

## Drawing the Map: Siting Architecture

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In the past two decades, mapping has emerged as one of the favoured means of documentation for architects. Architects question the boundaries of their discipline, circling in on the nature and form of their projects through a series of maps of tangible and quantifiable elements, such as infrastructure, built form, growth, and typologies, sometimes even venturing to address qualitative or less tangible aspects, such as the multifaceted and layered histories of a site. The premise is often that if one can delaminate and map the conditions found on site, then one can achieve a more complex understanding of said site. Hence, like Peter Eisenman and Laurie Olin for their *University Art Museum* at Long Beach, California, mapping allows the architects to include elements ranging from the existing buildings and historic monuments on the site to its geological fault lines.<sup>1</sup> Data are collected, separated, coded, and illustrated in a series of sheets, the ultimate ambition being to embrace many latent characteristics and spatial dimensions of the studied area. If maps can successfully represent sets of complex interactions in an effective manner, they also have an objectifying tendency. While J. B. Harley looked at maps as tools of domination, the social geographer Doreen Massey discussed their propensity to stabilize space-time and 'take the life out of space'.<sup>2</sup> Blaming representation for a condition currently affecting conceptions of space, Massey points to the close connection between processes of representation and their built outcome, particularly as it pertains to the possibility for representation to embody time.

Massey's criticism points to two main issues. Relating 'the map as representation' to 'the map as an agent' in spatial conception, she points to the propensity to disregard the impact that our presumably objective recordings of the world actually project onto the world. Moreover, her comments highlight the ever problematic conception of the relation between time and space, and the shifting tendencies which, over the last two hundred years, have led to privileging first the one, then the other. Through the discussion of two iconic architects' approaches to the same site over the span of forty years, we will introduce some of the implications associated with, respectively, drawing or mapping the site of architecture. While maps, especially as they are used by architects, can be considered a specific type of drawing, for the purpose of this essay we would like to distinguish 'maps' from other forms of graphic expression, which we will classify as 'drawings'. Focusing on drawing and mapping as two modes adopted to delineate architectural interventions, we will approach them insofar as they operate in two distinctive realms. Drawing brings to the fore the phenomenological dimension of architectural graphic representation as it engages architects and viewers set in the thickness of time, an embodied time involving memory, experience, and imagination. Mapping foregrounds another dimension, pointing rather to the epistemology of the project. Maps reveal, construct, and project the *epistémé* against which the project builds itself. Hence, through drawing and mapping, architects do not merely represent an existing world but also

actively project a creative and cultural reading, thereby negotiating the line between representation and projection. In other words, the architect must consider both maps and drawings insofar as they compound past, present and future.

### **Representing Space, Representing Time**

To illustrate the two poles underpinning architecture and its representation, we turn to the work of Carlo Scarpa and Peter Eisenman on the Castelvecchio Museum in Verona. The importance of representation in the practice of both Scarpa and Eisenman, who use drawings and diagrams, respectively, has been thoroughly discussed elsewhere.<sup>3</sup> Scarpa's unique and incremental working method, moving constantly between the physical construction site and the drawing board, could not be adequately considered without his drawings. As such, Scarpa's work is exemplary of what Stan Allen defines as a 'material practice', a type of architectural practice engaged mainly in the physical production of architecture, as opposed to a 'textual practice', which is 'devoted to interpretation and analysis of representation'.<sup>4</sup> Eisenman's work belongs to this theoretical end of architectural practice. Rather than drawings, Eisenman uses diagrams to analyze and 'reason' the project. These diagrams embody the thesis of the project, and, like a type of map, epistemologically position his textual projects.

Working forty years apart, the two architects approached the site from different viewpoints that involved different scales. Scarpa never settled on a privileged viewpoint: his rendered views are always fragmented and his position constantly shifting. He usually combines small sections or axonometric details that surround a central plan or elevation view. On his drawing sheets, elements are cut off or fade out before reaching the edge, leaving room for further development and offering a background to the ideas detailed in the margins. Conversely, Eisenman positions himself high above the site, most often choosing a complete plan view that

allows him to reveal all layers and underlying geometries simultaneously in each drawing. He usually represents the entire project from above, offering the viewers a full understanding of how each piece relates to the other. These distinct viewpoints are associated with different scales. Scarpa's drawings are often drawn at a scale of 1:25 or even 1:1, reinforcing the notion of his inquisitive proximity to the various elements that together constitute the site. For Eisenman, the distance is unmistakably greater, even though the use of computer-generated drawings carries no specific scale. The larger scale is necessary to keep a constant view of the whole, and this privileged viewpoint prevails over a closer attention to details.

These differences in scale and viewpoint are revelatory of a different consideration of the role of architectural representation. Through their graphic representations, both architects offer a translation of the site upon which the project can be conceived, but Scarpa dwells in the tangible while Eisenman thrives in the abstract. For example, Eisenman chooses to extract abstract lines and axes to represent the overall composition of the Castelvecchio, but Scarpa includes the outline of individual stones or the grain of a piece of wood. Consequently, joints and details are of a different nature. For Eisenman, the main joint is that between his project and Scarpa's existing intervention; to Scarpa, they are the elucidation of the encounter of two materials, two walls or two rooms, the coming together of something new with something old, celebrated with materials. Eisenman's viewpoint on the project and its site is often 'outside', at the 'distance' of a plan or an axonometric. When compared to Scarpa's attention to the fragments, Eisenman's position also implies the objectivity of being removed, the reluctance to look at an object from a subjective 'interior'.

Could the different approaches to the site, and consequently to the design, be inherent to the type of representation adopted by the two architects? While

Scarpa draws, Eisenman maps. If Scarpa's decision to draw and Eisenman's interest in mapping arc back to their respective involvement in material and textual practices, they are also indicative of different attitudes to time. In Scarpa's project, the sensibility to time compounds the documentation of materials in their existing weathered condition as well as his movement about them. His aggregate approach alludes to a necessarily incomplete and fragmented view, never fully stabilized, always approximated. Scarpa's drawings are actions and extensions of thought, and as such they do not impose themselves as fully coherent or ever finished. This sense of incompleteness translates to the built project: 'His built projects are moments frozen in the process of refining ideas rather than triumphant conclusion to them.'<sup>15</sup> Scarpa's fragmented drawings are traces of a process that unfolds in an unfathomable time that stretches from historical times through daily visits and unknown futures. Similarly, the work evolves as much between the drawings as it does between the drawings and the constructed project, and his intervention at Castelvecchio continues to age and change even beyond construction. The significance for the viewer to phenomenologically experience the non-totalizing monumentality of the resulting project contrasts with the ephemerality of Eisenman's installation, which can be understood through documentation. Addressing history as an idea that exists outside of time, Eisenman produced a temporary insertion that now most poignantly exists in drawings and photographs. In Eisenman's maps and diagrams, from the first abstraction of the axes of Scarpa's intervention to the recorded series of transformations that he submits them too, time is self-reflexive, internal, and built into the different translations and rotations that make up the chronology of the project. Eisenman's project speaks to the possibility of a finite totality that carries its temporalities internally.

In 'Trace Elements', Stan Allen approaches Eisenman's work through the concept of the index,

suggesting that rather than operating at a symbolic or iconic level, Eisenman implicitly works with the viewer's discovery of a reconstructed relation between a signifier and a signified that hinges on cues embedded in form. While Eisenman's plans are ichnographic traces of movements, they do not point to an actual material presence, but rather to abstract processes of transformations orchestrated by the architect. In this respect, the index points back to the movements of the creative process; an abstract movement in a timeless field that gains precedence over the very elements that initiated the various movements. As Allen argues: 'For Eisenman, design is the inscription of meaning into, or onto, the work by means of a series of more or less rigorous operations carried out by the designer.'<sup>16</sup> But, to echo Allen's question, what kind of meaning is then produced? The index here points back to itself, 'to the structure of representation', and we can only agree with Allen when he suggests that the deciphering work to be undertaken by the viewer locks the experience in a limited present.<sup>7</sup>

Although both architects consciously address the historical and actual context that extends beyond the building, their representations assume a different role in relation to the temporal location of the actual project. In Scarpa's drawings, the architect only developed specific materials, forms, texture, and light, providing moments of an overarching idea but never a synthesis of the overall project. Eisenman's thesis - his constructed fiction - can be read and understood through his maps or diagrams, where he suppressed details to favour the communication of a clear overall argument. Physical movement, that which really occurs in time and carries pasts and futures, is not the focus of his work. Life, the life of a material weathering or that of a viewer returning, is removed from the drawing as the depth of time is flattened out by an emphasis on the design process. Ultimately, Eisenman's representation of abstracted lines replaces the spatio-temporal complexity of the site and becomes the virtual site

of intervention, wherein the ocular and rational view from above prevails over the sensual and heuristic walk through the actual site.

Eisenman's approach to the temporality of a site, and the sensitivity to time that results from this approach, are paradigmatic of the ways in which maps are usually drawn into architectural conception and construction. Heir to the textual practices, architectural mapping is often associated with the possibility to index the 'designer's syntactical code', a possibility coupled with the idea that 'none of the notations take precedence over any other', so as to encourage 'more plural, open-ended "performances" of the project-in-time'.<sup>8</sup> These ambitions stem from a renewed emphasis on space as promoted, amongst others, by Michel Foucault and Edward Soja.<sup>9</sup> While the latter suggests that maps have the advantage of allowing simultaneities and the ability to disturb, reverse, and play with time's presumed chronology, the former questions the privileging of time that may have started with Bergson and puts forward his conception of heterotopias, of which 'heterotopias of time' only form one category. But the practice of architectural mapping that embraces this shift from time to space seems to be plagued with some of the scientific objectivity inherited from the tradition of map-making. While projects like Eisenman's avoid the objectifying timelessness of some maps, they become characterized by an idiosyncratic internal temporality. Likewise, though Eisenman's mapping at Castelvechchio or in Long Beach, California strives not to impose a single viewpoint, the ambition to let the space reveal its complexity, as though autonomously, fails. Despite a prevalent assumption, the designer's hand never disappears behind even the most random layering or scaling operations. Indeed, when mapping is brought into architecture owing - to refer to Corner's categories - to the automatism of its operation, because of its rhizomic character, or to grant the designer the ability to 'set up the game board', it prevents the architect from truly engaging the temporal aspects of the site. Rather than relying

on rules, syntax, and random transformations, can we conceive of a form of epistemological mapping that would be more open to the phenomenology of drawing?

### **Drawing Architecture: Record, Action, Projection**

If Eisenman and Scarpa demonstrate a polarity between material and textual practice, they also point to a common polarity between drawing and mapping, the first being more aligned with the phenomenological grounding of architecture, the second with its epistemological positioning. Hence, the decision to map often parallels the aspiration to replace the architect's direct engagement with the site - a phenomenological engagement that tends to characterize drawing - to approximate a less subjective contextualization of the project, situating it against a specific *epistémé*. If, as Corner has suggested, 'Mapping and contemporary spatial design techniques more generally have yet to find adequate ways to engage creatively with the dynamic and promiscuous character of time and space today',<sup>10</sup> our contention is that they can only acquire a 'new instrumental significance' by learning from the way in which drawings embody times.<sup>11</sup> Architectural drawings can address time in three fundamental ways. First, the representation of the condition found in the conception phase can reveal the multiple temporalities embedded in the site. Second, the manner in which the project is conceived can itself be recorded and gain temporal depth through a consciously accretive approach to drawing. Third, the drawings can constitute the first site in which to index multiple perceptions and untapped possibilities. In short, the drawing's potential to be open to different temporalities can emerge in its capacity to act as a record (or memory), an action, and a projection.

As a record, a drawing not only addresses the specific topography of a site to be built upon, but it is the implicit expression of a position on the

cultural, historical, and social contextual dimensions of that specific site. When recording through drawing, architects inevitably assume a certain perspective on time. This positioning may involve the communication of a sense of completeness or the acceptance of the ever unfinished, it may range from assuming the possibility of the whole to embracing the inevitability of the fragment, pursuing the belief in the universal or acknowledging an unavoidable plurality.

If the drawing, as a 'record', offers a perspective on the temporalities embedded in the site, as a 'projection' the drawing opens onto potential futures. As Robin Evans argued: 'Projections - the invisible lines that relate pictures to things - are always directional. Drawings arrest and freeze these vectors, but even in this fixed state, projected information can be mobilized by the imagination of the observer.'<sup>12</sup> The projective nature of drawings is in the imagination of the viewer, but also in the anticipation of a body moving in space, that is, the apprehension of the kinetic and embodied experience of architecture. In this respect, the drawing is not strictly projective in that it is a projection of a building yet to be constructed, but also projective in the sense that it is drawn in expectation of movements in time.

Drawing is also an action. Beyond the embodiment of the recorded site and the projection of a future building, each step in the drawing process carries its past and its future. In the words of Juhani Pallasmaa:

*[...] every act of sketching and drawing produces three different sets of images: the drawing that appears on the paper, the visual image recorded in my cerebral memory, and a muscular memory of the act of drawing itself. All three images are not mere momentary snapshots, as they are recordings of a temporal process of successive perception, measuring, evaluation, correction and re-evaluation.*

*A drawing is an image that compresses an entire process fusing a distinct duration into that image. A sketch is in fact a temporal image, a piece of cinematic action recorded as a graphic image.<sup>13</sup>*

It is in this sense that the drawing is action, in its dialectical power to put into relation past and future, but also the haptic and the optic, and the dynamic and the static. In other words, the drawing as action puts in relation the image recorded in memory with the projection on paper, it summons both the memory of the body tracing the line and the visual perception of the world, momentarily arresting on paper the movement of a constantly shifting reality. Through drawings as action, architects can maintain the tension between the critical and the projective, resisting the categorical separation of two attitudes to design that may not, after all, be mutually exclusive.<sup>14</sup> The presence referred to by the projection is anachronic, belonging to a time yet to come - or maybe even already past. Hence, the act of drawing finds its strength in its anachronistic suspension as a piece that constantly arcs forward and backward.

In this triple consideration of the drawing as record, projection, and action, the emphasis is on the inherent quality of the drawing to summon phenomenological time. As a record, the drawing can be polarized between the expression of a deep, embodied spatiality on one end of the spectrum, or a flattened or frozen time at the other end. In this manner, the record implies a projection of its author's conception of the relation between architecture and time, and indexes the sensibility with which the architect is willing to engage with the temporal dimension of the architecture. As a projection, the drawing can call upon the phenomenological involvement of the viewer in the space of the drawing, engaging his or her willingness to actively travel it in time rather than passively receiving it as a fixed image. Inviting projection across, up and into the page, allows incursions into the fourth

dimension, where projection may be extended and new movements found. As an action, drawings operate dialectically, between recording and projecting, between the architect's perception and that of the viewer. As such, to acknowledge that drawing is an action is to accept the responsibility and intentionality of the architect, while remaining open to a multiplicity of readings. This consideration brings us back not only to the agency of mapping, but more importantly, to the architect as map-maker.

### **Mapping the Site: Documenting, Documentation, Documentor**

Like drawings, maps can hold multiple temporalities. Yet, it is often their capacity to act as record and, more particularly, as a well-documented record that motivates their use in architecture. The word 'record' comes from the Anglo-Norman and Middle French *record* and referred to a piece of evidence about past events, whether in the form of a memory, an account, a story, or a discussion. To 'take record at' is to bear testimony of a fact or series of facts. To record is to preserve something as knowledge or information. While in extended use the record designates a memorial or a thing preserving the memory of a fact or event, a rare but nevertheless pertinent definition of the term indicates the account or reckoning of past time. From the sixth to the fourteenth century, the map was one of the prime means used to reckon time. For example, the geomancy that informed the location and layout of ancient Chinese cities was echoed in the layout of the temples and reciprocated in the organization of the house, and medieval *mappae mundi* such as the Ebstorf or Hereford maps not only approximated the geography of the known world, they summarized the scriptures from Genesis to the Apocalypse.<sup>15</sup> In short, these maps were far more than geographical orientation devices and situated individuals in a complex spatio-temporal world order. In the contemporary fragmented and plural world of accelerated time-space, everything is changing, and any universalizing or stabilizing representation is to be

questioned, redrawn.<sup>16</sup> As populations, cultures, economies, and even climates and landscapes shift, a stable frame of reference for the conception of architecture needs to be defined by the architect, setting the limits of a project's context within a vast and fluctuating reality.

Could our mapping of the site reveal fragmentary conditions, rich of a multiplicity of possible spaces, loaded with many potentialities of time, and hence create representation more telling of the complexities of an actual architectural project? In the face of the fragmentation of space and the acceleration of time, the potential layering inherent to mapping may allow architects to momentarily monumentalize a perspective on the site, constructing the present of the site out of many pasts and potential futures. The architectural site is never a clean slate; an architectural project is not an idea projected in a preset future but, as its documentation would attest, a process shaped as much by what was than by what is and what might be. While in the past two hundred years maps have often been equated with universalizing worldviews and tools of political domination, a conscious position on issues of scale, multiple viewpoints, and notions of empowerment can perhaps counteract the objectifying tendency of map-making. As Massey suggests: 'Not all views from above are problematic - they are just another way of looking at the world ... The problem only comes if you fall into thinking that the vertical distance lends you truth.'<sup>17</sup>

Looking particularly at the role of mapping, we can consider again the relation between mapping and architecture in a threefold role, first as the action of *documenting* upon which the project builds itself, second as the *documentation* resulting from the process, and third as *documentor*, or index of the intentions of the project. Mapping as a way to actively *document* a search for architecture may allow the identification of what is specifically heuristic in drawings, a process oriented around

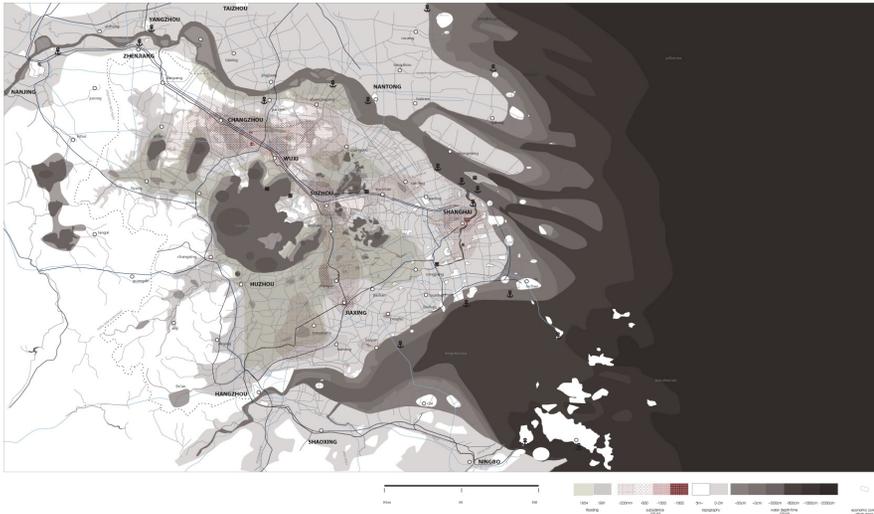


Fig. 1



Fig. 2

Fig. 1: *Geologic time*, a mapping in time of flooding, subsidence, topography and water depth. (Jeffrey Cheng, ongoing thesis project, 2010).

Fig. 2: *Temple texture*, a section through time. Temple of Earth at Fuciao Cun Temple, Suzhou (Photograph: Jeffrey Cheng).

questions rather than the illustration of a predetermined answer; mapping as *documentation* can reveal how the process of building a perspective on the site emerges from a careful consideration of the questions asked and documented; finally, the map as *documentor* hints at the indicative potential of drawings, as they index both a positioning with respect to the documented site and programme, as well as its materialization as a construction in space and time.

In a number of theses written at the University of Waterloo, mapping recovers its poetic and mythographic underpinnings and allows a multilayered reading of the sites. In an ongoing project, Jeffrey Cheng investigates the emerging mega-city of Jiangnan, which stretches from Suzhou to Shanghai and is affected by recurring flooding of the Yangtze River. In this instance, the focus of the project is temporal, and the series of maps produced strive to both arrest and render the incessant movement - from the quick displacement of people to the gradual subsiding of the land, the seasonal fluctuations of the river, and the unpredictable precipitations and ensuing floods. Between photographs and drawings, the project also involves a series of mappings, as though they were snapshots of a project too large to tackle [figs.1,2]. In this respect, the maps become the means to identify both the specific site and the specific approach, already embodying the seed of a sensibility to be carried from the scale of a temple to that of a mega-region.

In Cheng's thesis, the investigation and documentation of the specific geological and cultural conditions focused the projected architecture around temporal issues. The range of variables considered in the *documenting* phase translated to a broad interpretation of movements pertaining to landscape, population, transportation as well as culture. In this case, the *documentation* revealed an ability to operate with the same temporal sensibility at a variety of scales. As such, movements were

allowed and encouraged between the reading of a map at the scale of the country, a city, or a village temple. A similar movement was possible between the reading of a map, a photograph, or a drawing. Carrying the seed of the question that the student asked, while also projecting his sensibility in the way the found answer was projected, the *documentation* both framed the expanded site and informed a specific intervention. Moving from the scale of the mega-region in the context of contemporary China, the project then focused on the reoccupation of an abandoned temple, wherein the temple became an index - or *documentor* - of both smaller and larger phenomena such as weathering, industrialization, urbanization, modernization, and the continuity or discontinuity of culture.

At another particularly challenging site, the Valley of Gei Ben Hinnom/Wadi Al-Rababa located just south of the Old City of Jerusalem, the inclusion of conflicting Israeli and Palestinian memories, the acknowledgement of continuing and aborted histories, and the admission of a dual symbolism became an architectural investigation to be tackled through mapping. Located between the desert to the east and the green mountains of Jerusalem to the west, the valley is in many ways a boundary. It is described in biblical texts as the Potter's Field bought with Judas's money and referred to as the Field of Blood, the Gehenna, a garbage dump, the purgatory. Not so much by delaminating the information as by accepting the somewhat contradictory layering, the site is documented through a series of maps, tiptoeing about this eternal landscape that has consistently been claimed and reclaimed.

The author's attempt to both maintain the inherent contradictions that exist within the site, and yet also create a spatio-temporal site upon which one could act, is reminiscent of the ground Doreen Massey tries to define between postmodern instantaneity and the modernist singular temporality: 'To take on board the coequality of space is [...] to stand amid



Fig. 3



Fig. 4

Fig. 3: *Documenting the site - accumulating, finding, revealing traces.* Accumulated layers of information pertaining to the boundaries - natural, religious, political, historical, etc. - documented on site, Valley of Gei Ben-Hinnom, Wadi Al-Rababa, Jerusalem. (Liana Bresler, "Embedded Boundaries", Thesis project, 2010)

Fig. 4: *Site documentation - framing the space and time of the intervention.* Selective mapping of historical, mythical, geographical and archaeological features present in the Valley of Gei Ben-Hinnom/Wadi Al Rababa. (Liana Bresler, "Embedded Boundaries", Thesis project, 2010)

contemporaneous multiple becomings. And that means, again, that space is not a surface. The map is not space. It is representation of space-time.<sup>18</sup> It is precisely this representation of space-time that is sought through *documenting*. The mapping of the Valley of Gei Ben Hinnom/Wadi Al-Rababa is marked everywhere by a desire to represent the site as a complex space-time that would honour both its 'contemporary multiple becomings' and its contested pasts. To this end, the political, social, ecological, and geological elements are unwaveringly looked upon as temporal phenomena, deeply rooted in a mythological, religious, and historical past, changed every day by unpredictable interactions. Nearly everything that is brought to the surface has at least two sides - the olive trees, the tombs, the significance of a holy site are symbols claimed by both the Israelis and Palestinians. By registering the site through mapping, the architect chooses to embrace the plurality of histories, and yet, by projecting architecture upon it, she also must freeze one of its images in time. Poised between a situated action that is temporal and a monumentalization of the site in the form of a poetic synchronized map, the architect attempts to resist both the imposition of a normative narrative and the instantaneity of collapsed spaces.

In this project, the action of *documenting* takes the form of a series of parallel investigations into the hydrology, geology, mythology, and history of the site. The mapped site is marked with lines drawn in reference to events across time and space, sometimes blended, sometimes contrasted with the topography, and often suggestive of contested political boundaries [fig. 3]. While printed at a scale of 1:2500 and reduced to only include an area that extends slightly beyond the edges of the valley, the map is one of a series of maps that was scaled up to include the state of Israel and the Palestinian territories. As in any project, the extent of the map shown is a matter of positioning the project. In a successive map, i.e. the *document* [fig. 4], a perspective is

assumed, informed by all the lines now present on the site, traces of tangible as well as intangible realities. The pre-eminence of the deep-red, scaled-up skeleton that lies in the depth of the valley speaks to the dark history of the site as the Field of Blood, a necropolis, a place of human sacrifice and a no-man's land born of a bloody war. Finally, this map becomes the site plan upon which the project is to be conceived. And yet, from the scale, the lines shown, and the foregrounded elements, a project is already half conceived. The last drawing [fig. 5], *documentor* - somewhere between a map and a plan - then traces the project to come, but within the series of maps already shown, it assumes its form only for a moment as a series of new lines, soon to be lost amongst all existing lines, soon to be erased, foregrounded, contested, or forgotten. The emerging form, born of the documented contradictions, proposes an architecture that embodies the layered site, and the tracing of lines translates into a new hybrid identity for the valley in question. In this consideration of a complex site, mapping is approached as a creative act, involving both a willingness to listen and a readiness to act. Through mapping, the architect mapmaker reads the site and allows stories to emerge, but also takes on the position of the narrator.

### Mapping in Time

Maps will, as Harley reminds us, always 'represent more than a physical image of place', and if 'to read the map properly, the historian must always excavate the terrain of its surface geography', we argue that the same needs to be done to create the map sensibly.<sup>19</sup> When the architectural historian Marco Frascari discusses Alberti's concept of *lineamento*, he rejects the usual translation of *disegno* and suggests rather the expression 'denoting lines', referring to 'a facture of designation of the building's configurations and elements made by pulling lines and strings taking place on the construction site'.<sup>20</sup> The act of drawing a line on a sheet of paper is therefore an act of creation parallel to the act of

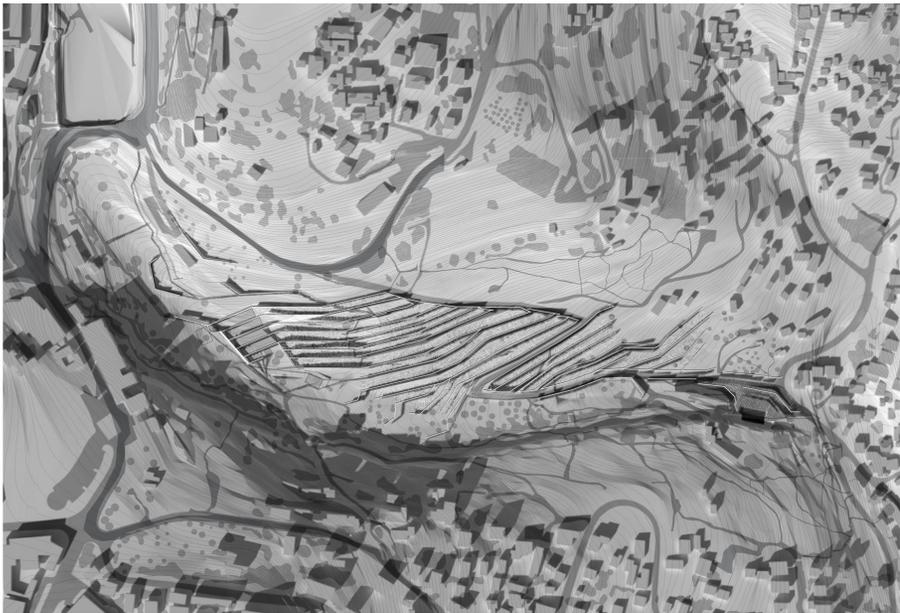


Fig. 5: *Plan as documentor - acting on the traces of layers accumulated.* Proposed intervention as it emerges from and reveals some of the documented spatio-temporal layers. (Liana Bresler, "Embedded Boundaries", Thesis project, 2010)  
Proposed water treatment facility as an intervention emerging from and revealing some of the documented spatio-temporal layers.

construction. Even the drawing of an existing site plan is an act of creation. Although we can conceive of a site as an accumulation of events that occurred in the past, but by recording them it is as if we were recreating or reaffirming them. In this sense there is no difference between documenting the past or the future of a site, both are a form of construction. The drawing of a site plan or the mapping of a site relate a constructed past to a projected future.

If we fail to recognize the positioning inherent to any mapping, we risk falling in the trap of those cartographers who have assumed the objectivity of their 'scientific' method and equated it with accuracy and even truthfulness. As Harley suggests, this has led to a language of exclusion which opposes "true and false"; "objective and subjective"; "literal and symbolic" and so on'.<sup>21</sup> To foreground the creative and artistic nature of maps is to accept and embrace their ability to open up humanistic perspectives not only for map-making, but for the way of seeing, which we inevitably project onto the representation of any given site. As James Corner asserts: 'Mapping is never neutral, passive or without consequence; on the contrary, mapping is perhaps the most formative and creative act of any design process, first disclosing and then staging the conditions for the emergence of new realities.'<sup>22</sup> Indeed, we can only agree with Harley's redefinition of mapping:

*Could it be that what cartographers do, albeit unwittingly, is to transform by mapping the subject they seek to mirror so as to create not an image of reality, but a simulacrum that redescribes the world? This alternative view of what a map is would allow us to embrace a much more open, self-critical, socially sensitive, politically street-wise approach to the practice of map-making and the objectives of cartographic activity.<sup>23</sup>*

Could mapping address temporality with an assumed depth that re-responsibilizes the archi-

tect map-maker and still remains open to the users' multiple readings in time? Drawing a map involves a search for the memories inherent in the site, wherein the map itself becomes the very translation of the conditions to which one was most sensitive. It is upon this translation, or monumentalization of a certain present of the site, that the design is projected, and - as documenting, documentation, and documentor - the map acts all at once as record, action, and projection. In this way, maps have the possibility to offer more than the impression of space as a surface, they offer not a complete and finished image, but 'a slice through time [...] full of holes, of disconnections, of tentative half-formed first encounters' where 'there are always connections yet to be made, juxtapositions yet to flower into interaction, or not, potential links which may never be established'.<sup>24</sup> If maps are needed today to approximate a representation of the fleeting and ever-expanding sites of architecture, we must disentangle them from a strictly scientific tradition and re-engage with their poetic, narrative, but also synchronizing potential, foregrounding not only the spatial intricacy but also the temporal complexity of the lived world.

Architects build *in* time. Building in time carries two separate connotations: the consideration of time as a site upon which one constructs a particular perspective - its epistemological dimension; and the consideration of the building that comes to life as different users experience it in time - in a phenomenological encounter. In other words, time is both the site and the medium through which one conceives of and experiences architecture. If we agree that history does not unfold along a singular line that starts at some unknown origin and ends at some unknown point, but that it is a complex multiplicity of temporalities that form constellations rather than one unidirectional line, then we can equally agree that inherent to the consideration of 'time' as a site is a certain perspective on what that time is. Through drawing and mapping, architects negotiate their

position in these two temporal frameworks. And at the fold between these two complex temporal sites of the architectural project, lie the pasts, presents, and futures of any project. While the buildings themselves eventually embody and orchestrate these times, it is really at the drawing board (to use a somewhat anachronistic expression) that architects may critically address architecture's relation to time.

### Notes

1. James Corner, 'The Agency of Mapping', in *Mappings*, ed. by Dennis Cosgrove, Critical Views (London: Reaction, 1999), p. 237.
2. 'It is not space that takes the life out of time, but representation. The real trouble is that the old equation of representation with spatialisation has taken the life out of space.' Doreen Massey, 'Some Times of Space', in *Olafur Eliasson: The Weather Project*, ed. by Susan May. Exhibition Catalogue (London: Tate Publishing, 2003), pp. 107-18; pp. 108-09.
3. For discussions on Scarpa's drawings see: Francesco Dal Co and Giuseppe Mazzariol, *Carlo Scarpa: The Complete Works* (New York: Electa/Rizzoli, 1985), Sergio Los, Carlo Scarpa, and Klaus Frahm, *Carlo Scarpa*. (Cologne: Taschen, 2002), as well as Richard Murphy, *Carlo Scarpa and the Castelvecchio*, Building Monographs (London: Butterworth Architecture, 1990). For discussions on Eisenman's use of the diagram see: Peter Eisenman, *Diagram Diaries* (New York, NY: Universe Pub., 1999); Peter Eisenman, *Feints*. (Milan, Italy: Skira Editore, 2006).
4. Stan Allen and Diana Agrest, *Practice: Architecture, Technique and Representation*. (Australia: G+B Arts International, 2000), p. xvii.
5. Richard Murphy, *Carlo Scarpa and the Castelvecchio*, Building Monographs (London: Butterworth Architecture, 1990), p. 12.
6. Stan Allen, 'Trace Elements' in *Tracing Eisenman*, ed. by Cynthia Davidson (New York: Rizzoli, 2006), pp. 49-65; p. 59.
7. Allen, 'Trace Elements,' p.62. Further on, Allen asks: 'If process is still important in architecture today, why not understand process as the unfolding life of the building and its site over time? [...] It is a process that unfolds in a complex interaction with the messy and unpredictable forces of life itself. Less narrative, less history; more atmosphere, more effect.' (p. 64).
8. Corner, p. 239.
9. Edward W. Soja, *Postmodern Geographies: The Reassertion of Space in Critical Social Theory*. (London: Verso, 1989), p. 4.
10. Corner, p. 226.
11. Corner, p. 228.
12. Robin Evans, 'Architectural Projection' in *Architecture and Its Image: Four Centuries of Architectural Representation*, ed. by E. Blau and E. Kaufman (Cambridge, MA: The MIT Press, 1989), pp. 18-35; p. 19.
13. Juhani Pallasmaa, *The Thinking Hand: Existential and Embodied Wisdom in Architecture*. (Chichester, U.K.: Wiley, 2009), pp. 89-90.
14. Michael Speaks, 'After Theory', *Architectural Record*, vol. 193, no. 3 (2005), pp. 72-75.
15. On Ancient Chinese maps see Wu Hung, *Monumentality in Early Chinese Art and Architecture* (Stanford: Stanford University Press, 1995). On Medieval maps, see Alessandro Scafi, *Mapping Paradise: A History of Heaven on Earth* (Chicago: University of Chicago Press, 2006) and P. D. A. Harvey, *The Hereford World Map: Medieval World Maps and their Context* (London: British Library, 2006).
16. This situation is well described by Marshall Berman, *All That Is Solid Melts Into Air: The Experience of Modernity* (New York: Simon & Schuster, 1982) and David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (London: Wiley Blackwell, 1992). It is also taken as a premise to Corner's reflection on maps and mapping.
17. Doreen B. Massey, *For Space* (London: Sage, 2005), p. 107.
18. Massey, 'Some Times of Space'.
19. J. B. Harley, *The New Nature of Maps*, ed. by Paul Laxton (Baltimore: The John Hopkins University Press, 2001), p. 48.
20. Marco Frascari, 'Lines as Architectural Thinking', *Architectural Theory Review*, vol. 14, no. 3 (2009), pp.

200-212.

21. Harley, *The New Nature of Maps*, p. 155.

22. Corner, p. 216.

23. Harley, *The New Nature of Maps*, pp. 203-4.

24. Massey, *For Space*, p. 107.

### **Biographies**

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