Beyond The Object: The Phenomenon of Memory in Architecture

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Memorials and monuments are often designed as objects, lacking experiential qualities shared by memory and space. In their symbolic and representational forms, they fail to embed memories, and a comprehension of the past, within the observer. Objectified memorials often utilize literal representation to communicate remembrance, yet human memories are constructed from first-person perceptions of time and space. An investment into architecture and urban environments as physical and experiential containers of memory can invigorate a critical awareness of the past as what has been and what continues to be. An investment into architecture and urban environments as physical and experiential containers of memory can invigorate a critical awareness of the past as what has been and what continues to be.

Architecture has the potential to evoke the memory of a place through visceral experience over historical representation by emphasizing properties of space that influence human memory and perception. In order to distance memory from objectification, the space of commemoration must activate bodily consciousness through a sensorially rich architecture, which enhances the overlap between mnemonic processes and phenomenological perception in space. Through these means, architecture can foster greater collective identification with the past, rather than simply acknowledging it.

The physical relationship between man and memorial has been reduced to a representation, a visual layer. Objectification dissociates memory from space because memory itself is spatial and experienced through the body. “Just as eliminating space and time as the indispensable parameters of our intuition would mean the undermining of human experience itself, so the absence of body memory would amount to the devastation of memory altogether.” Memories and experiences can be contained in the body, but the lack of occupiable space in architectural objects diminishes bodily experience in favor of visual relationships. Resisting objectification and allowing people to inhabit, move through and interact with commemorative spaces will establish a truer connection between architecture and memory.

Techniques of spatial abstraction bring us into the realm of ideas and the mind. When connected with affects of matter and the physical environment, one can experience a perceptual self-awareness of mind and body in space. Phenomenal conditions of space, such as light, temperature, textures, scents, tastes, sounds, muscular activity and visual cues can serve as triggers of memory—all of which can be used to generate visceral atmospheres. Communicating the temporality of architecture—and thus human experience—through atmospheric properties can enable an imagining of the past as a result of manipulating architectural conditions. Marking the evolution of the site situation, and revealing the temporal nature of the project itself will be elemental in creating time-consciousness in the architectural proposition.

[1] CONTENTION:

“...the dominant form of the modern era—is an object rising from a leveled site. The goal in the modern era has been to divide up the world and to make all of the resulting fragments (objects) interchangeable. Objects are transportable and interchangeable because they are concentrated masses cut off from their environment.”

_Kengo Kuma, Anti-Object: The Dissolution and Disintegration of Architecture_

“Claude Lanzmann once said that when you write about the Holocaust ‘the worst moral and aesthetic mistake you can make is to approach your subject as if it belongs to the past.’ But that mistake, it seems, is precisely what is being made: the discipline of history is pervaded with the desire to commemorate, but the infected historians hardly, if ever, commemorate the things they write about... As a result commemoration is all over the place but is never taken as seriously as it should be.”

_Eelco Runia, “Burying the Dead, Creating the Past”_
Beyond the Object: The Phenomenon of Memory in Architecture

The proliferation of memorials outside of the location where the memorialized event occurred has disrupted urban collective memory. This has recently occurred at a large scale through the spread of Holocaust Memorials globally. Such memorials construct remembrance independent of site, causing a disconnect between the two. From this, two kinds of sites emerge: the artifactual, which relies on relevant remnants on the location where the commemorated event occurred, and the constructed memory—a completely fabricated means of commemoration achieved through material expression and physical environment. A combination of the two could restore collective memory to place specificity through commemoration on artifact sites, mediated by highly constructed environments to generate desired spatial effects.

Within the realm of memory itself, episodic memory stores personal experiences, and is thus heavily influenced by concepts of time and emotion. To enhance mnemonic qualities of space, the concept of the episode can serve to embody a place’s memory as a series of discreet, yet interrelated events. In creating a series of spaces recalling the past through sensory engagement, the past can become part of the occupant’s personal, recorded experience, and thus part of their personal and collective memory.

Situated in Chicago, IL, the process of commemoration will be realized as a set of architectural pavilions, each reconstructing a critical moment from the city’s past. Said events will be selected for their influence on Chicago’s development and should be commemorated on the sites at which they occurred. As a series of episodes throughout the city, the architecture will emphasize the interdependence of present and past events, of memory and perception, and of collective memory and architectural experience.

The goal is not to replace our understanding of collective memory, but through fostering an awareness of self and one’s relationship to the past and site, to distinguish memory as an entity distinct from representation and objectification.
1970s MEMORIAL BOOM
Fifty years following the Holocaust and WWII, a surge of memorial construction occurred in an attempt to re-brand national identity. The representation of past acts of terror and trauma sought to alter prior connotations of the past from people’s minds. Focused on new images of the nation and the city, objectified memorials became a main mode representing memory in urban environments.

MEMORY
Memory regards the succession of past events, actions, and traditions as continuous and co-existent within the present; the present is a past we are still experiencing. It is a spontaneous, living entity rooted in physical space and conditions of our environment: place, time, objects, names, and the senses. Current methods of memorialization do not take this into account, and create “timeless” objects instead of a sensorial architecture. The trend of objectifying memory has been analyzed by a series of philosophers, namely Pierre Nora and Eelco Runia, who question the changing role of memory in our daily lives.

LES LIEUX DE MÉMOIRE
Developed by Pierre Nora, the concept of lieux des mémoire asserts that memory has receded from society, and the only way we can manage to remember is through sites of memory: architecturally–museums, memorials, archives, monuments, libraries, cemeteries and historic places, socially–festivals, anniversaries, treaties, depositions, sanctuaries, fraternal orders. Such sites develop when real environments of memory—intimate, living characteristics of a collective heritage, such as a social ritual or way of life—cease to exist. These are particularly prevalent in our current culture which is constantly restructuring itself for the sake of the “new.” As Nora states, “These lieux de mémoire are fundamentally re-mains, the ultimate embodiments of a memorial consciousness that has barely survived in a historical age that calls out for memory because it has abandoned it.”

MEMORIAL OF IMAGE
Of les lieux de mémoire, monuments and memorials in particular have become dependent on illustration of the memorialized, to the point where commemorative architecture is reduced to symbol and image. Memorials and monuments as such exist as objects, fixing and freezing time, “Ordinarily, if we want to make something that will endure, we turn to a shape of cohesive force, believing it to be the only form that will impress on people’s memories....The function of a monument is also to last through time; thus it aspires to be a powerful, conspicuous object. Does this mean that objects are the only form to last through time? I was not so sure.” In their representational and symbolic qualities, memorials and
monuments have lost the prospect of human interaction, making clear that contemporary society is concerned with documenting the past as an object of reverence, and potentially dissociated from the present. How can one truly gain a sense of the past, if it has been reduced to texts, figures on podia, plaques, fountains, and columnar objects? I believe that symbolic and illustrative memorials fail to communicate the essence of the past that human memory is so deeply embedded in and that architecture has the potential to express. Ultimately, memory is aided by the effects of space on the body, and this relationship should become more apparent in the design of mnemonic spaces.

Accordingly, collective memory can and should emphasize the transformation of space as a condition paralleled by the passage of time. Typically understood through representational forms and historical reconstructions, these forms stops the continuum of time. Instead, spatio-temporal connections can be achieved through an architecture that engages mind and body in space.

**THE OUTSIDE OBSERVER**
The design of symbolic and representational memorials fail to address the perspective of the outside observer, someone who was not part of the event being remembered. According to Edward Casey, physical objects may fix a moment in time by documenting it, but this tends to function on a personal level. For the Vietnam War Veteran, a visit to the Vietnam Veterans’ Memorial in Washington, D.C. may evoke certain emotions, whether from past experience, or personal engagement with the collective memory. A similar reaction from a civilian could not be achieved without the specific abstract and visceral architectural qualities it possesses. Architecture attributed to public memory should become more publicly accessible in the way it represents its content—it should evoke moments in time, rather than illustrate them. This may be made possible through techniques of spatial abstraction, rather than architectural and representational symbolism.
OVERVIEW

As opposed to representational techniques, the abstraction of architectural space can be used to exploit space as a mnemonic device. Abstraction can underscore conceptual relationships between architecture and commemorated event by allowing people to project their own interpretations onto the architecture. While objects allow for interpretation, they function on a symbolic level, as in the allusion toward the obelisk as an ancient symbol of power and prestige in the Washington Monument. While not strictly representational in the pictorial sense, the lack of spatiality in such an object diminishes its capacity to illicit an emotional response from a subject.

Abstraction, on the other hand, can be a method for translating emotionally driven concepts into physical form. In the Vietnam Veterans Memorial, the carving out of the ground acts as a scar on the landscape, relating conceptually to the scars inflicted onto American soldiers, and American collective identity/memory, by the war.

MODERNISM AND THE ANTI-OBJECT

According to Kengo Kuma, objectification occurs when architecture is designed as discreet from its environment and to be seen fully from a distance. Architecture of this sort could be understood through a single photograph, such as early Modernist projects by Le Corbusier: formally discreet from its environment to emphasize its object-ness. The fact that such architecture can be summed up in a single photograph further substantiates its objectivity via the photograph’s inherent isolation of subjects from their context. Many monuments and memorials can be understood in this way, as the affect of vision and representation diminishes opportunities for sensory engagement, and further objectifies commemorative architecture.

ENVIRONMENT(S)

If, as Casey states, memory is based on conditions of our physical environment, the architecture attributed to memory and commemoration should relate to the concept of environment in two ways: it should be dependent on said environment (contextual), and should generate environments that relate to the memory being evoked (building). Obscuring the totalized view of an architectural work in its entirety can then lends to a synthesis between architectural environment and contextual environment.

ANTI-OBJECT, NEO-KANTIANISM AND PHENOMENOLOGY

As Kant described, a dichotomy between the phenomenal and noumenal exists which translates spatially to the relationship between subject and object, occupant and archi-
tecture, and even mind and body. Neo-Kantists of the early 20th century advocated for a connection between these entities, through an architecture relating physical matter and mental consciousness. Architects of this period, such as Bruno Taut, were working in direct opposition of Modernists, like Le Corbusier, who emphasized formal abstract geometry. Taut likened consciousness to experiential fantasy in architecture, which was validated by matter itself (in the form of new technologies).

Following Neo-Kantianism, phenomenologists sought to connect architecture to human consciousness, but with a focus on the constantly changing aspect of human experience itself. Theoretically, phenomenology, as promoted by Edmund Husserl, considered the fluctuation of time and perception as motivators:

> Every experience can be subject to reflection, as can indeed every manner in which we occupy ourselves with any real or ideal objects...Through reflection, instead of grasping the matter straight-out—the values, goals and instrumentalities—we grasp the corresponding subjective experiences in which we become ‘conscious’ of them, in which (in the broadest sense) they ‘appear.’ For this reason, they are called ‘phenomena.’

This approach is applied to architecture in that all experiences within space are potentially phenomenological, but only when one encounters a simultaneous consciousness of the mind and body. In moments of phenomenological experience, one is hyper-aware of their environment, themself, and time. Accentuating aspects of temporality and experience through the senses (which are also properties that trigger memory), can reduce the objectification of commemorative spaces.

THE DOMINANCE OF VISION

If architectural objectivity can be understood through a single-viewpoint, then this limits architecture to the sensorial affect of vision. While linked to other senses, ocularcentrism has aided in focusing commemorative architecture toward objectification. This is especially true for representative commemoration, since imagery tends to be based on properties of sight. To formulate commemorative spaces of human engagement and of greater collective significance, “Dependence on visual perception must also be avoided...Vision abhors time, it always desires a still image, which is why objects and two-dimensional patterns are always in demand.” Material and geometric purity shared by Modernist architecture, memorials and monuments, focused on the visual, which createds distance between perception and matter. We can become more engaged in with the physical realm through a cohesion of the senses, for example, through haptic architecture which heightens and unifies perception with the built environment through intimacy.
ARTIFACTS SITES VS. CONSTRUCTED SITES

“[Walter] Benjamin felt that random historical events such as the construction of the first arcades must be allowed to violently collide with others, so that the present may achieve insight and critical awareness into what once had been.”
—M. Christine Boyer, The City of Collective Memory

ARTIFACT SITES
Potentials for collective sites of memory exist in artifact and constructed sites. Artifact sites, such as Gettysburg, PA or Holocaust sites in Europe, exist as unplanned remnants of a former condition or time. Aldo Rossi explains the relationship between man and artifact: Artifacts either enable us to understand the city in its totality, or they appear to us as a series of isolated elements that we can link only tenuously to an urban system. To illustrate the distinction between permanent elements that are vital and those that are pathological, we can again take the Palazzo della Ragione in Padua as an example. I remarked on its permanent character before, but now by permanence I mean not only that one can still experience the form of the past in this monument, but that the physical form of the past has assumed different functions and has continued to function, conditioning the urban area in which it stands and continuing to constitute an important urban focus.

As living evidence of the past, these places exemplify Nora’s “real environments of memory.” Such sites rely on remains to sustain collective memory through experienceable physical environments. This form of memory is subject to societal changes of use over time.

CONSTRUCTED SITES
Constructed sites like the Holocaust Museum and Vietnam Veterans’ Memorial in Washington D.C. function as devices of collective memory, but are not located on the site of initial occurrence. Here, commemoration is removed from the unplanned passing of time, and these sites rely on a reconstruction to evoke a past event. This can be highly abstracted, or somewhat more literal through the pairing of spatial qualities and representational mediums—photography, artifacts, drawings etc. Architecturally, materiality and tectonics can aid in the creation of mnemonic space, as in the use of black steel, reductive surfaces and the accentuation of construction joints in the Holocaust Museum.

LOCATION OF COMMEMORATION
Architecture and the city are loci of memory. Public spaces and “iconic” buildings become points of collective memory for which inhabitants and visitors associate memories with spaces. Such memory is based on the nature of architectural artifacts and the existing fabric of the city. We construct remembrance through the means of memorials and monuments to acknowledge significant moments in our collective pasts. While of collective importance, spatial mnemonic devices also allow remembrance on a personal level for people more closely involved with the commemorated event or occurrence. How does architectural remembrance relate to the individual who was not a part of the event—the veteran versus the civilian, especially when the connection between location and event is lost?
NATIONAL MEMORY

The memory of the city is currently misrepresented and is focused on national identity, as opposed to the local. Instead of commemorating events directly related to a past of a particular place—cities in particular—urban commemorative spaces are often dissociated from local memory—e.g. the dissemination of Holocaust memorials outside locations where the Holocaust occurred. Commemorative spaces should more directly relate to their location of incidence, so as to create a more intimate relationship between memory and location. This can help to increase the legibility of a city’s past, and act as secondary collective urban loci.

Dispersion of Holocaust Memorials outside of the location of occurrence
THE LOCATION OF MEMORY

Contention

VISCERAL
MEMORIAL TO THE MURDERED JEWS OF EUROPE
VIETNAM VETERANS’ MEMORIAL
NEUE WACHE
WORLD TRADE CENTER MEMORIAL
Fig. 11 Oklahoma City National Memorial, “chairs”

Fig. 13 WWII Memorial

Fig. 15 Washington Monument

Fig. 17 Jefferson National Memorial

Fig. 12 Oklahoma City National Memorial

Fig. 14 WWII Memorial, Colorado stela

Fig. 16 Washington Monument

Fig. 18 Jefferson National Memorial
Sensory experiences in the present often trigger memories from our past. The scent of a particular material can cause recall of a prior experience or place we’ve visited. Although difficult to predict what specific aspects of our physical environment will cause an experience to be retained as a memory, heightening one’s perception and self-awareness in constructed space can provide a stronger framework for remembrance.

Mnemonic techniques known as the art of memory, or memory palace, explain how the senses influence our ability to remember and are directly connected to space. Mnemonics such as the memory palace work through a mental movement through familiar spaces—one’s house, school etc.—to aid in remembrance. Here memory is heightened by focusing on the visual, tactile and other sensory characteristics of said spaces one has already experienced. The senses are dependent on one another, and while mental images and vision seem to be primary, they are substantiated by the other senses to heighten recall. These techniques set up and recognize direct connections between mind, body, matter and time as integral to memory.

“In memorable experiences of architecture space, matter and time fuse into a single dimension, into the basic substance of being, that penetrates consciousness. We identify ourselves with this space, this place, this moment, and these dimensions become ingredients of our very existence. Architecture is the art of reconciliation between ourselves and the world, and this mediation takes place through the senses.”

—Juhani Pallasmaa. The Eyes of the Skin: Architecture and the Senses
TEMPORALITY
For the purpose of this thesis, notions of time can be understood in two ways: on the position of a person in space and their perception of time through that space, and also as the marking of time through architectural means. Aldo Rossi discusses the latter through architecture of permanence, where architectural artifacts which have survived the course of time bring the past into the realm of the present—a past that can still be experienced. The perception of time can be explained by the Japanese stroll garden, where space and time are inseparable and related through orchestrated pathways. Lighting and materiality can also have great influences on spatio-temporal perception as they can orient the occupant to the time of day, or to seasonal changes.

HAPTIC / TACTILE
Many of the other senses can be traced back to the haptic, particularly because the sense of touch is identified by a closeness of man to subject. Building materials can harness the process of time through weathering or material decay, and the intentional inclusion of this technique within architecture draws relationships between the haptic and temporal. This can be exemplified by the changing of material texture and surface over time. Hapticity promotes an awareness of self through the memory of the body in space—interaction with the ground affirms our orientation on earth, and can be heightened by the other senses, such as the sound of our movement across it.

OCULAR
Contemporary ocularcentrism has resulted in an approach to space based on visual content. This resonates within the space of memory in its objective and textual nature. In denying our other senses, the predominance of vision has furthered the separation of the past from the present. Vision is the sense most closely related to separation and distance, while the other senses may bring us nearer to consciously perceiving our environment. The literal distance between people and the space of memory caused by sight reflects our psychological distance from the past. Vision should instead be utilized as a sense that connects other senses to create a unified experience.

AUDITORY
Whereas haptics activate the body, sound has the potential to activate both mind and body. Sounds we produce in space activate different levels of self-awareness depending on material and acoustic characteristics. Reverberations of noise will undoubtedly effect people differently than dim noises in a space which reduces sound through materiality. Our bodies may create sounds, but our minds are effected by them.
OLFACTORY
“A particular smell makes us unknowingly re-enter a space completely forgotten by the retinal memory; the nostrils awaken a forgotten image, and we are enticed to enter a vivid daydream.” Tectonics and haptics are intensely tied to the sense of smell, where vision is not. Building materials, especially natural ones such as wood, can act as mnemonic triggers through the recognition of and association between texture and scent.

GUSTATORY
As an intimate sense, taste functions similarly to touch, mediating between vision and the tactile. While literally difficult to “taste” architecture, per se, the perception of color and texture can evoke memories of taste. These may relate more to similarities between the surface of architecture and everyday objects—bowls, cups etc. that come into contact with the mouth.

MUSCULAR
Muscular memories are born of habitual action, and ingrained in the literal muscles and skeleton of the body, rather than the mind. The performance of day-to-day activities becomes automatic through the body and can be recalled without thought. Spatially, this has implies regularized interaction between people and space, but what if this norm is disrupted? How can presumed interactions between man and space be reworked or used to trigger memory or produce a self-awareness through architecture? How can space refer to, but also defer from established collective and personal muscle memories to cause an awareness of self?

INTERRELATIONSHIPS
None of these elements of memory are entirely discreet. Something triggered by a taste will undoubtedly cause the recollection of several other characteristics related to the perceived and remembered taste: how the object looked before being tasted, what it smelled like, the texture of the object etc. Similarly, none of these aspects are independent in space—the feeling of a material will cause the recollection of its appearance and scent as well. It is through the combination of these knowns that the architecture can develop as a container of memory via sensorial activation.
THE ROLE OF PHENOMENOLOGY

“...it is clearly in action that the spatiality of our body is brought into being, and an analysis of one’s own movement should enable us to arrive at a better understanding of it. By considering the body in movement, we can see better how it inhabits space (and, moreover, time) because movement is not limited to submitting passively to space and time, it actively assumes them, it takes them up in their basic significance which is obscured in the commonplaceness of established situations.”

_Maurice Merleau-Ponty, Phenomenology of Perception_

THEORIES OF PHENOMENOLOGY AND SPACE

Unity between the senses of memory can be attained through the perspective of phenomenology. Architecture can act as a mnemonic device by providing the setting for phenomenological experience. Just as it is difficult to fully predict what affects of sensorial experiences will trigger memories, it is difficult to project the phenomenological experience of architecture. Instead, architecture can provide a framework for phenomenal consciousness through a more complete sensory engagement with space.

Theories of phenomenology in architecture asserted by Steven Holl state that architecture cannot be experienced in its totality in one instance. This notion further substantiates previous discussions of architecture as an anti-object, and can be applied to spaces of memory. By devising a set of highly experiential spaces, a comprehensive understanding and synthesis of said spaces can be formulated by the occupant. This technique can be utilized to draw connections between spatial expression and commemoration. Where “questions of meaning and understanding lie between the generating ideas, forms and nature and quality of perception,” so too can commemorative space produce collective understanding of memory and the past through visceral experiences. The creation of visceral spaces can connect ideas of individual and collective memory, human perception, temporality and space.

TIME-CONSCIOUSNESS

Phenomenologists such as Juhani Pallasmaa advocate for the celebration of time’s passage in architecture. The current trend is to prevent weathering and preserve architecture as if it were constructed yesterday. Material purity separates architecture from the reality of time, instead of taking advantage of potential time-based material transformations (or weathering) and textural connections on a haptic level. An acknowledgement of architecture as a temporal construct can give us an enhanced sense of time-consciousness.

Aspects of time-consciousness can reduce architectural objectivity through material characteristics which change over time and possess highly tactile attributes. Additionally, the inclusion of commemorative artifacts work in a similar way to arouse consciousness of past and present through juxtaposition.
Collage of the experience of the Memorial to the Murdered Jews of Europe
BODILY
Bodily memory can be broken down into three major groups—the traumatic which is isolated and particular, the erotic which is anticipatory, and the habitual which is continuous and holistic. All of these emphasize how we remember through experiences and self-awareness. Casey establishes the difference between remembering our body in a situation (as if from a third-person camera perspective) versus remembering through bodily being in the situation (as if the body is the camera). This relates back to the discrepancy between constructed and artifact sites, and sites of memory and real environments of memory. The latter in each situation provides an enhanced connection to personal and collective memory.

TRAUMATIC
Traumatic memories typically relate to specific instances, which effect singular parts of the body and are therefore explicitly remembered—the arm, foot, shoulder. They carry a certain history to them and are characteristically episodic; traumatic experiences are recollected in a narrative, made up of a before, during and after. Composed of one or a series of intensified experiences, traumatic recollections exist outside the every-day. Since the traumatic can have the greatest impact at a large scale in the form of wars or deaths, it has become the primary mode of public remembering.

EROTIC
Erotic memory uses past experience to imagine future ones, and is somewhat interpersonal. Habitual memories exist as a subconscious part of our lives, which orient us within our world. While traumatic recall tends to separate the past by isolating our body parts, and thus the associated experiences, the erotic and habitual are more holistic and tie our bodily perception to the past, present, and—through imagination—even to our future.

HABITUAL
Daily actions and repeated functions are ingrained within our person, whether we realize it or not. Habitual memories inform future actions through subliminal orientation and regularity. "In such memory the past is embodied in actions....The activity of the past, in short, resides in its habitual enactment in the present." This aspect of memory sustains that the past is constantly part of our present and future, and that if the two were discreet, we would not be able to unconsciously perform daily activities. Where traumatic memories are the effect of monumental actions, habitual memories fill in the background layer of our daily lives. These tend to be tactile, such as driving a car, or the ability to feel your way through a dark space you had previously encountered.
PLACE
All memories are either situated in a place, or are of an event or subject in a place. Since all recollections have direct relationships to the constructed environment, a sense of place orients our memories in time, space, and relative to the body.

COMMEMORATION
As a collective process, commemoration synthesizes ritual and material mediators to create memories those who have a distant connection to the commemorated. And yet it is precisely in this unpropitious setting of commemoration, in the company of others who are likely to be just as oblivious as I with regard to explicit remembrance, that remembering of a decidedly commemorative sort is going on. The disconnection between location and memorial discussed earlier, can may be mended by the process Casey describes, where a group of people collectively remember through something.

RITUAL
As framed by commemoration, ritual involves at least four formal features: act of reflection, allusion to commemorated event or person, bodily action, and collective participation in the ritualistic action. Ritual can provide a starting point for investigating how people interact with space in a repetitive (or habitual) manner. The continuation of a ritual from the past to the present, and into the future, secures a memory over time. Rituals are malleable and adapt to cultural and societal shifts, rather than remaining static through time. This continuity is beneficial to grounding memories to a particular site through repetitive action and association between space, meaning and remembrance.

THE ROLE OF COLLECTIVE MEMORY
The combination of these systems can formulate a collective memory. A great amount of this is nationally based, rather than focused on the particularities of a place. Orienting collective memory toward local relevance will be imperative for the project since the national scale cannot typically speak to local or regionally significant pasts, but local (city scale) collective memory may have national importance, such as 9/11, or The Great Chicago Fire. Emphasizing the local can also activate particular place memories more intensely through ritual and commemorative practices.

EPISODIC
The concept of the episode, briefly explained by traumatic memory, connects notions of space, time, perception, and memory types. It can act as a bridge between architecture and bodily experience, relative to commemoration.
The senses of memory can be declarative—consciously recalled—or non-declarative (procedural) and action related.

Within declarative memory, a distinction was made between episodic and semantic memory by Endel Tulving in the early 1970s. Semantic memory stores factual information and knowledge, while episodic memory stores specific personal experiences. Episodic memory holds concepts of time and emotion as significant influences. It can track actions, feelings associated with those specific remembered actions, social contexts surrounding a memory, and one’s relation to such social situations—the assassination of JFK, the election of a president, a friend’s birthday party. A primary concern here is that episodic memory deals with first-person perception to recall an experience or event. Additionally, a heightened awareness of the context surrounding the memory can strengthen recollection—whether spatial, phenomenological, temporal, or sensorial. The term episodic implies fragmented remembering and occurs at irregular intervals. Relationships between mnemonic episodes and architecture can be understood through the experience of the body moving through space.

AALTO

Relative to a sensorial and atmospheric architecture, Juhani Pallasmaa discusses episodic subtleties in the work of Finnish architect, Alvar Aalto.

“*In his episodic architecture, Aalto suppresses the dominance of a singular visual image. This is an architecture that is not dictated by a dominant conceptual idea right down to the last detail; it grows through separate architectural scenes, episodes, and detail elaborations. Instead of an overpowering intellectual concept, the whole is held together by the constancy of an emotional atmosphere, an architectural key, as it were.*”

_Juhani Pallasmaa, “Architecture of the Seven Senses”_

A variety of environments and the manipulation of formal and material architectural elements in Aalto’s Villa Mairea provide the framework for such an experience. The project’s focus on transitioning between emotional states utilizes details and small, human scale elements to do so.

TSCHUMI

In Bernard Tschumi’s Manhattan Transcripts, he illustrates a series of events, spaces and programs as episodes within the city. Through drawing, photography and collage, Tschumi breaks architecture down into a set of linear, deconstructed or dissociated scenes. Working through individual frames, Tschumi sets up temporal links between frames. “They es-
tablish a memory of the preceding frame, of the course of events. Their final meaning is cumulative; it does not depend merely on a single frame (such as a façade), but on a succession of frames or spaces. In discussions of sequence, he calls for “indispensable” connections between moments and spaces, where one space is understood through its relationship to prior and future experiences and programs. Architecture becomes a series of separate experiences that come together to create holistic understanding of meaning behind architectural intentions.

ARCHITECTURE
The architecture will emphasize the concept of the episode at several scales, as well as a device for reducing the objectification of memorials. At an urban scale, a series of memorials will manifest as episodes throughout the city of Chicago. Located where major historic events occurred, each episode will function semi-autonomously as part of a larger system. At the scale of a single building, a set of varied physical environments can construct episodic experiences of space. Combining aspects of ritual, the temporal, visceral experience, and sequence, a heightening of spatial perception can occur, which is integral to theories of the episode and the transposition of memories through architectural means.
Located along the Southwestern edge of Lake Michigan, Chicago’s formation by a series of glacial erosions provided an optimal situation for urban development. Founded in 1832, the city gained importance due to its position and topographical features, making it a trade and transportation destination. Chicago became a place defined by its relation to other American cities as a regional and national node. The city developed differently than many other Eastern American cities of the time, which established a separation from their pasts (mainly that of the American Revolution). Instead, Chicago prospered as a city that invented its own future.

Although effected by traumatic occurrences, Chicago was not founded or defined by its lamentation over them. Instead, the city has been defined its optimistic reactions toward trauma, and thus by innovation. Chicago should be celebrated for its innovations and series of regional, national and global “firsts,” produced in response to traumatic occurrences, which have directly influenced current urban and social situations. By remembering such events, the focus of collective memory can be directed toward commemoration which combines the traumatic and the celebratory.

Within the context of Chicago, this approach provides the prospect of remembering the city itself rather than a series of events external to its past. Commemorating conditions of Chicago’s own history will assist in revealing the memory of the city as a component of its current condition.

“A one can say that the city itself is the collective memory of its people, and like memory it is associated with objects and places. The city is the locus of the collective memory. This relationship between the locus and the citizenry then becomes the city’s predominant image, both of architecture and of landscape, and as certain artifacts become part of its memory, new ones emerge. In this entirely positive sense great ideas flow through the history of the city and give shape to it.”

_Aldo Rossi, The Architecture of the City_
Locating Chicago within the U.S. context
URBAN DEVELOPMENT

Site: Chicago
Alterations to the Chicago River

North Branch Canal 1857
South Branch Straightening 1922
Sanitary and Ship Canal 1900
Cal–Sag Channel 1929

Current Chicago River flows
ENVIRONMENTAL CONDITIONS

Planimetric solar diagram

Average and maximum solar angles

Site: Chicago

- Jun: 71.4°
- Jul/Aug: 64°
- Sep/Oct: 48.64°
- Nov/Dec: 21, 24.53°
- Dec: 24.53°
Beyond the Object: The Phenomenon of Memory in Architecture

Transit systems in Chicago

Highways in the Chicago area
CURRENT CHICAGO MEMORIALS

LOCATION OF MEMORY
1. Haymarket Memorial
2. Jacques Marquette Memorial
3. Grant Park Lincoln Memorial
4. Eternal Flame
5. Monument to the Great Northern Migration
6. Logan Monument
7. Veterans’ Memorial Park
8. City Hall Plaque
9. Clarence F. Buckingham Fountain
10. Ulysses S. Grant Memorial
11. WWII Black Soldiers’ Memorial
12. Vietnam Survivors Memorial
13. Bataan-Corregidor Memorial Plaques
14. Christopher Columbus Monument
15. Washington-Morris-Salomon Memorial
16. Chicago Fire Department the Fallen 21 Memorial
17. U.S.S. Chicago Anchor
18. Elks National Veterans Memorial
19. General Sheridan Statue
20. Kennison Memorial
21. Chicago Lincoln Statue
22. Nathan Hale Statue
23. Thaddeus Kosciuszko Statue
24. George Washington Memorial
25. Alexander Hamilton Monument

NATIONAL COLLECTIVE MEMORY
- explorers
- international wars
- presidents
- military figures
- national trauma
- national political figures

CHICAGO’S COLLECTIVE MEMORY
- local trauma
- local political figures
- local celebration
- local historical relevance
- local battles

National collective memory infects Chicago

Site: Chicago
Beyond the Object: The Phenomenon of Memory in Architecture

CHICAGO Memorials
1. Haymarket Memorial
2. Jaques Marquette Memorial
3. Grant Park Lincoln Memorial
4. Eternal Flame
5. Monument to the Great Northern Migration
6. Logan Monument
7. Veterans' Memorial Park
8. City Hall Plaque
9. Clarence F. Buckingham Memorial
10. Ulysses S. Grant Memorial
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13. Bataan-Corregidor Memorial Plaques
14. Christopher Columbus Monument
15. Washington-Morris-Salomon Memorial
16. Chicago Fire Department The Fallen 21 Memorial
17. U.S.S. Chicago Anchor
18. Elks National Veterans Memorial
19. General Sheridan Statue
20. Kennison Memorial
21. Chicago Lincoln Statue
22. Nathan Hale Statue
23. Thaddeus Kosciuszko Statue
24. George Washington Memorial
25. Alexander Hamilton Monument

Chicago parks with memorials and monuments:
1. Lincoln Park
2. Grant Park
3. Northerly Island Park
4. Jefferson Park
5. Washington Park
CURRENT CHICAGO MEMORIALS

George Washington Memorial 1775 Depiction of Washington in command of the Continental Army

Washington-Marion-Salem Memorial 1775 General Washington and two civilian financiers of the Revolutionary war are featured

Thaddeus Kosciuszko Statue 1775 Honor of service in revolutionary war

Alexander Hamilton Monument 1804 First secretary of the treasury, secure nation’s financial stability

Logan Monument 1894–1895 General Logan’s victories in Mexican–American War and Civil War, created Memorial Day

Ulysses S. Grant Memorial 1846–1865 Distinguished military career—Mexican–American War

Grant Park Lincoln Memorial 1965–1965 Dedicated to the legacy of Abraham Lincoln and the Civil War

Eternal Flame 1914–1975 Honors dead from WWI, WWII, Korean War, Vietnam War

“This is the heart of Chicago and I know the heart of Chicago is with us today.”

Vietnam Veterans’ Memorial Park 1960–1975 Vietnam veterans

Vietnam Survivors Memorial 1960–1975 Vietnam War survivors

Logan Monument 1846–1865 General Logan’s victories in Mexican–American War and Civil War, created Memorial Day

Grant Park Lincoln Memorial 1961–1965 Dedicated to the legacy of Abraham Lincoln and the Civil War

Christopher Columbus Monument 1451–1506 Founding of the New World, and conveyed the spirit of President FDR’s New Deal during the Great Depression

Nathan Hale Statue 1775 Revolutionary War militia, stole British intelligence, was hanged

General Sheridan Statue 1862–1865 Union General during the Civil War

Jacques Marquette Memorial 1675–1675 Marks the location where Marquette spent the winter of 1674–1675

Washington-Morris-Salomon Memorial 1775 General Washington and two civilian financiers of the Revolutionary war are featured

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Jacques Marquette Memorial 1675–1675 Marks the location where Marquette spent the winter of 1674–1675

Nathan Hale Statue 1775 Revolutionary War militia, stole British intelligence, was hanged

Kensington Memorial plaque, park 1940–1952 David Kennison’s settlement in Chicago as the final survivor of the Boston Tea Party

Memorial types and locations within Chicago

Site: Chicago
Beyond the Object: The Phenomenon of Memory in Architecture

Happened Elsewhere
- Haymarket Memorial
  - Haymarket Riot
  - May 4, 1886

Happened in Chicago
- Monument to the Great Northern Migration
  - 19th century
  - African American Northern Migration
- Chicago Fire Department The Fallen
  - December 22–23, 1910
  - 21 firefighters trying to put out a massive fire at the Union Stock Yards, deadliest building collapse in American history until 9/11/01
- Eternal Flame
  - 1914–1975
  - Honor dead from WWII, Korea, Vietnam War
  - "This is the heart of Chicago and I know the heart of Chicago is with us today."
- Elks National Veterans Memorial
  - 1935
  - Sacrifices of American war veterans
- U.S.S. Chicago Anchor
  - 1945–1995
  - Service of U.S.S. Chicago in WWII, Korea and Vietnam Wars
- Vietnam Veterans' Memorial
  - Park
  - 1960–1975
  - Vietnam veterans
- Vietnam Survivors Memorial
  - 1960–1975
  - Vietnam War survivors
- Logan Monument
  - 1846–1865
  - General Logan’s victories in Mexican–American War and Civil War, created Memorial Day
- Thaddeus Kosciuszko Statue
  - 1776
  - Honor of service in Revolutionary War
- George Washington Memorial
  - 1775
  - Depiction of Washington in command of the Continental Army
- Ulysses S. Grant Memorial
  - 1846–1865
  - Distinguished military career–Mexican–American War, Civil War
- Nathan Hale Statue
  - 1776
  - Revolutionary War militia, stole British intelligence, was hanged
- Christopher Columbus Monument
  - 1451–1506
  - Founding of the New World, and conveyed the spirit of President FDR’s New Deal during the Great Depression
- Alexander Hamilton Monument
  - 1804
  - First secretary of the treasury, secure nation’s financial stability
- Washington-Morris-Salomon Memorial
  - 1776
  - General Washington and two civilian financiers of the Revolutionary War are featured
- Clarence Buckingham Memorial
  - 1913
  - Clarence Buckingham’s life
- Elks National Veterans Memorial Plaques
  - 1942
  - Recognizing the surrender by Bataan and his troops to the Japanese forces during WWII at Manila Bay
- Kennison Memorial–plaque, park
  - 1840–1852
  - David Kennison’s settlement in Chicago as the final survivor of the Boston Tea Party
- Jacques Marquette Memorial
  - 1675–1675
  - Marks the location where Marquette spent the winter of 1674–1675
- Grant Park Lincoln Memorial
  - 1961–1965
  - Dedicated to the legacy of Abraham Lincoln and the Civil War

Commemorated Where Occurred
- Haymarket Memorial
- Haymarket Riot
- May 4, 1886
- Logan Monument
- General Logan’s victories in Mexican–American War and Civil War, created Memorial Day
- Thaddeus Kosciuszko Statue
- Honor of service in Revolutionary War
- George Washington Memorial
- Depiction of Washington in command of the Continental Army
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- Vietnam Survivors Memorial
- Vietnam War survivors
- Eternal Flame
- Honor dead from WWII, Korea, Vietnam War
- "This is the heart of Chicago and I know the heart of Chicago is with us today."
Influence on Collective Memory

Urban amenities like public art, social spaces, and monumental architecture can be identified as icons within the city. Chicago inhabitants, commuters, visitors and tourists alike may attach memories to them for various reasons—perhaps for their scale, for the known and readily available images of them, or the experience one may have with them. For one reason or another, people often identify Chicago such icons, and they have “become Chicago.” This implies a shift in the city’s collective memory toward les lieux de mémoire, discussed by Nora. Almost all of them include an experiential aspect, but the affect of that experience is overwhelmed by the monumentality of the icon itself.

These specific objects and large-scale, monumental architecture can embed memories, but mainly through the direct experience of and with them. The reflective and fantastical properties of “The Bean” engage the viewer visually, but also encourages movement around and underneath it as one tries to decipher its complex surface. While these icons may provide the stage for new experiences of the existing environment, collective memory could be re-centered to provide an understanding of what made such icons are possible.
Beyond the Object: The Phenomenon of Memory in Architecture

Percentages of memorial types

- Park
- Waterfront
- Public Square
- Urban
- Pedestal + Statue
- Columnar
- Plaque
- Fountain

Field Condition
Artifact
Traumatic / Celebratory / Commemorative
Public Icons
1780s—Jean Baptiste Point du Sable settles at the mouth of the Chicago River

1795—Six Square miles of Chicago acquired by the U.S. government

1803—Ft. Dearborn is constructed along the Chicago River

1812—Battle of Ft. Dearborn

1818—Illinois is unionized as a state

1840—Chicago is platted by James Thompson

1848—Illinois and Michigan Canal construction completed

1848—Chicago Board of Trade is established

1851—The city’s first university, Northwestern University, is established

1855—Lager Beer Riot

1860—Lady Elgin Disaster along the Lake Michigan shore

1865—Union Stockyards open, Chicago is America’s meatpacking center

1868—Rand McNally is formed in Chicago as a railway mapping company

1871—The Great Fire

1885—Home Insurance Building completed, as the world’s first skyscraper

1886—Haymarket Riot (May Day)

1890—The University of Chicago is founded by John D. Rockefeller

1892—First ‘L’ line is constructed

1893—World’s Columbian Exposition held in Chicago

1894—Pullman Company Town strike

1895—Chicago Flood in the freight tunnel system

1897—Loop train lines completed

1900—Chicago River flow direction is reversed

1910—Union Stockyard Fire, 21 firemen killed

1913—Great Lakes Storm

1915—S.S. Eastland Disaster in the Chicago River

1919—Chicago Race Riot

1925—Chicago Tribune Tower constructed

1929—St. Valentine’s Day Massacre

1933—Century of Progress World’s Fair

1933—Union Stockyards’ second fire

1958—Streetcar system dismantled

1969—John Hancock Tower constructed

1971—Union Stockyards closed

1973—Sears Tower constructed

1983—Harold Washington becomes the first African American Mayor

1992—Chicago Flood in the freight tunnel system

2004—Millennium Park opens

2012—28th G8 Summit held in Chicago
1780s – Jean Baptiste Point du Sable settles at the mouth of the Chicago River

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1939 – Union Stockyards Second Fire

1947 – Chicago Race Riot

1958 – Streetcar System dismantled

1969 – John Hancock Tower constructed

1971 – Union Stockyards closed

1973 – Sears Tower constructed

1979 – Loop train lines completed

1983 – Harold Washington becomes the first African American Mayor

1984 – Millennium Park opens

1987 – Loop train lines completed

1992 – Chicago Flood in the freight tunnel system

2004 – Millennium Park opens

2012–2018 – G8 Summit held in Chicago
Several events have been selected for their significance as episodes within the memory of Chicago. The location where the original events occurred will become the sites for intervention. Several of the sites possess existing artifacts, while others do not resemble their former selves at all, and must be supplanted with completely constructed memory. As Rossi states, “Sometimes these artifacts persist virtually unchanged, endowed with a continuous vitality; other times they exhaust themselves, and then only the permanence of their form, their physical sign, their locus remains.” For sites with artifacts, a dialogue between said artifact and new constructed experiences, as well as consideration for the artifacts’ current versus initial function will be vital. Sites without artifacts will rely more heavily on constructing experience through historical relationships.

“[4] SITE(S): EVENTS

“The public realm of the City of Collective Memory should entail a continuous urban topography, a spatial structure that covers both rich and poor places, honorific and humble monuments, permanent and ephemeral forms....”

—M. Christine Boyer, The City of Collective Memory
Battle of Ft. Dearborn
1812

Construction of the fort began prior to the acquisition six square acres of current day Chicago by the American government. Built in 1803, the fort was ambushed and burned by the Potawatomi tribe on August 15th. Eighty-six of 148 evacuees were killed during the attack.

Union Stockyards
1865–1971

The opening of the yards on Christmas Day consolidated a few smaller stockyards in the New City community into a larger slaughterhouse and packing district. The success of the stockyards was mainly due to Chicago’s prominence as a national railroad and shipping center. The eventual closing of the yards signifies the end of the rail system as a means of trade and production, giving way to public transportation and travel.

The Great Fire
1871

Destroying 73 miles of streets, and 17,000 buildings, the fire claimed about 300 lives and displaced 100,000 people from their homes. As the city rebuilt, housing formerly located in the center was pushed to the city’s edge, making way for a main business district to develop. Changes in the architectural make-up of the city ensued, resulting in the advent of the Chicago Frame, and the skyscraper.
Beyond the Object: The Phenomenon of Memory in Architecture

- **The Great Fire**
  - 1812
  - Construction of the fort began prior to the acquisition of six square acres of current-day Chicago by the American government. Built in 1803, the fort was ambushed and burned by the Potawatomi tribe on August 15th. Eighty-six of 148 evacuees were killed during the attack. Destroying 73 miles of streets, and 17,000 buildings, the fire claimed about 300 lives and displaced 100,000 people from their homes. As the city rebuilt, housing formerly located in the center was pushed to the city’s edge, making way for a main business district to develop. Changes in the architectural make-up of the city ensued, resulting in the advent of the Chicago Frame, and the skyscraper.

- **Haymarket Riot**
  - 1886
  - On May 4th, a large gathering of reformers and laborers advocating for higher wages were confronted by police forces when a bomb exploded within the crowd. The following attack resulted in the death of eight officers, and injury of sixty. It is unknown how many protesters were killed, but eight anarchists were tried in court for the incident, despite a lack of evidence as to the initial bomber’s identity.

- **Columbian Exposition**
  - 1893
  - The Expo. solidified Chicago as a city of innovation, in industrial, artistic and architectural terms. The fair grounds became known as the “White City,” in contrast to the greyness of Chicago’s center. While the antithesis of many American cities, the planning of the exposition set standards for future urban planning principles.
After acquiring six square miles of land at the mouth of the Chicago River in 1795, American settlers constructed a wood fort on the riverfront and lake shore. Selected for its situation at the intersection of the river and the lake front, the site of soon-to-be Chicago was optimal for trading and establishing national transit routes. The fort housed American evacuees from Native American forces in 1812, but was abandoned during the conflict. Americans fled to nearby Fort Wayne, and shortly after, the Native Americans burned the structure down.

For four years after the massacre, the site remained empty. The United States Army rebuilt a second fort on the same location in 1816, which functioned similarly, acting as a refuge for residents of the area during the Black Hawk War. The for was eventually destroyed in 1857, as it became obsolete.
Fig. 2 Fort Dearborn axonometric
<table>
<thead>
<tr>
<th>EVENT</th>
<th>PRECEDING</th>
<th>DURING</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Native American-owned land</td>
<td>Confrontation with Native Americans brewing</td>
<td>Site remains vacant until the second Fort is constructed</td>
</tr>
<tr>
<td></td>
<td>Settled for proximity of lake and river—a prominent fort position</td>
<td>The fort housed refugees from the American territory</td>
<td>Rapid growths of size and population reduce the need for a defensive fort, the city’s scale becomes its protection</td>
</tr>
<tr>
<td></td>
<td>Wood fort for American soldiers to establish Chicago as an American entity</td>
<td>Fort burned after evacuation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Direct relationship between man and environmental context—solar</td>
<td>Space of sanctuary and comfort</td>
<td>Fort type becomes obsolete in Chicago—atmosphere of emptiness</td>
</tr>
<tr>
<td></td>
<td>Device for protection</td>
<td>Comfort is disrupted by spatial distortion</td>
<td></td>
</tr>
</tbody>
</table>

**FT. DEARBORN**
Site view East along Wacker Dr.

Site view West across Michigan Ave.

Site(s): Events
Beyond the Object: The Phenomenon of Memory in Architecture

September / March

June

9:00 am 12:00 pm 3:00 pm 6:00 pm
Chicago’s growth as a prominent rail city during the 1800s allowed for a centralized meatpacking industry to develop there. The Union Stock Yards consolidated several smaller yards already present in the “New City” district on the Southwest side of the city at Halstead and Exchange Place. Planned during the Civil War, the stockyards officially opened on Christmas Day, 1865, and claimed a 475 acre site. The rapid success of the stockyards as the focal point of American meatpacking was made possible by the comprehensive rail network running through and to Chicago.

The facilities could hold over 400,000 live animals at once, and from its opening until 1900, 400,000,000 animals were slaughtered there. The massive scale of the yards was threatened several times by fire, but always recovered rapidly. Two major fires, one in 1910, and one in 1934, left the yards in ruins. Until 9/11, the largest recorded number of fire fighter deaths (twenty-one) in the nation’s history occurred in the 1910 fire.

The stockyards experienced a rapid decline from the 1950s until finally closing in 1971. Where the railroad benefitted the stockyards through a process of centralization, the developing highway network dispersed the meat industry’s operations. For this reason, major companies such as Swift & Armour left the Union Stock Yards, spurring its decline.
Fig. 7 Stockyards Pens
### EVENT

<table>
<thead>
<tr>
<th>PRECEDING</th>
<th>DURING</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago’s location as a pivotal trading point brought in a large amount of rail construction</td>
<td>Industry constantly producing grime/smoke</td>
<td>Residential zoning fills in around the site, becoming the “Back of the Yards”</td>
</tr>
<tr>
<td>Small, independent meat packing facilities existed in the site area</td>
<td>Macro–national center for meat industry connected by rail</td>
<td>Transition from meatpacking program to largest industrial park in Chicago</td>
</tr>
<tr>
<td>Materiality and textures are raw, rough, unfinished</td>
<td>Micro–dense network of rail transportation</td>
<td>Former open shed buildings replaced by low-rise brick structures</td>
</tr>
<tr>
<td>Materiality and textures are raw, rough, unfinished</td>
<td>Several fires retard production, but only claim the lives of a few humans and livestock</td>
<td>Transition from open to enclosed space</td>
</tr>
</tbody>
</table>

### UNION STOCKYARDS

Multiple scales of circulation or programmatic relationships/links
Small interruptions or moments of intensity
Industrial materials and atmosphere obscures view

Chicago’s location as a pivotal trading point brought in a large amount of rail construction
Small, independent meat packing facilities existed in the site area
Materiality and textures are raw, rough, unfinished
Beyond the Object: The Phenomenon of Memory in Architecture

Site plan
INDUSTRIAL RESIDENTIAL

Traffic patterns + site access

Building density + open space division

Site location

Zoning split

Site(s): Events

#8 CTS Bus
Site(s): Events
Construction in Chicago up until the Great Fire had primarily been out of wood, with brick or stone veneers for more significant buildings. This largely contributed to the quick and uncontrollable spread of the Great Fire in 1871 from the O’Leary family shed at DeKoven and Jefferson Streets. Fueled by a strong western prairie wind, the fire moved north for 36 hours, absorbing 18,000 structures, and displacing one-third of the city’s residents. Approximately 300 people died in the course of the fire.

After the razing of the city, new, steel construction methods were implemented for all major buildings to prevent such a tragedy from occurring again. The adoption of steel within Chicago led to the advent of the earliest skyscrapers, as the material properties allowed for greater spans, heights and loads than wood. Not only did the fire speed up the transition toward a new building material and a new architecture, but the city also adapted its zoning policies to formulate a central business district on land formerly occupied by residential buildings. The Great Fire is significant for the trauma inflicted upon the city, but also for the innovations reacting to it.
Fig. 16 Michigan Ave. Water Tower
<table>
<thead>
<tr>
<th>EVENT</th>
<th>PRECEDING</th>
<th>DURING</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid expansion as industrial center of America–The City of the West</td>
<td>Void created in the city, displacing 100,000 residents</td>
<td>“The City of the West is DEAD”</td>
<td></td>
</tr>
<tr>
<td>Industry integrated within the city</td>
<td>Dry prairie wind augmented fire</td>
<td>Shells of stone buildings remain—a frame + a surface</td>
<td></td>
</tr>
<tr>
<td>Construction mainly out of wood; brick skins appear on prominent buildings</td>
<td>36 continuous hours of flames</td>
<td>Wood is replaced by steel construction, taking tragedy and turning it into opportunity: the skyscraper</td>
<td></td>
</tr>
<tr>
<td>Materiality and textures are raw, rough, unfinished</td>
<td>Power of nature over man—sublime experience</td>
<td>Emphasis upon surface and outer edge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Presence of an unoccupiable void</td>
<td>Discreet relationship between framing/structure and cladding</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Potential for a vertical component</td>
<td></td>
</tr>
</tbody>
</table>
Site view North along Michigan Ave.

Site(s): Events

Water Tower East

Pedestrian South North movement through site
Major pedestrian flow through site

Public Waterfront

Lakeshore Dr.

Vertical comparison

Low rise  Mid rise  High rise

Urban Void

Density

Site location

Urban void

Traffic patterns + site access

Site(s): Events
As part of a growing labor movement in America, and a series of events in Chicago, the Haymarket Riot (commonly known as May Day) confirmed strength in the rise the labor movement. On May 4th, 1886, a peaceful crowd of unionists, anarchists, reformers and socialists turned violent when a bomb exploded, killing eight observing policemen. A large fight broke out, which resulted in 60 wounded officers, and an unknown amount of deaths and injuries among the crowd members.

Police were unable to identify the bomb thrower, but arrested hundreds of people, eventually trying eight known anarchists in court for murder. Motive forces behind the labor movements associated the Haymarket Riot associated the event, and the ensuing celebration of it, with Communism. Many Americans identified with the riot later on because of its ideological implications. Observance of May Day was popular prior to WWI, but this declined during the Cold War because of the Red Scare.
Fig. 22 Illustration of the Haymarket Riot explosion
<table>
<thead>
<tr>
<th>EVENT</th>
<th>PRECEDING</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Patterns of social reform are on the rise in American cities and small towns</td>
</tr>
<tr>
<td></td>
<td>A week long protest by unionists, and socialists occurred in Chicago, from which the Haymarket Riot sprouted</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EVENT</th>
<th>DURING</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Public discussion at the Haymarket on Desplaines St. surveyed by police</td>
</tr>
<tr>
<td></td>
<td>A moment of violence interrupts a peaceful gathering</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EVENT</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Police brutality became an issue among social reformers</td>
</tr>
<tr>
<td></td>
<td>Two sides developed, one honoring the death of the police, the other honoring the attempts of labor reformers at the Haymarket</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ARCHITECTURAL AFFECT</th>
<th>PRECEDING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subtle manipulation of ground plane at entrances</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ARCHITECTURAL AFFECT</th>
<th>DURING</th>
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<td>Independent spaces or volumes disrupt/penetrate/impact one another</td>
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<td>Transition between serenely lit and aggressively lit ones</td>
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<th>ARCHITECTURAL AFFECT</th>
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<td>Dichotomy of regulated space and free or open space</td>
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<td>Movement between two zones within the memorial</td>
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Site(s): Events
Beyond the Object: The Phenomenon of Memory in Architecture

December

September / March

June
SITE V: COLUMBIAN EXPO.

Responding to the rather fragmented social composition of American life, the World’s Columbian Exposition of 1893 sought to concretize an American cultural identity. Thought of as an “Encyclopedia of Civilization,” the entire fair was seen as documentation of man’s progress throughout time. Ideas presented by the fair’s architect, Daniel Burnham, advocated for Beaux-Arts planning and reference to past fairs. He planned for the architecture of the Columbian Expo. to provide the effect of the Eiffel Tower during the Universal Exposition in Paris.

The architecture of the fair was designed in the style of, what Burnham later called, the City Beautiful Movement. Exemplified by the white surfaces, Neoclassical appearance and Beaux-Arts plan, the City Beautiful became a model for opening up congested American cities, but actually prevented architecture from moving forward and adapting to cultural changes. Known as the “White City,” the fair grounds stood in stark contrast to the rest of Chicago’s predominantly grey architecture. Finally, the illumination of the grounds gave people the idea that this would spread to their own cities, and even farmland.
Beyond the Object: The Phenomenon of Memory in Architecture

Fig. 29 Aerial illustration of Expo. grounds and Hyde Park
Fig. 30 Strolling gardens at Wooded Island

Fig. 31 Wooded Island from Horticultural Hall

Fig. 32 Exposition grounds Bird's-Eye View, Wooded Island at center

Fig. 33 Exposition grounds Bird's-Eye View, Wooded Island at center
<table>
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<tr>
<th>EVENT</th>
<th>PRECEDING</th>
<th>DURING</th>
<th>POST</th>
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<tr>
<td>The city of Chicago is rapidly rebuilt out of the Great Fire’s ruins</td>
<td>Time and culture are categorized through exhibitions</td>
<td>Burnham’s Expo. restricts the progression of architecture, and time through repetition of past styles</td>
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<tr>
<td>Social composition of American society is fragmented</td>
<td>Pure textures and spatial compositions, existing literally and metaphorically distant from the grey, haphazard city</td>
<td>Burnham’s 1909 Plan for Chicago attempts to beautify the city by replicating strategies seen in the Expo.</td>
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<tr>
<td>Rough materials that activate the haptic spaces</td>
<td>Architecture is a paradigm for the City Beautiful movement</td>
<td>Visually and aurally quiet spaces</td>
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<tr>
<td>Reflective and planar surfaces</td>
<td>Elongated space of repetitive experience to slow the perception of time</td>
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<tr>
<td>Transition from fragmented space to highly regulated and ordered space</td>
<td>Visually distant connection to “future” spaces in sequence, restrict motion</td>
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</tbody>
</table>
Site location

Grid vs. pastoral pathways

Topography / texture

Traffic patterns + site access

Site(s): Events
As a device for relaying memories, the architecture will take the form of a memorial type, including additional functional aspects, similar to the Memorial to the Murdered Jews of Europe in Berlin. The memorials should work on personal and collective levels, and will be comprised of contemplative spaces, and an archive for individual retreat and study, as well as a garden for collective experience. Additional programs are intended to accommodate the differences in context (urban and historical) surrounding the site, and are suited for individual and collective interaction.

“(The public realm of the City of Collective Memory) should include places for public assemblage and public debate, as well as private memory walks and personal retreats.”
M. Christine Boyer, The City of Collective Memory

[5] PROGRAM
PROGRAM ANALYSIS

TWO SCALES
The programming of mnemonic spaces are considered as episodes at two scales, that of the city, and that of the building. Embracing the concept of the episode, the set of memorials will be dispersed throughout the city, allowing for each to respond to historical and site contexts, as well as function independently from one another. Although literally different structures in different places, the memorials will share common programmatic threads which help to create continuity between them. Programs of garden, archive and contemplative space are common to each project, but will react differently to their respective sites and the memories being evoked. Through this approach, the project can be understood as an interdependent system of memorials, or as physical episodes of collective memory for Chicago.

At the scale of the building, the break down of program can be seen episodically as well. Steven Holl describes how architecture can be perceived in this way, “...a single work of architecture is rarely experienced in its totality but as a series of partial views and synthesized experiences. Questions of meaning and understanding lie between the generating ideas, forms and the nature and quality of perception.” To achieve a variety of experiences throughout each building, different programs can be articulated as singular moments within an overall experience. Similarly, a single program can also be broken down into smaller sections or sub-episodes, such as the sprinkling of garden spaces throughout the whole building, each possessing different characteristics. The manipulation of programmatic relationships through these methods can strengthen remembrance in the experience of each memorial through a variety of physical environments.
PROGRAMS: PERSONAL TO COLLECTIVE
The following programs are listed in order of the most personal and intimate, to the most collectively engaging. Programs included and their respective scales will be determined by particular site conditions and program site fit relationships.

CONTEMPLATIVE SPACE
Personal / Introverted / Isolated / Slowness
The contemplative space will be the main aspect of the design, in terms of creating a place which evokes the selected urban memory. This program can be seen as a singular zone, or a series of spaces to reinforce the concept of the episode. While auxiliary spaces will aid in constructing an experience about the chosen memory through their atmospheric conditions, this space is intended to be more sacred and humbling for the individual. The space should illicit the desired spatial effects and emotional response, while allowing the individual to project their understanding onto the architecture. Personal experiences of this space will strengthen collective understanding of the memory through shared experience.

RESTROOMS
Service / Private
Primarily a functional component, the restrooms should not interfere with the atmosphere fostered by the hierarchically significant spaces within the project. That said, they should receive natural ventilation and adequate lighting so as not to detract from the architecture in a detrimental manner.

OFFICES
Control / Security / Service / Private / Staff
Several offices will be used for the staffing and maintenance of the facilities. While private, these, like the restrooms, should not interfere with the public programs.

COAT CHECK
Public / Small / Functional
A minimal programmatic component, the coat check will act as part of the lobby, and allow for visitors to have a more direct and unburdened experience of the space.

ARCHIVE
Personal / Research / Text / Documents / Silence
An archive of tangible media (texts, maps, drawings, imagery, artifacts) can support the architectural experience, but should not become the primary means of understanding the commemorated event, for the visitor. The tangibility and tactile properties of items in the archive could assist in constructing a haptic experience of artifacts. The archive can provide a platform for collecting documents related to the event, for the purpose of research as well. Through these means, objects within the collection may be better understood when paired with the architectural experience, and by being re-located to where the event occurred. While a visit to the archive will not be mandatory to understand the project and the memory evoked, it could strengthen the experience (emotion) with knowledge.

AUDITORIUM
Public / Collective / Directional / Active
The auditorium would be used to hold public discussions related to the memorialized event, and also as an element of civic public space within the city. Such a space can assist in creating collective identification with the memorial, and to build a collective memory for the city around the selected episodes and sites. The experience of the auditorium should be one which fosters a relationship between the individual and the public.

MEETING HALL
Communal / Collective / Discursive
A semi-public space, the meeting hall will serve those in the community engaged with preserving the memory or memorial. It will also provide a place of discourse for visitors seeking educational programs, or for the community surrounding the site.

GARDEN
Enclosed / Expansive / Exterior / Public / Collective / Extroverted / Social
The garden will be the connective tissue of the project as a vehicle for circulation, social interaction, and as a setting for reflection. It will mediate between collective and personal identification. Episodes within the building can be connected back to the garden, and the garden can act as an episode in and of itself.

LOBBY
Transitory / Mediating / Public / Entry / Openness / Modest / Indoor-Outdoor
In order to ensure a tonal transition between the outside world and the memorial, the lobby will need to mediate between the two. Any building’s entrance must deal with exteriority and interiority, but in this case, the lobby must also provide a modest transition between the reality of outside, and the architectural environment within. This will assist in focusing the occupant’s attention on the issues presented through the architecture, acting as a space where one may clear their mind before continuing into the rest of the building.
screening room

gallery

storage

lounge

circulation desk

computer lab

reading room

stacks

restroom

office

coat check

lobby

garden

contemplative space

PROGRAM

PUBLIC

SERVICE

COLLECTIVE

INDIVIDUAL
<table>
<thead>
<tr>
<th>Contemplative Space</th>
<th>Garden</th>
<th>Lobby</th>
<th>Coat Check</th>
<th>Office</th>
<th>Restrooms</th>
<th>Stacks</th>
<th>Reading Room</th>
<th>Computer Lab</th>
<th>Circulation Desk</th>
<th>Lounge</th>
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98 Program
Beyond the Object: The Phenomenon of Memory in Architecture

Contemplative Space

Garden

Architect

Meeting Hall

Lobby

Auditorium

Contemplative Space

Office

Restroom

Coat Check

6,000 ft²

5,000 ft²

4,500 ft²

4,000 ft²

3,500 ft²

3,000 ft²

2,500 ft²

2,000 ft²

1,000 ft²

200 ft²

150 ft²
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<th>Office</th>
<th>Coat Check</th>
<th>Archive</th>
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104 Program
Ft. Dearborn Program

Contemplative Space_4,000 ft²
Garden_4,000 ft²
Lobby_1,000 ft²
Auditorium_2,500 ft²
Restrooms_300 ft²
Coat Check_200 ft²

Subtotal_12,000 ft²

Circulation at 25%_3,000 ft²

Total_15,000 ft²
Beyond the Object: The Phenomenon of Memory in Architecture

- 16,700 ft²
- garden
- auditorium
- lobby
- contemplative
- 28%
- 72%
Union Stockyards Program

ContemplativeSpace_4,000 ft²
Garden_3,500 ft²
Lobby_1,000 ft²
Meeting Hall_2,000 ft²
Restrooms_300 ft²
Coat Check_200 ft²

Subtotal_11,000 ft²

Circulation at 25%_2,750 ft²

Total_13,750 ft²
Great Fire Program

<table>
<thead>
<tr>
<th>Space Type</th>
<th>Area (sq ft)</th>
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<td>Offices</td>
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<tr>
<td>Coat Check</td>
<td>200</td>
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</tbody>
</table>

Subtotal 14,300 sq ft

Circulation at 25% 3,575 sq ft

Total 17,875 sq ft
Haymarket Sq. Program

Contemplative Space_4,500 ft²
Garden_3,500 ft²
Lobby_1,000 ft²
Archive_3,000 ft²
Restrooms_300 ft²
Offices_300 ft²
Coat Check_200 ft²

Subtotal_12,800 ft²

Circulation at 25%_3,200 ft²

Total_16,000 ft²
Beyond the Object: The Phenomenon of Memory in Architecture

- 15,000 ft²
- 85%
- 15%
Columbian Expo. Program

Contemplative Space _6,000 ft²
Garden _4,000 ft²
Lobby _1,000 ft²
Archive _3,000 ft²
Auditorium _2,500 ft²
Restrooms _300 ft²
Offices _300 ft²
Coat Check _200 ft²

Subtotal _17,300 ft²

Circulation at 25% _4,325 ft²

Total _21,625 ft²
Beyond the Object: The Phenomenon of Memory in Architecture

- Lobby
- Auditorium
- Archive
- Garden
- Contemplative

45,800 ft²

62%
38%
**[6] PRECEDENT ANALYSIS**

“An architectural experience silences all external noise; it focuses attention on one’s very existence....At the same time, architecture detaches us from the present and allows us to experience the slow, firm flow of time and tradition. Buildings and cities are instruments and museums of time. They enable us to see and understand the passing of history.”

—Juhani Pallasmaa, “Architecture of the Seven Senses”

“All experience implies the act of recollecting, remembering and comparing. An embodied memory has an essential role as the basis of remembering a space or place. Our home and domicile are integrated with our self-identity; they become part of our own body and being.”

—Juhani Pallasmaa, “Architecture of the Seven Senses”

**TOWARD AN ARCHITECTURE OF MEMORY**
- Vietnam Veterans Memorial
- Memorial to the Murdered Jews of Europe
- New England Holocaust Memorial
- Holocaust Museum
- Neue Wache
- Jewish Museum

**PHENOMENOLOGICAL**
- Chapel of St. Ignatius

**EPISODIC**
- Parc de la Villette
- Danteum
“The names of some 60,000 American soldiers who died in the war are all carved into the black granite that covers the wall. There are no objects here. Nevertheless, we are able to remember; we are able to capture time.”

Articulated as a scar on the landscape, the Vietnam Veterans’ Memorial represents the time span of the war through the chronological engraving of war victims’ names. It evokes the temporal dimension through reflection on the polished black granite of the two retaining walls. These literally reflect the image of the viewer onto the wall, and “behind” the names, metaphorically placing them within the memorial and the memory of the deceased. Paired with the simple, decline beneath the ground, the black granite reflects, but also blocks views of the surrounding context. This creates a more intimate environment between the viewer and memorial by removing outside visual distractions, and allowing them to focus on the haptic qualities that add to the experience of the granite’s surface. While ascending from and leaving the memorial, the viewer is slowly re-engaged with their surroundings, with the eventual return of view of the surrounding tress, as well as the axial relationship to either the Washington or Lincoln Memorial.
Beyond the Object: The Phenomenon of Memory in Architecture

- **Changing of view and reflection while moving through**
- **Reflection of self, reflection into the past**
- **Site context reflection**
- **Personal and subject-based reflection**
- **Site relationship**

1975 - 2012
MEMORIAL TO THE MURDERED JEWS OF EUROPE

Berlin, Germany / 2003–2005 / Eisenman Architects
Program: Memorial and information center

“…any attempt to represent [the Holocaust] by traditional means is inevitably inadequate.”

For Eisenman, pre-Holocaust markers and symbols of individual death are no longer suitable for commemoration, which has an effect on the concept of memory and monument in this work. To realize this, he sets up instability within a stable system, a grid of 2,700 concrete stelae. Rotating and shifting stelae of different heights, accompanied by a distorted continuous ground plane which rises and dips down gives a layered experience to the memory of the Holocaust. Shifts in the horizontal and the vertical remove complete axially from the gridded system, skewing human perception of what one would assume to be a regular grid, a fairly common occurrence in daily life. Eisenman puts forth a position on memorials through this work, asserting that Holocaust memorials in particular cannot be nostalgic, and can only identify with memory as a living entity in our present.

Fig. 3 View of adjacent block from above
Fig. 4 View surrounding blocks from atop blocks
Fig. 5 View between blocks
Fig. 6 Aerial Image of the memorial’s undulating top
Fig. 7 Low paths change human perception of scale
Beyond the Object: The Phenomenon of Memory in Architecture

Manipulation of a stable system through the ground plane and the "vertical"
Jewish architect Stanley Saitowitz chose to portray the “darkness of the Holocaust” through light. This allows the project to be read in both positive and negative terms through the overall visceral effect of the six towers. The experience instills a sense of slow agony, but also of hope through scale, materiality, inscription, light, symbolic reference and temperature. It momentarily takes the viewer out of the city and through Poland’s six “factories of death,” Chelmno, Treblinka, Majdanek, Sobibor, Auschwitz-Birkenau, and Belzec. Light passing through the towers’ glass projects shadows of etched numbers onto the viewer. The six million numbers of Holocaust victims represented here become part of the experience, part of the visitor.
According to James Ingo Freed, the building is intended to function as a “resonator of memory.” The building separates reality of the outside world from its internal logic, derivative of the “ghost world of the Holocaust.” This is achieved through oppressive materials and architectural reference to prison-like buildings. Freed adapts architectural symbols found in the death camps to evoke the Holocaust, and create the desired ambiance; four watchtower-like figures make up the Northern façade, and archways are reminiscent of those found at Auschwitz. An orchestrated circulation route establishes a dialogue between exhibition space and architecture by circumambulating the main Hall of Witness atrium space. Exhibition rooms use artifacts, imagery and documents to educate visitors, and this is reinforced by the experience of the architecture itself—architecture and historical representation are dependent on one another.
Beyond the Object: The Phenomenon of Memory in Architecture

Fig. 19 Exterior watchtower

Replication of brick pattern and scale of Auschwitz towers

Fig. 20 Interior portal

Dark, oppressive, industrial structure

Fig. 21 Elevator lobby

Elevator cladding evocative of gas chambers
Originally designed by Karl Friedrich Schinkel in 1816 as a royal guard house, the Neue Wache was adapted to a memorial to German victims of war in 1931 by architect Heinrich Tessenow. After several changes in its commemorative subject, the current Neue Wache stands as a memorial to the Federal Republic of Germany, but retains its updated spatial composition since 1931. A singular space of star materials contains an open oculus above a sculpture by Kathe Kollowitz, *Mother with her Dead Son*. Stark materials line the walls, while the exterior retains its façade, as designed by Schinkel. With a single entry point, the visitor must confront the empty of the space directly. The centralized lighting, high ceiling, and plain materials give a subdued atmosphere to the space.
Berlin, GE / 1998 / Studio Daniel Libeskind
Program: Museum

“The task of building a Jewish Museum in Berlin... requires the incorporation of the void of Berlin back into itself, in order to disclose how the past continues to affect the present...”

Constructed at a time when Berliners were reconsidering the role of their past in their future, the Jewish Museum solidifies the centrality of the Jews in Berlin’s identity. It acts as a “spiritual testimony” to Jewish-German history through proportion, lighting, and materiality. Outside the main galleries, four components articulate Libeskind’s experiential intentions: the six Voids, the Hoffmann Garden, the Tower, and the underground Axes. Each of these embody ideas about the Jewish-German population—absence, orientation and dissociation, and are achieved through spatial distortion, scale and the use of light and materials to do so. Within the galleries, the voids appear as black figures, and allow one to peer inside through gun-slit like apertures. The façade is largely independent of the interior organization and program, creating a disconnect between interior and exterior. The overall form of the building implies a “looking back” at where one came from within the building, which the façade makes unclear, and metaphorically to the history of the Jews.
Beyond the Object: The Phenomenon of Memory in Architecture

The six voids
Seattle, WA / 1994–1997 / Steven Holl Architects
Program: Jesuit chapel at Seattle University

The Chapel is seen as a gathering of different lights, both literally through various atmospheres generated by light, and people types in the social context for which the building is intended. Drawing from the writing of St. Ignatius, Holl utilizes the architecture to create a richer sensory experience through light and haptics. A main intention expressed by the client was to go beyond conventional religious symbols to communicate the significance of religion and religious space. The project can be read episodically in its development as “Seven Bottles of Light in a Stone Box;” each program presents a different experience through the perception of light, color, scent and texture. Beeswax coating in the chapel of the Blessed Sacrament distinguishes its sacrality from others through scent. Holl is able to capture time by considering the movement of light through the “bottles,” and the way this relates to Seattle’s environmental circumstance—light radiates or is more subtle depending on cloud coverage. Alternatively, the construction process is evident in the final product through fabricated pocket point plugs embedded within the exterior wall. Acknowledging the process of construction in the past makes time an increasingly present factor.
Transformation of lighting illustrating the passing of time

Remnants of construction bringing that moment into the present

Beyond the Object: The Phenomenon of Memory in Architecture

Remnants of construction—1998

Transformation of lighting illustrating the passing of time

Remnants of construction bringing that moment into the present

Beyond the Object: The Phenomenon of Memory in Architecture
PARC DE LA VILLETTE

Paris, France / 1982–1998 / Bernard Tschumi Architects
Program: Cultural and entertainment facilities

Overall, the park functions as a series of deconstructed points within a larger grid. Each point, or folie, is a test of programmatic specificity, relative to form. Each folie takes on a different form, but works within a framework of lines, planes and volumes; Tschumi establishes a language for the set, but allows each to exist as its own episode within that set. This deconstruction occurs at multiple scales: the overall park, the space surrounding the folie, and the folie itself. The distribution of nodal points introduces notions of time to the park, where one can measure their real and perceived distance within the space of the system to previous or upcoming nodes. By taking apart and reassembling the park’s program, Tschumi creates successive sequences and frames that come together to form a holistic experience. Drawing from cinematic scenes and sequences, the park’s design exacerbates the concept of episode through the literal break down of form and architectural dispersion, which in turn influences the experience and perception of the visitor in space. Perception of the project is broken down in the same way that program and form are, and can be pieced back together through bodily movement and experience within the park.

Precedent Analysis
Succession of frames between folies, combination of author's diagram and original drawings by Tschumi
Precedent Analysis

Episodes along the N-S Gallery

Structural armature connecting folies

Pathway connecting folies

Stand-alone folies
In the design of the Danteum, Terragni and Lingeri translate the stages Dante’s *Divine Comedy* into a series of episodes as a promotional technique for Mussolini’s Italian Fascist regime. Realized through mathematical proportion, lighting strategies, spatial interrelationships, and reference to the ground and sky, the Danteum sets a course through a series of spaces, each with distinct ephemeral affects. Connected through architectonic similarity, each room can be experienced independently, but is reliant on above, below and adjacent spaces to generate said affects. Transitions of density, openness, floor and ceiling reciprocity and spatial division assist in formulating a consistently varied language of stark, oppressive, monumental, expansive and seemingly floating spatial episodes.
Beyond the Object: The Phenomenon of Memory in Architecture

Fig. 40 Inferno light, edited from Terragni’s drawing
Fig. 41 Purgatory Light, edited from Terragni’s drawing
Fig. 42 Paradise light, edited from Terragni’s drawing
Fig. 43 Impero Light, edited from Terragni’s drawing

Upper and lower disconnect
Light density
Longitudinal split
Slot passage + descent
<table>
<thead>
<tr>
<th><strong>PRECEDENT CONCLUSIONS</strong></th>
<th>Vietnam Veterans’ Memorial</th>
<th>Memorial to the Murdered Jews of Europe</th>
<th>New England Holocaust Memorial</th>
<th>Holocaust Museum</th>
<th>Neue Wache</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manipulation of the ground plane</strong></td>
<td>Retaining wall + continuous passage below and above to foster awareness of ground</td>
<td>Carving + undulation to obfuscate ground + context</td>
<td>Generative surface–void + steam</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modulation of light</strong></td>
<td>Used to create reflections on black marble surface</td>
<td>Darkness between dense and tall stele</td>
<td>Used to make emphasize atmospheric effect and make highlight glass’ material properties</td>
<td>Breaks up cellular rooms, marking them as individual experiences within a larger set</td>
<td>Single source to create hierarchy and complement starkness of interior</td>
</tr>
<tr>
<td><strong>Interior–exterior separation</strong></td>
<td>Not quite interior and exterior, but differences and similarities are drawn between the ground and the sky (or the understood top surface of the stelae)</td>
<td></td>
<td></td>
<td></td>
<td>Oculus open to the sky and elements</td>
</tr>
<tr>
<td><strong>Episodic condition</strong></td>
<td></td>
<td></td>
<td>Symbolic meaning represented through a set of six towers, each of a different death camp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewish Museum</td>
<td>Chapel of St. Ignatius</td>
<td>Parc de la Villette</td>
<td>Danteum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------</td>
<td>--------------------</td>
<td>---------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunken ground plane and blocks tilted from 0°, changing one’s orientation to the sky; sloped and perspectival corridor “axes”</td>
<td>Color modulation acknowledges different zones, reflected by bees-wax surface</td>
<td>Superposition of spatial nodes and circulation systems</td>
<td>Divided into golden ratios and subsequently sliced, allowing for the passage of light through narrow slots to spaces below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to spaces that acknowledge the exterior, but prevent fully reaching it from the axes; disjunction between façade and interior function</td>
<td></td>
<td></td>
<td>Thin slots create discreet floors and walls; makes the architecture “float,” and to connect environment to textual reference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variations on a theme of void below grade, at grade, and within the building mass</td>
<td>Programmatic difference articulated through variations on lighting, and texture, creating seven different atmospheres</td>
<td>Deconstructed gridded point system is reconstructed by the participant through perception of time and through event</td>
<td>Derived from Dante’s text, the architecture translates each stage of the Divine Comedy into a singular space, tied together through architectural language</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A Memorial Archive to The Great Fire, Chicago, IL

Situated on the location of the only two structures to survive the fire, a water tower and pumping station constructed three years prior to the event, the project utilizes these two artifacts, as well as a system of pipes and vertical access shafts below grade as mnemonic and spatial mechanisms within the project. The ground plane becomes a programmatic and metaphorical device for dividing the project into “pre-fire” and “post-fire” spaces, with the majority of commemorative spaces below ground, and a series of towers above grade. Conceptualized as a series of five major episodes related to the stages of the event and it’s aftermath, the project constructs a series of episodic visceral spaces to evoke the memory of the fire and provides an opportunity to enhance Chicago’s otherwise absent collective memory.
Beyond the Object: The Phenomenon of Memory in Architecture

Conflagration

Exodus

Remains

Displacement

Reconstruction
Beyond the Object: The Phenomenon of Memory in Architecture
Entry ramp below street
Exodus
Remains - Figure interior
Beyond the Object: The Phenomenon of Memory in Architecture

Remains
Reconstruction Tower Viewing Deck
Street view East across Michigan Ave. (Site photo provided by Barbara Burke)
Beyond the Object: The Phenomenon of Memory in Architecture

Landscape level at -14’
Beyond the Object: The Phenomenon of Memory in Architecture

Aerial view
Glossary

Abstraction
Body Memory
Collective Memory
Commemoration
Episodic
Evoke
Experience
Memorial
Memory
Mnemonic
Objectified
Phenomenology
Place Memory
Symbol
Visceral
A method for bringing architecture into the “world of ideas;”¹ a technique that can potentially aid in the production of visceral space

“Body memories are not just memories of the body but instances of remembering places, events, and people with and in the lived body”²

Of, pertaining to, or derived from, a number of individuals taken or acting together

A process of co-remembering with others, which consolidates body and place memory into one experience³

Perception-based remembrance through which the relationships between memories are semi-autonomous

To call (a feeling, faculty, manifestation, etc.) into being or activity. Also, To call up (a memory) from the past⁴

The fact of being consciously the subject of a state or condition, or of being consciously affected by an event. Also an instance of this; a state or condition viewed subjectively; an event by which one is affected⁵

A piece of architecture which allows for people to inhabit the past; can reveal connections between past and present in collective and personal memories

The faculty by which things are remembered; (a person’s) memory or power of recollection⁶

A means of remembering, either intentionally or not

Reduced to the properties of an object, anti-experiential and exhibits a disconnect between meaning and physical form / effect

The philosophical study of connections between matter and human consciousness of the mind

“....the fact that concrete places retain the past in a way that can be reanimated by our remembering them: a powerful but often neglected form of memory”⁷

Something that stands for, represents, or denotes something else (not by exact resemblance, but by vague suggestion, or by some accidental or conventional relation); esp. a material object representing or taken to represent something immaterial or abstract, as a being, idea, quality, or condition; a representative or typical figure, sign, or token⁸

A quality of experience and being which illicits an intuitive or gut reaction
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3. Ibid, 5.
15. Ibid, 7.
22. Ibid, 90.
25. Ibid, 11.
27. Ibid, 15–16.
28. Ibid, 95.
32. Ibid, 112.

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15. Ibid, 130.
79.
19. Ibid, 155-156
20. Ibid, 162
21. Ibid, 160
22. Ibid, 149-150
23. Ibid, 183
24. Ibid, 217
25. Ibid, 223
30. Ibid, 82.

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4. Ibid.
5. Ibid.
6.
8. Ibid.

CITY: CHICAGO

SITE(S): EVENTS

PROGRAM(S)

PRECEDENT ANALYSIS
2. Ibid, 37.
THE SENSES OF MEMORY

SITE: CHICAGO

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Robert N. Dennis collection of stereoscopic views.

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Robert N. Dennis collection of stereoscopic views.

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1893  
Photograph.

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1893  
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A brief essay discussing the importance of individuals confronting and repeatedly visiting their memories, especially in a way that grounds them to the place where they occurred


This book examines how architecture, during the 1960s and 1970s, favored design as an abstract visual art instead of one focused on the human body


In this book, Boyner analyzes the way in which representational and historical architectural fragments have taken over the role of collective memory in the city, and in doing so advocates for the contemporary city to adapt its architecture of collective memory to societal changes


A philosophical study of the operation of memory in daily life meant as a continuation of previous theories, through the lens of phenomenology


This book speaks to the rise of abstract monuments and memorials to create new national identities, and what this did to the practice of memorialization


Discusses the motivation and process behind the museum, including project documents


Article addressing the significance of memory in contemporary society, given the rise of digitization


Provides theoretical and conceptual information about the Memorial to the Murdered Jews of Europe, as well as photographs


A historical documentation on the Haymarket Riot through diagrams and text


A historical documentation on the World’s Columbian Exposition through plans, images and text


A section of the City of Chicago’s website, which outlines the location, appearance, and significance of memorials within the city.

Useful for information regarding the Chapel of St. Ignatius—photographic documentation, conceptual motivation, and the use of light and haptic qualities


Pallasmaa argues all senses are interrelated, and for an architecture informed as such, opposed to the current domination by optics


Presents a set of maps corresponding to major eras in Chicago’s history and provides a detailed overview of the time period associated with each map


Publication of lecture materials relating the city’s palimpsestic nature to recent denial of and erasure of urban history and urban artifacts


An article questioning and criticizing Nora’s and other philosophers’ positions on the distinction between memory and history; sees the memories, memorials and histories as discontinuous with the present, and that past events ground present situations


A series of essays by Japanese architect Kengo Kuma outlining his position on the objectification of architecture


A book that looks at the disconnect between architecture, orientation, interiority, exteriority, and the body, as well as the unforeseeable circumstances architecture can produce


Useful for historical documentation of the Great Fire and of one of the selected sites


Essay the concept of place as spaces that can be remembered, imagined and considered


Expansion of a treatise on memory describing the break between and distinction between history and memory, and national identity embodied within each


This book sets up the relationship between the definition of one’s environment through phenomenological means


Used to define terms in the glossary

In this article, Pallasmaa questions the dominance of vision in architecture, underscoring the phenomenological potentials of all senses, time, and materiality in architecture.


An essay which deals with the way bodily senses manifest in architecture, and secondarily their relationship to our ability to reconstruct past experiences.


Essay arguing that space is inherently temporal, existential, and mnemonic, and how buildings can be read in such ways.


A manifesto discussing the role of architecture in the city, as urban artifact, a primary element, and locus, and what has effected change to those aspects of the urban composition.


In this essay, Runia refutes and substantiates parts of Nora’s claims regarding “sites of memory,” positing that the identity-enhancing commemoration of traumatic events should be given up for the sake of self-exploration.


An essay which posits that architecture and art have become symbolic, and that through a study of natural environment we may make architecture appeal to the memory and associations of the common man, once again.


An essay speaking to the connect performed ritual, both sacred and secular, to issues of urbanism.


Useful for information regarding the New England Holocaust Memorial—photographic documentation, and conceptual motivation.


Useful for information regarding the Jewish Museum—photographic documentation, conceptual motivation, and the Jewish population of Berlin.


Schumacher presents an analysis of the Danteum through Dante’s writing, and in the context of Terragni’s other works, which is useful for understanding the relationship between architectural and referential narrative, and conceptual and physical translation of an artifact into space.

_This book provides critical conceptual and design documentation Le the Parc de la Villette, useful for analysis of episodic conditions in architecture, and the connection between discreet elements to form a holistic understanding of space and meaning._


_Tschumi analyzes the relationships between program, event and space, represented in episodic terms through drawing and collage._


_A book cataloging photographs of historically significant events, locations and buildings._


_An analysis and retelling of historical treatises on the art of memory, resulting in postulations regarding the intrinsic link between memory and the stability of place._


_Outlines the motivation behind Zumthor’s architectural aspirations, relative to memory and human perception._