# Information Location

ERIN MOORE
University of Arizona

## Site

Site should be easy. It should be a reassuringly stable place from which to take a bearing, to orient, to begin. For architects, design starts here—with a site plan, a site visit, a map.

The information of site is something to design from. It is the primary data that limits and expands design possibilities. Architectural propositions are generated based on what the designer knows about a place—on climate, on soil type, on local needs, on adjacent building scale. An architect brings a neat package of program and preconceptions to a project. Site research, among other factors, serves to arouse a design that goes beyond a universal solution or a fulfillment of square footage requirements.

The problem is that while a site's existence is easily confirmed, its fundamental nature is infinitely elusive. Like the photon that is observed through its effects but never in actuality, or like the recounting of a story that reveals more about the teller than the event, a site cannot be more of a place than we know how to describe. A site in its imperceptible wholeness cannot be understood beyond its individual, definable layers—layers of projection more than distillation.

Specifically, architectural site is a construction.[1] No matter how much a designer researches site conditions and no matter how analytically or diligently she gathers data, site information can be no more than a document of valued perception. By choosing to document sun angles, set backs or sounds, the designer creates a unique vision of a place. The process of gathering site information and then re-representing a place is an act of taking sides, of political positioning.

## Site in Practice

Carol Burns acknowledges a transition in the conception of site in recent historical architectural practice. In "On Site: Architectural Preoccupations," she argues that the

> present status of site as a shaping force within architecture is a reaction to the mainstream ideology of modern architecture. Called "the International Style" or functional modernism," the names given to modern architecture betray a concern for universalizing issues unrelated—even opposed—to those arising from the specificity of a given place. . . . Reactions against the resulting widespread homogeneity are evident in diverse architectural responses of the last twenty years.[2]

In the face of mass produced building components, universal standards of practice, and global branding of architectural icons, it is not clear that architects really have found a way to produce a diversity of architectural responses or a suitable reaction to the homogeneity that Burns names. Building materials and types, at least in global metropolises, are not particularly recognizable as unique to a region, culture, or environmental climate. This may be, as Burns implies, a symptom of industrial modernity. While this may be the case, it is also true that a culture of site analysis is still part of design practice. Many architects do try to use site information as a generating force in their designs.

For this process, the challenge is twofold. First, what are the boundaries of an architectural site? Discourses in globalization and transurbanism blow open the scale of architectural influence in both space and time. Global theorists deconstruct transcontinental spaces as fast as they can define them. Networks and flows replace cartographic location. Significant adjacencies are as likely to be across an ocean as on the next city block. World topography is smoothed out in measures of communication and transportation and then is fragmented in measures of power and enfranchisement.

Constructions of place as simultaneous global and local condition defy conventional means of architectural site analysis. A scaled and measured site plan has little room for information from outside its physical boundaries. The edge of the general plan marks just one layer of physical adjacency. The contextual information is singularly formal. In its most extreme, the conventional site document can be read as a manifesto for a static modernity of freestanding object-buildings. The objects are global in their placeless universality and, at the same time, discretely self-referential.

The second challenge in generating design from site information is temporal. How can the site be framed in measures of time? Here again the convention fails. In the ultimate failure of architectural control, the paper plan cannot account for a building's imminent transformation, degradation, and possible redefinition.[3]

The reduction of site in architectural practice through two-dimensional site representation may be just what Mark Wigley disclaims in "Resisting the City:"

> We could ask architects to stop crying about the city, demanding that they bravely embrace the essential indeterminism, instability, immateriality, ephemerality, gaps, confusion, and strangeness of urban life. We could call for order and overload could become the role model—every architect turned into a surfer, riding rather than resisting the flows.[4]

In academic practice (in university studios and in their related ateliers), designers have risen to the challenge of accounting for global and temporal information in site documentation. In these cases, the nomenclature changes; this is a process of making a map rather than of making a plan. In this kind of practice, a map is a site document that may include information beyond physical adjacencies or particular moments in time.

In replacing the site plan with the site map, or more specifically, when mapping replaces the diagram, designers can take on both the overload of site information and the problem of temporal space. The process of mapping and the extension of mapping into parametric design are ways to incorporate diverse scales and types of information and to tackle predictable change in site representation.

While mapping site may broaden a designer's ability to understand a place and its interdependencies, the process is just as much an act of site construction. As long the designer uses research and mapping as part of the creative process—as part of the re-representation of place that may become the design proposal—the document or the proposal can be read as an evaluative point of view.

Mapping must be understood as just one more lens through which to view information. In fact, it is the viewing distance from interpretation to site that makes it possible to abstract the place enough to make a map.

**Site Mapping**

Rem Koolhaas and the Harvard Project on the City's yearly investigations of cities and regions are a case in point of both the usefulness of the methodology for mapping site and its pitfalls. In "Mutations," Koolhaas and his colleagues document their research on two metropolises and also on "the impact of shopping on the City."[5] The book uses graphic representations of population in specific cities, for example, to measure their condition in time and quantity. In this way, the document begins to encompass huge amounts of information, measured within temporal scales. In its breadth, the book is a montage of graphics and narratives that actually suggest multiple readings of the research, and therefore multiple readings of the cities.

In the book's introduction, Koolhaas indicates that the research was conducted in order to find ways to "document and understand the mutations of urban culture in order to develop a new conceptual framework and vocabulary for phenomena that can no longer be described within the traditional categories of architecture . . ."[6] The research was not conducted as a basis for designing in the places represented. At the same time, the document is a design *of* the sites. In re-representing the Pearl River Delta and the city of Lagos, Koolhaas and his colleagues make a document of their perceptions of the place and its relationship to the authors and their geographical and cultural positions. And, like any architectural proposition, it must be judged relative to its embodied values rather than on a supposed accuracy.

It is easy to question Koolhaas' choice to map such archetypical examples of the ultra-foreign metropolis. In "Transnational Trespassings," Ananya Roy categorizes this type of research (though not these particular examples) as "aesthetic imperialism," implying that institutionalized academics find something inherently romantic about the supposed primal poverty of these cities.[7] It is appealing and common to choose a distant city to represent as architectural site document. The primary reason for this trend is not aesthetic appeal.

Mapping is an exercise in abstraction. In documentation, infinite information is distilled down to the mappable. Representation is only understandable through the distance between the real place and the parallel document. To be able to identify the systems of a city, the viewer requires some unfamiliarity. Distance is a tool, in this case, for generalization, regardless of accuracy.

It might seem as though Koolhaas chose Lagos as a site because it has more of the time-space, "environment as vector not container" phenomena he hoped to map—multiplicity and contradiction, bottlenecking and diversion, growth and decay. He could have done this anywhere. But, if he had chosen an institutionally familiar city—New York, Cambridge, Los Angeles—the representation would have been unrecognizable to residents of the mapped city.

It is not that mapping requires a degree of ignorance. In fact, site information is fractal—the closer you look, the more you see. From a distance, systemic phenomena are revealed. Up close, the systems are just as complex. For some reason, large-scale flows and phenomena are most charismatic for architects—tidal flux, industrial production, erosion, platting. It may be both the possibility of abstraction and the appeal of large-scale systems that make aerial photography popular in the discipline.

Aerial photographer Alex MacLean's work does just what Harvard Project on the City's documentation achieves. MacLean's photographs filter a site through distance and establishment of boundary. The resulting site recounts a chronological story of erosion, growth and human intervention. Each photograph contains a few interpretive narratives, varying only in the viewer's degree of familiarity with the frozen phenomena.[8]

In the photograph "Wheat Strips on Plateau, Cutbank, Montana"[9] MacLean shows alternating dark and light swaths of cultivated land surrounded by eroding hillsides. The image reveals a unique geometry of industrial architecture—oblong and repeating, in this case—and the excavated material of surrounding hydrological erosion. The photo is most revealing at the points where the hillsides meet the fields; the fields trace an imperceptible edge that follows the limits of the hillside gulches. These patterns are revealed in the photographic distance between the viewer and the ground.

Documenting an unfamiliar city or landscape is a performance of discovery. Koolhaas presents the scholar with a new point of view that is dependent on presenting a new-to-you place. The overview that MacLean provides is also a privileged glimpse into the unfamiliar. This is the use value of mapping. The process of re-representing information gives the scholar something that did not already exist in the city or landscape that she imagines.

Unfortunately, in the case of Koolhaas' Lagos project, many of the tropes are recycled and serve to re-establish loaded perspectives on the urban city. How might Koolhaas and his colleagues have surpassed stereotypical measures of population explosion and urban migration (along with the implied under-development and deprivation)? How, in their search for ways to describe their view of the

city as a condition of "virulent change" that defies geometric measure, can they avoid simply collecting evidence of this preconception?[10]

In researching and representing architectural site, designers must find ways to collect data that they do not expect to find. Mapping should be an exercise in surprise, rather than in confirmation. The process of abstracting and representing site must expand rather than reduce or rehash possibilities for interpreting and imagining space. Site mapping cannot become a more detailed and (falsely) more accurate representation of a place.

New forms and systems become visible in mapping processes that systematically re-combine or distill information. The designer can choose the methodology. The outcome must be unpredictable. The resulting landscape is entirely new. It is closer to neither the existing physical place nor the architect's initial understanding of its systems.

Rigid methodology, rules, or the "abstract machine" can replace the distance of the outsider or the aerial photograph as a means to abstract information.[11] Still, even if this kind of map succeeds in defying preconceptions, it is no more a one-to-one recreation of actual site than any other site document. Again, the systematically generated map is an act of removal and distance. And again, the choice of information to map, its limits, and the rules of documenting the data must all be infused with the value system of the designer—a rich artifact of interpretation.

**Site Geometry**

In practice, a site plan or map adopts the geometry of the tools of the documentation; by extension, land is imprinted with the shape of its measure. Lot lines and the roads that follow the edges of townships are as straight as a surveyor's transit can measure. Site grading in new housing developments are no more complex than a civil engineer can draw. These are Cartesian geometries—static buildings grounded on fixed points. The examples come from conventional site plans, the kinds of plans that are better for documenting location than for communicating variables.

But what happens when site planning becomes site mapping? What happens when site maps include parametric information, when maps include uncertain change over time, interrelated variables, quantifiable or unquantifiable phenonemena? I could call these *functional maps*, adopting a term from environmental planning that is used to describe a map that documents relationships on top of dimensions. This kind of map, for example, might document a functional rather than a physical relationship between a particular wetland and its greater watershed.

Just as site plans inscribe particular geometries on the landscape, functional maps must also come with their own tendencies toward certain kinds of inscription and partitioning of land. To begin to imagination the form that land might take when its surveyors and cultivators are guided by functional maps, it is useful to consider the geometric study Stan Allen makes in "Points + Lines, Diagrams and Projects for the City:"

Allen describes a geometric order he names "field condition." To Allen, a field is "any formal or spatial matrix capable of unifying diverse elements while respecting the identity of each."[12] In these cases, the parts are ordered by local connectivity rather than by externally imposed geometry. This is the kind of ordering by which trees are spaced in a forest; each tree is located a distance from the next one dependent on a series of variables including available light and other resources.

The geometries of Allen's fields are the geometries of parametric relationships. If it is possible to imagine the shape of related variables, a field might be the closest thing. The geometry of a map, and so of Allen's field, must be a geometry of parts rather than of an overarching order. Is this geometry different than that inscribed (on paper and on land) by a surveyor's transit and triangle?

Alex MacLean's photo, "Wheat Strips on Plateau, Cutbank, Montana,"[13] documents the intersection of both geometries. Eroded hillsides embody systemic, functional relationships between water and earth. The form of those hillsides comes from the intersection and character of those parts. The plantings themselves are generally ordered by the particular geometries of agricultural machinery, cultivation and efficiency. All the same, the order of the tools of industrial

agriculture breaks down at the edges where planted rows meet eroded hillsides.

This description of the geometry of MacLean's image is a description that could be applied to many landscapes; land can be read in measures of human inscription and in measures of the functional relationships between its parts. As architects look for ways to include functional relationships—and so temporal, systemic change—in their site documentation, how will this also change the way that architects inscribe their ideas onto the land?

**Endnotes**

[1] This is not to be confused with Carol Burn's definition of "constructed site." In the context of her article, *On Site: Architectural Preoccupations*, "constructed site" means one in which the architect has acknowledged and responded to local conditions. This is in contrast to her "cleared site," the case of a design project that denies the site except to act upon it.

[2] Carol Burns, "On Site: Architectural Preoccupations," in *Drawing/Building/Text*, ed. Andrea Kahn (New York: Princeton Architectural Press, 1991), 148.

[3] Even if the site plan does not show it, in *Architectures of Time: Toward a Theory of the Event in Modernist Architecture*, author Sanford Kwitner makes a convincing argument that modernist architecture did incorporate radical perceptions of time in its designs. (Cambridge: MIT Press, 2002).

[4] Mark Wigley, "Resisting the City," in *Transurbanism* (Rotterdam: NAI, 2002), 104.

[5] Rem Koolhaas and the Harvard Project on the City, *Mutations.* (Barcelona: Actar, 2001), 19.

[6] *Ibid*., 19.

[7] Ananya Roy and Nezar AlSayyad, ed., *Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia. (Transnational Perspectives).* (Oxford: Lexington Books, 2004).

[8] James Corner and Alex MacLean, *Taking Measure Across the American Landscape* (New Haven: Yale University Press, 1996).

[9] *Ibid.*

[10] Rem Koolhaas and the Harvard Project on the City, *Mutations.* (Barcelona: Actar, 2001), 19.

[11] Outside the architectural practice, Giles Deleuze and Félix Guittari describe this mechanistic process of abstraction in their essay, "On Several Regimes of Signs:"

> Abstracting content is an operation that appears all the more relative and inadequate when seen from the viewpoint of abstraction itself. A true abstract machine has no way of making a distinction within itself between a plane of expression and a plane of content because it draws a single plane of consistency, which in turn formalizes contents and expressions according to strata and reterritorializations.

Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brain Massumi. (Minneapolis: University of Minnesota Press, 1987), 141.

[12] Stan Allen, *Points + Lines, Diagrams and Projects for the City*. (New York: Princeton Architectural Press, 1999), 92.

[13] James Corner and Alex MacLean, *Taking Measures Across the American Landscape*. (New Haven: Yale University Press, 1996), 128.