleton of its former self. The population has dwindled to about 30,000, the insatiable appetite of the pit devoured a good deal of the city, and empty lots now outnumber the houses and stores. Still, the bones of the city remain as one of the most fascinating architectural landscapes in the West. Not only is there an incredible number of surviving buildings from the late nineteenth and early twentieth centuries, but the presence of the pit, which has a surreal, specter-like quality, defines many of the region’s central issues—the despoiled land, the detritus of development, the question of saving the past and embracing the future. The complex contradictions of Butte’s landscape drew our attention, and made it a perfect location to pose our question: how can the study of Butte’s past be applied to designing for the city’s future?

History is more than a set of names and dates moving through time. Though historians often deny it, theory remains central to their project; it is theory, a proposition that leads to a particular line of interpretation, which makes the past meaningful. For Carter’s class, the organizing proposition was that the history of architecture in the American (post 1800) West is best understood sociologically as “constructed space.” Particularly American value systems (ideological structures) were and are projected onto the land in the form of buildings and other features

that communicate (symbolize) these widely held ideas. To understand what is “western” about western American architecture, historians must focus on discovering the relation between structure and function, between idea and meaning. In short, they must pay attention to the “design process” by which Americans shaped this newly appropriate region for their own socio-economic purposes.¹⁰

Stated another way, Carter asked his students to view western architecture first in terms of what Americans beginning in the nineteenth century “asked [this newly acquired territory] to do and be,” and then suggested that they consider the architectural landscape as the product of four basic mythic structures: the West as Eden (garden), the West as Conquest (subjugation), the West as Commodity (profit), and finally, the West as Refuge (renewal). His course was intended to highlight the impact these mythologies had on the creation of a western American architecture. Students were required to take two exams and prepare term research papers. More importantly, they were asked to transpose this idea of “social construction” to their own design work: they were asked to think of what demands their own work would have on a place like Butte, Montana. What are the myths that will shape a new American West?¹¹

Anne Mooney picked up this question in her “topics” graduate design studio. In the studio, students were again asked to consider not only the older structuring myths of the West (the lessons of history) but also about new ones and how they could be used to address the exigencies of a new western social order. The studio was organized so that students would be able to ground their design work within the framework of history, but also allow them to apply the lessons of “past constructions” to come up with their own formulations of the region and its evolving identity. This foundational work provided a historical benchmark while freeing students to experiment in finding a new contemporary relevance for today’s architecture. Through the studio design work these emerging stories could find expression and begin to define new possibilities for the West.

The studio course began with a series of readings and the Wim Wenders’ 2005 film, *Don’t Come Knocking*, which served to deconstruct not only the western film genre but also some of the romantic assumptions about the West itself. The film

was chosen to get the students thinking about the “regional” identity of the place and how it is perceived from both the inside and outside. The studio requirements involved completing a series of two- and three-dimensional design exercises that challenged students to an imaginative rethinking of the intersection between architecture, culture, and the American West.

One of the most important collaborative efforts of the semester was a field trip to Butte. During the four day excursion, students and professors from both courses traveled to Butte to analyze its architecture and history. Butte’s distinctive urban landscape, its rich stock of buildings of all kinds, colorful signage, colorful people, and its untapped, largely preserved potential were all considered. The detritus of industrial development especially fascinated the students and led to a sense of wonder and intrigue. What was this place? And how could it have changed so rapidly from what it was to what it has become? As time was limited, bigger issues had to be put aside and attention drawn toward individual projects. Students had selected research topics before leaving Salt Lake; history topics included everything from a chronology of urban development to the establishment and maintenance of ethnic neighborhoods and boundaries, while the design students were asked to select a site with either an infill or edge condition. Once they landed in Butte and got over their initial culture shock, they were to finalize their site selection and begin field and archival research. Ultimately this proved too much to ask: there just wasn’t time. Fairly early it was decided that students should concentrate on gathering as much background information as possible on their sites before turning to historical research. Still, the format of hybrid studio–history seminar does allow studio faculty to encourage a more careful analysis of the site through a more seamless integration of historical and contextual research.

The conditions encountered in Butte are representative of urban challenges faced throughout the United States and this gave the undertaking a certain timeliness that dovetailed with the theme of the history course, the de-romanticizing of western American history. In the west, the frontier quickly gave way to “strip mines and strip malls”¹² –and to cities like Butte--with its elaborate mining architecture, its plentiful brothels, and segregated ethnic neighbor-

hoods. The fieldtrip made the need for new stories more apparent than ever, and during the long van rides (Butte lies some 300 miles north of Salt Lake City), communal meals, and late night conversations, a number of themes arose: environmental sustainability, land reclamation, cultural renewal, population density, gender equality, and ethnic diversity were a few of the ideas students' felt could serve as new mythological structures for the West.

It should be said too that Butte city officials and local business people and residents cooperated in opening various buildings and historical archives to the group and in coordinating tours and site visits. Students were specifically asked to assess the needs of the city and to develop possible scenarios of architectural intervention which could address pressing issues such as a lack of services for uptown residences, weak economic conditions for small businesses, and an aging population with health concerns. Individually students began to develop these program scenarios to respond to their particular site's physical, historical, environmental, economic and social conditions. Specific programs developed including a market and café, housing, community auto repair shop, a business incubator, tourism office, art gallery and artist workshop with living quarters, education programs, a theater, and a recreation and fitness center. Each student's work was developed alongside existing city facilities, abandoned structures and even the pit.

Back at the University, things settled into the normal routine. In history class, lectures and readings explored the architectures of Eden, Conquest, Commodity, and Refuge. In studio, the first assignment asked the students to design and construct a "repository" of experience derived from the Butte visit and the study of its history. This conceptual device was a non-architectural expression of the student's research to date and was intended to embody their experience of the place. The heuristic value of this exercise lay in getting them to translate ideas into form and to begin the exploration of a new formal language, one well-grounded in research. These repository objects served as a vehicle to interpret the philosophy and nature of a student's developing project narrative. For example, using a toolbox found near her site, Shalae Larsen created an interactive site analysis that unfolded in a sequence to tell the history of Butte.



Figure 2. Photo of repository by student Shalae Larsen

The adaptive-reuse of this found object informed her choice of urban site and inspired the design of her repository, which was based on the myth of commodity and incorporated a photographic narrative of the site printed on cardstock and connected with electrical tape and hinges. Shalae's repository exhibited the understanding of place that one gains in the manipulation of the object. This early exercise later led to her development of an architecture which also conveyed a sense of "unfolding," defining the manner in which the building occupants and visitors interact with the spaces.

Using another found object, student Cesar Caballero inserted a garden of wheatgrass into a discarded transformer box and wired it for light. Later in the semester this "repository" led to his adaptive-reuse of an abandoned mining head frame that he transformed into a new civic monument, a public park and recreation center for Butte. In both cases, the intersection of the industrial and the natural worked together forming a new symbiotic relationship.

From these repositories, themes began to emerge in the students' design projects that were directly tied to their history coursework. These themes included spatial models derived from the camp fire

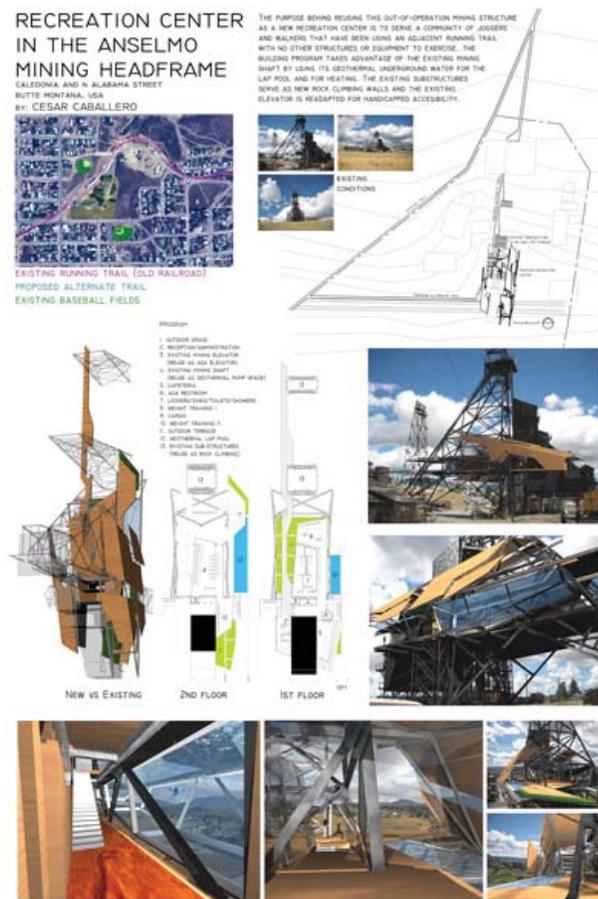


Figure 3. Design work by student Cesar Caballero

(the symbolic hearth), mining typologies (the intersection of above and below ground spheres), studies of the western false-front façade (the Edenic quest for civility), the presence of the parlor (women's gendered space), and the foregrounding of ethnic identity (in the face of conquest by the Anglo-majority). Many responded to the demands of Butte's economic and ecologic crisis, incorporating an evolving and convincing narrative of sustainability and a re-examination of how western resources are exploited. Predictably perhaps, sustainable design came to the forefront as a major new "mythology" for the American west. Students integrated green strategies into every aspect of their architectural responses, from programming, to site, materials selection, and to form-making. The history class and the studio were both engaged in creating narratives based on the introduction of

an environmental ethic with its accompanying architectural response for the troubled town.

By the time the mid-term review came around, it was increasingly evident that much of the student work was moving into the realm of the pre-conceived, previously-known design vocabulary and away from the stated goals of the studio. One reason for this may lie in the fact that in history class students are asked to learn basic information (in this case past architectural expressions of mythic structures) and then essentially repeat it on the midterm exam, so they were accustomed to sticking to the main ideas of Eden, Conquest, Commodity, and Refuge and thus were following suit in the studio. It may be too that studio teaching tends to focus on "formal" qualities of architecture (shape, massing, etc.) and not on intangible, symbolic thinking. This is an aspect of the experiment that needs further thought, but clearly students felt uncomfortable with moving forward, to truly embrace the idea of putting their stories into practice. To counter this reluctance, Mooney devised a two-week charrette that would combine a writing exercise (what the West means to me) with a large-scale (1/2" = 1'-0") façade section design.

By shifting to another scale (focusing on the principle elevation) and reinserting the question of meaning (what the architecture of the New West might be) the students were forced to address their designs in a less superficial, more rigorously detailed manner. An elevation study at a large scale is an assignment rarely confronted by today's design students, who are more typically working with digital or analog massing forms and in developing key spatial experiences in perspective. This exercise, inspired by another era in architectural education, reflects a time where the process of façade development - proportions, decoration, and articulation - was at the forefront of design consciousness.

As the studio returned to its design problems post-charrette, the projects began to exude a heightened clarity and cohesion. It was always the hope that through a history-studio collaboration a new set of vernacular responses could begin to emerge based on the historical layers of the site. This began to be seen in the work of students like Shanshan Lou who created a project for a small business incubator in Butte's historic Chinatown district. The architecture



Figure 4. Rendering of business center for Butte's Chinatown district courtesy of Shanshan Luo

incorporated traditional Chinese building elements and featured an exterior glazed skin of colored glass specified with the brick color extracted from surrounding masonry structures. Lou's project strives to foster community by bringing together diverse people for economic and social support in an environment with links to history, culture and context. In stark contrast to this highly contextual response, student Casey Sinner's design offered a counterpoint to the historical. His work literally hangs from its context - steel remaining from the burned and abandoned site - forming a new architecture rooted in the past. Sinner's project was to serve the arts community, providing art education and gallery space in a building designed as a lens for residents to view their city with a new perspective. Its modernist language and gravity-defying footprint bring an entirely new vocabulary to the city.

In architecture meaningful projects that are equally grounded in the past as in the future are rare. There is an overarching emphasis on the future of architecture and its formal possibilities—in what is new versus what has already been done. This desire for pure invention with a wholesale abandonment of the past could be replaced with a deeper



Figure 5. Image of the site courtesy of student Casey Sinner

level of invention, grounded in place and imbedded in culture and context. The trick is to get students to quit thinking of history as something static, unchanging. In fact, history is itself all about change and how people in the past found solutions to their problems. The problems may change, but the need for creative solutions remains. Carter's class, asking the students to think of history as a dynamic process of intervention, and to think of themselves as players in this process, has the potential to integrate history into the design studio. The alternative approach outlined in this paper integrates history and studio by demonstrating to students that the new always emerges from an understanding of what came before, not only in terms of form (looking for useful elements in past landscapes) but also in process (the dynamic act of bringing ideas alive through architectural design). The work of this collaboration finally led to the recognition that ultimately the West is an invention; it is what people have asked it to be. This became critical as students realize their role as future leaders who will make their own mark on the landscapes which they will touch.

ENDNOTES

1. Stanford Anderson, "Historiography and Architecture I," *Journal of Architectural Education* 44:3 (May 1991), 130.
2. ACSA Report for the Accreditation Review Conference (ACSA 2008), 6.
3. See Keith N. Morgan and Richard Cheek, "History in the Service of Design: American Architect-Historians, 1870-1940," in *The Architectural Historian in America*, ed. by Elisabeth Blair MacDougall (Hanover: University of New England Press, 1990), 61-75.
4. The literature here is voluminous. See such works as Amos Rapoport, *House Form and Culture* (Englewood Cliffs, N.J.: Prentice-Hall, 1969); Anthony D. King, ed., *Buildings and Society: Essays on the Social Development of the Built Environment* (London: Routledge and Kegan Paul, 1980); Neil Leach, ed., *Rethinking Architecture: A Reader in Cultural Theory* (London: Routledge, 1997); and Kim Dovey, *Framing Places: Mediating Power in the Built Environment* (London: Routledge, 1999).
5. Dell Upton, "Architectural History or Landscape History," *Journal of Architectural Education* 44:4 (August 1991): 195-199.
6. See J.A. Chewning, "The Teaching of Architectural History during the Advent of Modernism," in *The Architectural Historian in America*, 101-110.

7. See such works as John Chase, Margaret Crawford, and John Kaliski, eds., *Everyday Urbanism* (New York: The Monacelli Press, 1999) and Steven Harris and Deborah Berke, *Architecture of the Everyday* (Princeton, New Jersey: Princeton University Press, 1997).

8. Abigail Van Slyck, Buildings, Landscapes, Cultures Symposium, University of Wisconsin-Milwaukee, June 2008.

9. See Michael P. Malone, *The Battle for Butte: Mining and Politics on the Northern Frontier, 1864-1906* (Seattle: University of Washington Press, 1981) and Michael P. Malone and Richard B. Roeder, *Montana: A History of Two Centuries* (Seattle: University of Washington Press, 1976), 247-250.

10. See Thomas Carter, "Introduction: A Theory for Western Vernacular Architecture," in *Images of an American Land: Vernacular Architecture in the Western United States* (Albuquerque: University of New Mexico Press, 1997), 3-18; William Cronon, George Miles, and Jay Gitlin, eds., *Under an Open Sky: Rethinking American's Western Past* (New York: W.W. Norton, 1992); and Robert Hine and John Mack Faragher, *The American West: a New Interpretive History* (New Haven: Yale University Press, 2000).

11. See Richard Hughes, *Myths America Lives By* (Urbana: University of Illinois Press, 2004); Donald Worster, "Beyond the Agrarian Myth," in *Under Western Skies: Nature and History in the American West* (New York: Oxford, 1992), 3-18; Carolyn Merchant, "Reinventing Eden: Western Culture as Recovery Narrative," in *Common Ground: Rethinking the Human Place in Nature*, ed. by William Cronon (New York: W.W. Norton, 1985); William Cronon, "Kennecott Journey: The Paths Out of Town," in *Under an Open Sky*, 28-51; Richard Hughes, "The Myth of the Millennial Nation," in *Myths America Lives By*, 91-109; Roderick Nash, *Wilderness and the American Mind* (1967; revised ed. New Haven: Yale University Press, 1973); and Eric Hobsbawm, *The Invention of Tradition* (Cambridge: Cambridge University Press, 1983).

12. Katherine Roberts, "Continental Divide—A Western State of Mind," *New York Times*, September 14, 2008.