Memory is not Concrete:
A Case Study of the Memorial to the Murdered Jews of Europe

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Abstract
Concrete has become the default material for memorials, and this is also the case in the project of this paper: the Memorial to the Murdered Jews of Europe in Berlin, a eleven acres of gently undulating charcoal grey concrete, made up of 2,711 concrete stelae lined up along paths that orthogonally dissect the whole site. Most of current research on the so-called Field of Stelae addresses to the features of emptiness, anonymity, and muteness so as to underscore what makes this newly erected site of Holocaust memory in the center of Berlin unique. Those works examine the political implications of memory work in and around the site, and ask in what ways and to what extent the discourse on remembering the Holocaust in Germany affects action at the memorial, and how this action, in turn, recasts old and new discursive modes about the past and present politics in contemporary Germany. This paper, however, would like to emphasise an alternative scope of this memorial through the study of its application of concrete, not simply a choice of the designers for this memorial, but a physical medium produced by specific procedure and particular technology. I would accordingly offer an analysis of the tension associated with concrete between the experience of, and action in, the Field of Stelae, its aesthetics and the discussions around it. In spite of established defenses of the design per se by journalist Hanno Rauterberg, historian Mark Godfrey, and architect Peter Eisenman himself, the project fails to bear an adequate historical relation and, hence, is an unsuccessful memorial. At the same time, nevertheless, the use of concrete at the field of stelae deserves more attention in the sense that how to be memorable—associated with special quality requirements including meticulous sitework as well as off-site production—without being a memorial; or even as Eisenman said, “I wanted it to have the quality of concrete without being concrete.” The autonomy of concrete in Berlin, as a result, betrays long-lasting assumption of a material like concrete’s historically constructed relation either to memories towards the future or to the modernity facing the past. Taken together, we see the process by which concrete was in certain circumstances, along with a specific industrial programming, made into a memory-signifying material. And what is clear at the Memorial to the Murdered Jews of Europe is that it was not even for any memory-bearing properties as such that concrete was chosen as a medium for memorial, but rather for contingent reasons: for the opportunity it gave to make seamless objects; and for its nature-suppressing qualities to have a place empty of housing, commerce, or recreation. The question of historical content begins at precisely the moment the question of memorial design ends. Memory, which has followed history, will now be followed by still further historical debate in the upcoming future. From this paper’s point of view, concrete seems to be the general answers to these questions. But memory, after all, is not concrete.

Keywords: Concrete, Material, Modernity, Memory, Peter Eisenman
Portraying a breach in civilization by means of art is different, perhaps even impossible. But for the act that seeks its symbolic expression here, there is no better medium than that of visual art—the abstract formal language of modern art, whose brittle self-containment is more likely than any other to guard against solecisms and trivializations. Anything more tangible would risk the pitfall of false abstraction. (Jürgen Habermas)¹

1. Introduction: A Research Question of Concrete

“Concrete has become the default material for memorials,” said Adrian Forty, and this is also the case in the project of this paper: the Memorial to the Murdered Jews of Europe in Berlin, a eleven acres of gently undulating charcoal grey concrete, made up of 2,711 concrete stelae3 lined up along paths that orthogonally dissect the whole site—the so-called Field of Stelae (Figure 1). Architect Peter Eisenman and sculptor Richard Serra won the competition to build it in 1997, a very busy time in Berlin as Francesco Dal Co depicted:

There was much to be done, and the Reichstag was also calling for its reassuring and spectacular dome. In this instance, decisions were made slowly, the admirable German industriousness yielded, and everything was once more held at bay. The [Holocaust] memorial was only inaugurated on May 10, 2005.4

This is, with certain, a project that has been widely written about, both in English and German.5 Provided we focus on the established discourse on the Field of Stelae, as what this paper is going to do as well, most of them addressed to the features of emptiness, anonymity, and muteness—Irit Dekel’s “Memorial with no Things,”6 Francesco Dal Co’s “Existing in the Absence of Names,”7 even Peter Eisenman’s own “The Silence of Excess,”8 to name a few—so as to underscore what makes this newly erected site of Holocaust memory in the center of Berlin unique. Those works examine the political implications of memory work in and around the site,9 and asks in what ways and to what extent the discourse on remembering the Holocaust in Germany affects action at the memorial,10 and how this action, in turn, recasts old and new discursive modes about the past and present politics in contemporary Germany.11

3 Each is the same width and length, 95 by 237.5 centimeters; they are set in long, parallel rows, separated from each other by a gap of 95 centimeters. Their height varies: the shortest block rises a few millimeters above the cobble-stoned ground; the tallest reaches four to five meters into the sky. Varying not only in height but also in angle, these geometric component parts tilt randomly, from 0.5 to 2.0 degrees. Johan Åhr, “Memory and Mourning in Berlin: On Peter Eisenman’s Holocaust-Mahnmal,” Modern Judaism 28 (2008): 288.
4 Ibid.
5 Please see the bibliography by the end of this paper.
7 Dal Co and Taylor, “Existing in the Absence of Names,” 91.
10 Ball, Disciplining the Holocaust.
This paper, however, would like to emphasis an alternative scope of this memorial through the study of its application of concrete: a material which in fact owns many things to do with history and memory according Adrian Forty and his seminal book *Concrete and Culture*. Concrete is not simply a choice of the designers for this memorial, but a physical medium produced by specific procedure and particular technology. I would accordingly offer an analysis of the tension associated with concrete between the experience of, and action in, the Field of Stelae, its aesthetics and the discussions around it.

To the end, I challenge the seeming success nowadays of Eisenman’s Memorial for the Murdered Jews of Europe. In spite of defenses of the design by journalist Hanno Rauterberg, historian Mark Godfrey, and Eisenman himself, the project fails to bear an adequate historical relation and, hence, is an unsuccessful memorial. At the same time, however, the use of concrete at the field of stelae deserves more attention in the sense that how to be memorable—associated with special quality requirements including meticulous sitework as well as off-site production—without being a memorial; or even as Eisenamn said, “I wanted it to have the quality of concrete without being concrete.” The autonomy of concrete in Berlin, as a result, betrays Forty’s assumption of the material’s historically constructed relation either to memories towards the future or to the modernity facing the past.

2. Site of Memory: Memorial with no Things

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The proposal of a memorial to the murdered Jews of Europe was activated by a citizens’ initiative of West Berlin intellectuals around the journalist Lea Rosh and historian Eberhard Jäckel in 1988\textsuperscript{13} (Figure 2), a year before the Wall came down. Once the federal government decided to make Berlin the capital of unified Germany, it donated an approximately twenty-thousand-square-meters significant plot in the city, part of the ministry garden until 1945, next to Hitler’s ruined Chancellery and crossed by the death strip along the Berlin Wall.\textsuperscript{14} The unique circumstance of the memorial location was precisely described by Peter Carrier (Figure 3):

Its symbolic significance is heightened by immediate urban surroundings: the new government zone, Reichstag building and Brandenburg Gate to the north, the Potsdamer Platz, Leipziger Platz and the documentation center called the Topography of Terror to the south. By occupying a location on the former no-man’s land between East and West Berlin close to these existing sites, it acquired national symbolic significance that neutralized discrepancies between separate commemorative traditions of the former East and West Germany.\textsuperscript{15}

Unlike other such memorials in Poland or Israel introduced in James Young’s \textit{The Texture of Memory},\textsuperscript{16} this one is abstract, invented and located not in the site of persecution. In that sense, the memorial is not designed to make and trace the history of a specific authentic site or event on a particular day, but recalls the genocide as a whole.

Eisenman’s design filled with “stelae” needs, accordingly, to be understood out of the box, rather than merely another reference to timeless, Greek tombstones. As Young said, especially in this case, “Holocaust memorials reflect not only national and communal rememberance, or their geographical locations, but also the memorial designer’s own time and space.”\textsuperscript{17} In what follows, I will examine this memorial’s location, physical openness, newness and abstractness, besides its sheer size, which do not make the project a fascinating place for the staging of designated memory work as Irit Dekel indicated,\textsuperscript{18} but instead for the performance of a American-Jewish architect’s personal representation of the national guilty in the past through, according to Forty,\textsuperscript{19} the material—concrete—without a history.

\textsuperscript{17} Ibid, 8.
\textsuperscript{18} Dekel, \textit{Mediation at the Holocaust Memorial in Berlin}, 6.
because Eisenman averred:

The enormity and scale of the horror of the Holocaust is such that any attempt to represent it by traditional means is inevitably inadequate…Our memorial attempts to present a new idea of memory as distinct from nostalgia…We can only know the past today through a manifestation in the present.20

As the quotation above, Eisenman does not believe the Holocaust-Mahnmal reducible to any single or simple notion. To some extent, Eisenman was not even trying to speak out for those Jewish victims of the National Socialist reign of terror in a figurative way. The educational purpose of this memorial in a historical relation for Eisenman only takes place for anyone who abandons the narrow 0.95m walkways to enter the subterranean spaces, “hidden below ground level at the south-east corner of this extraordinarily moving memorial is an Ort (place) of Information, a knowledge [center] providing visitors with information [carefully] relating to the Holocaust. (Figure 4 & 5)”21 As for an aesthetic relation, possibly the main concern for Eisenman in Berlin: “2,711 gunmetal-grey reinforced concrete stelae, each uniquely positioned on a uniform grid to form a wave-like progression across an undulating site, which drops to 2.4m below street level in places.”22 It is this failed dialectical relation between historical and aesthetic aspects brought about the strong critique like Henry Pickford’s:23

T]he Eisenman memorial and the four rooms of the information [center] are spatially disjoint and virtually independent of each other, such that each relation—the aesthetic and the historical—becomes autonomous and self-sufficient, the aesthetic tending toward myth, the historical toward mere document.

Obviously, past is not the issue for Eisenman in Berlin, not even the possible remembrance of another experience of the past. Instead, he emphasizes the sense of uncanniness and instability created by the stelae and the landscape in the present; to be more specific, a “performance landscape” or a “land art” that attempts to create a new immediacy as writer and journalist Hanno Rauterberg said.24 As a result, this paper, to be practical, focus on Eisenman’s formal endeavor to as well as the actual quality of the

21 Helen Elias, “Standing Stones as a Jewish Memorial,” Concrete Quarterly 212 (2005): 10. The underground information center was designed to complement the abstract form of remembrance that is embodied in the memorial above. A major section of the information center that supplements the memorial is dedicated to informing the visitor about authentic sites, even about the ones that do not exist anymore for reasons of concealment during the Third Reich. In other words, the information center stresses the importance of authentic sites and encourages the visitation thereof.
22 Ibid, 9.
heaps of concrete on the *stelenfeld*\textsuperscript{25}

3. Field of Stelae: Art of Concrete

\textsuperscript{25} Dekel, *Mediation at the Holocaust Memorial in Berlin*, 3.
At the Memorial to the Murdered Jews of Europe in Berlin, those concrete slabs are not a sign according to the examination of the location of site as well as the attitude of the architect depicted above. They are, at most, “a non-sign, an indication that there is nothing to be discovered about the past, here in a place that, of all places, surely should be a site of remembering.” People are not confronted with the presence of history at the memorial, but with the present itself. In other words, “[w]hat has been created here is not a landscape of remembrance, but a landscape of experience” yet with an abstract awareness of the history.

How, a following question could be, Eisenman employed the massive plinths of concrete to create “a memorial with no things” as Dekel named? Starting form a contradictory might be helpful: art historian Mark Godfrey is possible the main critic of defense available to the advocates of the memorial who suggested ways in which the memorial “generates meaning” sufficient to represent the Holocaust. Drawing upon Eisenman’s “idea of ground in the Nazi ideology of blut and boden [(blood and soil)] that made the Jew placeless, alien, and other,” Godfrey suggests that the memorial “replaced the firmness and fixity of the German ground with a fictitious, unpredictable, newly invented topography [comprised entirely of concrete], one that is other than stable.” A second interpretation relies on the dissonance between an apparently rational grid of pillars and individual pillars that lean inward or outward at various degrees, which Godfrey regards as “a disturbing product of a rational system” and as an “analogy for Nazism.”

So, next, why lots of concrete could mean nothing stable and rational? And all of these in the above quotes may does not work at all when it comes to Eisenman and his concrete on site, a problem could only be tackled by engaging the experience and questioning the material at the memorial. Rauterberg, another key supporter of the project’s association with memory, wrote an impressive paragraph describing the experience there:

Remembrance, for [Eisenman], is walking towards an unknown destination; it is a physical experience in which we come closer to ourselves and, he hopes, to history. It involves a vague notion of art’s ability to bridge time and change attitudes. But even for those who do not subscribe to this idea, unexpected impressions emerge while walking, touching, seeing. And for some, at least, these impressions turn out to be vital and memorable metaphors. An abstract

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29 Godfrey, Abstraction and the Holocaust, 246.
awareness of history slips into the here and now. We see people disappear into the inextricable maze before our eyes. We discover how the seemingly harmless becomes menacing. We sense that even the rational has an irrational undercurrent. We notice how easily our notions of order are undermined.\(^{31}\)

In regard not only to the feeling of loneness and lost, but also to the carelessness of history, Dal Co wrote a better one while walking in the memorial:

Walking among the stelae, one sinks; slowly, as one continues along the passages, the foliage of the trees and the spires of the city disappear from view, aided by the gradual weakening of the light. One’s route lacks any direction and has no goal: It leads from nothing and approaches nothing, accompanied merely by an increasing geological unease…What has surfaced is not even a ruin, however. Ruins demand a sense of history and a veneration of the past: attitudes not required here, since the stones are indifferent to it, in their monochrome monotony. In the Berlin memorial, we do not experience what spirits who entertain a good relationship with history feel before sites that offer the spectacle of ruin. There is no room for such sentiments in the memorial, and even fear is not admitted here.\(^{32}\)

And not least, this is exactly what Eisenman said, “it is the memorial’s relationship to the idea of ground and not its site specificity that lends this work.”\(^ {33}\) Neither Rauterberg nor Dal Co mentioned about the understanding of German Holocaust through, the German word of memorial, this *mahnmal* in Berlin.

Regardless of the Murdered Jews of Holocaust in Europe, and even of the site location in the heart of Berlin, the study of Eisenman’s design of the memorial would thusly shifted to what we can nowadays clearly behold there: the field of stelae, namely, a lot of megalithic standing concrete, “such a work becomes a warning, a *mahnmal*, not to be judged on its meaning or its aesthetic but on the impossibility of its own success [to articulate the history].”\(^ {34}\) The memorial is not really for the murdered Jews at all, it is for the present-day audience in Germany (citizens, tourist, etc.), who lack any lived memory of the events, even though they might be “invited” or “demanded” to recall things in the past, provided they happen to go to the Information Center.\(^ {35}\)

In so arguing, there seems to be only one thing existing without any doubt at the memorial: concrete. They are not located there randomly in a mass, but will situated on the grid as a whole. Before doing any further to discuss on Eisenman’s concrete, we may first think about why is concrete, but not other materials. Two official competitions—1995 and 1997 respectively—were held before a

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32 Dal Co and Taylor, “Existing in the Absence of Names,” 94.


34 Ibid.

35 It is estimated that about merely 12 percent of the visitors to the memorial actually enter the Information Center. Dekel, *Mediation at the Holocaust Memorial in Berlin*, 8.
suitable proposal was found which went through several stages of modifications. Eventually, after many public debates and various changes of the design, the Bundestag accepted the modified proposal that was designed by the New York architect Peter Eisenman, whose partner sculptor Richard Serra refused to comply and withdrew the project during the revision of their original design including more than 4,000 stele on the site\textsuperscript{36} (Figure 6).

Although the total number of stelae was forced to be less, down to under 3,000 ones as a result (Figure 7), in order to enable handicapped access,\textsuperscript{37} it emptiness is of a new order that still cannot be compared to a marching or a rally ground, allowing only one person to go between the stelae at a time. And more importantly, the material had never changed as of using concrete. Compared to the abundant literature on memorials, little has been said about concrete as a medium for monuments, since most writing about concrete is concerned with its technical aspects (as I will address later in next section); “the relatively small proportion of the literature that deals with its aesthetic aspects generally takes the form of an apology, committed to showing that concrete is not dense, dull, grey, monotonous or soulless—all the things that are usually said about it—but that it can be beautiful and inspiring.”\textsuperscript{38} In these apologies, it is rare to find much mention of concrete’s application to monuments.

One exception, however, would be Marcel Joray’s \textit{Le Béton dans l’Art Contemporain} (Concrete in Contemporary Art) in 1977 because it even says, “It is in the creation of monumental works that the use of concrete fully justifies itself.”\textsuperscript{39} However, Joray’s reason in saying so do not support the use of concrete in memorials, let alone Eisenman’s one in Berlin according his explanation based on economic and structural consideration respectively: first, it is the only material affordable for their necessarily large size;\textsuperscript{40} second, forms can be produced in it that would be impossible in stone or bronze.\textsuperscript{41} Despite of the reasonable factors in building construction and practice, they were not the case when it comes to the Memorial to the Murdered Jews of Europe, as well as other monuments in usual.

Cost is not, or should not be seen to be, a factor when it comes to a memorial because cheapness

\textsuperscript{36} Carrier, \textit{Holocaust Monuments and National Memory Cultures in France and Germany since 1989}, 124-125.
\textsuperscript{37} Dekel, \textit{Mediation at the Holocaust Memorial in Berlin}, 11.
\textsuperscript{38} Forty, “Concrete and Memory,” 78.
\textsuperscript{40} Take churches for example, they are among some of the earliest concrete buildings. Generally the reason was cheapness: it gave the greatest volume for the least cost. Forty, “Concrete and Memory,” 81.
in a memorial is somehow offensive to those it commemorates, and therefore concrete should never be chosen simply on the grounds of economy. That is to say, memorial is the one form of structure on which, ostensibly at least, no expense should be seen to be spared, and this could be the reason why that up until the Second World War, granite and limestone were the almost invariable rule for memorials. If cost can be discounted as a justification for the choice of concrete as a material for memorials, so too can the argument about its structural possibilities.

Solidity, massiveness, weight are the qualities most often implied by memorials. If one is looking for examples of structural ingenuity, monuments are not generally where one would visit. Taken together, both reason of using concrete—in terms of economy and structure—provided by Joray are not sufficient for understanding the use of concrete in Eisenman's memorial, notorious for displaying serious redundancy of the material. "The field of Stelae" is namely the case can topple Jorey's assumption by the fact that it was not even until the arrival of a request, concerned with any visitor sitting in a wheelchair, from the competition committee that Eisenman agreed to largely reduce the number of concrete stelae, spreading nearly the size of three football pitches, in his original design with Serra, who renounced the project due to this unsatisfactory result.

If neither economy nor structural possibilities entirely justify the preference of concrete for memorials, what other explanations are there in Berlin? Through analyzing other monuments made out of concrete in Europe elsewhere, Forty ultimately attribute the default use of concrete in memorial to material's association with modernity by saying:

"Like modernity, it brings people together but cuts them off from one another; it overcomes the forces of nature but obliterates nature; it emancipates us but ends up destroying old ways of life and old craft skills; and not least, it is irreversible, there is no turning back."

It would be tempting yet too easy to admit the Forty's discourse quoted above. This approach—confronted by a concrete memorial, we face an object that advertises the double aspect of modernity: a journey into a better future, but which at the same time, as a memorial, reverts to a moment of past

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41 Due to concrete's isotropic features to carry loads equally in all direction and so abolish the distinction between load and support. Forty, "The Material without a History," 34.
42 Even memorials that might look as if they had been made out of concrete, or simply that they were made of concrete, turn out to have been made of, or at least clad in stone. Forty, "Concrete and Memory," 77.
43 Dekel, Mediation at the Holocaust Memorial in Berlin, 11.
45 Forty, "The Material without a History," 38.
time—certainly has things to do with what Eisenman called “the sense of a dual time: one experience in the present; the other, the possible remembrance of another experience of the past in the present [towards a future].” However, Eisenman’s concrete stelae themselves, as I prove ahead, raise the question of remembrance and its location as a matter of fact. Whereas these manifestoes even become problematic in some ways, for a profounder understanding of Eisenman’s memorial in Berlin, it would be necessary to consternate fully on the concrete per se.

Joachim Schlör and Jürgen Hohmuth provide very careful data, despite cold statistics they are, to begin with: the total area of the site is 19,073m², on it are distributed 2,711 stelae made of high-quality concrete which are 0.95m wide and 2.98m long. The height varies between 0.5m and 4.7m: 469 of the stelae are 1-1.5m high, 232 are 2.5-3m high, and 83 are around 4.5m high. They are arranged in 54 axes from north to south and 87 axes from east to west. The paths are paved, and 180 lighting units are sunk into the ground. There is wheelchair access, and 41 trees on the western side of the site lead visitors over from the Tiergarten. In this memorial design, Eisenman illustrates how an apparently rational as well as orderly system loses its connection with human reason provided it becomes too big and grows beyond its intended proportions. This instability in an apparently stable system could be what those concrete pillars aim to express, which could be accessed further in real experience inside the field of stelae.

Every visitor “can enter and exit the huge forest of almost imperceptibly leaning slabs from all sides and at all times of day or night,” through any position of this memorial without a wall. The undulating paths allow only one person to walk between the wave-like concrete slabs at a time (Figure 8), within the irregularity of the arrangement of the steltenfeld. In doing so, people are thrown back on their own resources due to the lack of any instruction for the proper or correct use, “some go single file, some leave stones on top of the abstract pillars, some leave flowers, some say prayers.” The transition is extraordinary as Eisenman points out:

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47 Joachim Schlör and Jürgen Hohmuth, Memorial to the Murdered Jews in Europe, Berlin (München: Prestel, 2005), 45. The Place of Information in the south-east corner of the installation has an exhibition area of 778 m², plus rooms for lectures, a bookshop and offices. Total construction costs were 27.6 million Euros.
50 Ibid, 45.
Because of its subject, the serenity and silence perceived from the street are broken by an internal claustrophobic density that gives little relief as it envelops the visitor who enters the field. The experience of being present in presence, of being without the conventional markers of experience, of being potentially lost in space, of an un-material materiality: that is the memorial's uncertainty.51

However, there are some tricky parts in above description. "In architecture and urbanism, we find a particular striking case of a persisting and almost wholly uncritical attachment to the traditional Western belief that material objects provide a complete and satisfactory analogue for the mental world for memory."52 When such a project can overcome its seemingly diagrammatic abstraction, it is in its physical excess; rather than the uncertainty, but certainty: concrete. Moreover, at the field of stelae, concrete is even too much to be excessive as "one does not face an 'object,' the individual moves within and inside the [concrete] of the memorial."53

At the ground level, you are at the center of a panorama of the historical core of Berlin; go down into the Memorial to the Murdered Jews of Europe, and you are cut off from everything except for a mere glimpse of sky between the towering concrete forms in the field of stelae, and only unpleasantly declivity along with narrow pathways allow for any escape. Not a void, but an object, and another one. When you are in the void, there is nothing there to look at apart from yourself, the sky, and the unbroken surface of the concrete slab (Figure 9). An overwhelming sense of oppressiveness is increased by the slight tilt of most stelae. "Eisenman wanted his [memorial] to be a proxy for the trauma of living in a concentration camp: to induce disorientation and claustrophobia."54 Collectively, these leaning monoliths create an apparent wave across the field, “the inextricable maze,”55 in Rauterberg’s words, where people disappear.

With certain, Eisenman, who won the second official competition of the memorial in 1997, clearly understood the stalemate of as well as the debate over the roundly-criticized design of original winner German architect Christine Jackob-Marks in 1995 (Figure 10), whose proposal was an 20,000m² concrete panel, tilted to a height of 11 m on the south side, with the 4.5 million names of the known

54 Åhr, “Memory and Mourning in Berlin: On Peter Eisenman's Holocaust-Mahnmal,” 285. According to Eisenman, “I have heard people say they were in awe and felt a sense of speechlessness; their hands got moist, and I am pleased with these kinds of reaction.”
murdered Jews caved into it, while space for the remaining 1.5 million unknown names is left empty. However, the would-be memorial was dropped due to forceful criticism that even attracted international attention. In July of 1997, after many meetings and hearings, a new competition was decided on after all. This time, three other candidates—including Jochen Gerz, Gesine Weinmiller, Daniel Libeskind (Figure 11-13)—together with the final winner Peter Eisenman and Richard Serra were selected, by when Eisenman fully realized that the choice of concrete works well, but not its colossal massing as a whole, and no names on it would be a better strategy. This is owing largely to a fear of Berlin becoming the “remorse capital” as Carrier observed, a permanent representation of shame was by no means desirable as part of memorial culture in Europe, especially Germany.

4. Concrete Logistics: Exercise in Formalism and Primacy of Material

Some people may be reminded of the megalithic standing stones, like those in Brittany. Others may think of the stone-strewn cemetery on the Mount of Olives in Jerusalem. But these associations do not quite tally with the industrial perfection of the stelae, any more than do other attributions and interpretations—they all founder in the unfathomable mass of stelae and their painstaking alignment. (Hanno Rauterberg)

Admitting that Eisenman learned lessons for the previous failure while designing his field of stelae, I would now turn back more specifically to concrete itself in this project, and start form why concrete works well, as I mentioned previously, in European culture of memorial, by which we behold fragility of memory and the general unsatisfactoriness of all attempts to transfer the evanescence of mental recollection into solid matter. Eisenman is not only a Jew, but also a very sensitive designer to the politics since, as we can tell, apart from the underground Information Center, there is no sign in this memorial on the ground, let alone something like a “Jewish Star” used by his competitor Dani Karavan in 1997’s competition (Figure 14). Although “[t]he Holocaust is, if anything, a particular German historical fact which has coloured the whole spectrum of German political identity since the Second World War,” it is pure experience in the field of stelae, there is nothing to be read, only the concrete

56 Carrier, Holocaust Monuments and National Memory Cultures in France and Germany since 1989, 128.
57 Schröer and Hohmuth, Memorial to the Murdered Jews in Europe, Berlin, 34.
58 Carrier, Holocaust Monuments and National Memory Cultures in France and Germany since 1989, 137.
60 Young, At Memory’s Edge, 205
61 Schmeing, “Eisenman’s Design for the Berlin Holocaust Memorial: a Modern Statement?” 60.
itself, which "is neither beautiful nor ugly. It is merely a material put at man's disposal. It is innocent."\(^{62}\)

To put it differently, in Forty's words:

\[T\]he use of concrete in memorials exposes the fact that concrete is not immune to meaning, that it has an iconography. Unlike so-called 'traditional' materials, whose meaning is often said to be inherent and embedded in them, concrete's is fluid and mutable, made by the circumstances of history.\(^{63}\)

In this Holocaust-Mahnmal, the choice of concrete seems to most deliberately calculated, a fully worked out strategy from the start.

This is not to find an answer, as Forty's endeavor in his concrete research, to why concrete justifies itself most fully in the realization of monuments; instead, I approach in the sense that why concrete is the default solution for Eisenman—actually an alternative designer of the project—in the context of building the Memorial to the Murdered Jews of Europe in Berlin, a project so far never investigated by Forty, whose hypothesis as of "[w]hatsoever service concrete may be to memorials, it would seem that memorials allow concrete to reveal what otherwise has had to repressed" is very tempting, but little hard evidence is offered, and neither is the case in Eisenman's stelenfeld in Berlin.

Nevertheless, "memory" has been taken up in the practice of architecture and urbanism since the 1970s and 1980s,\(^{64}\) during which concrete serves as a default material in building monuments in a long run, memorials do give some insights into concrete if we redeem how Forty discuss the unpopularity of concrete in general, by which he agreed with why Frank Lloyd Wright called concrete a "mongrel" material in 1927 because simply of its ambiguity:

- Is it Stone? Yes and No.
- Is it Plaster? Yes and No.
- Is it Brick or Tile? Yes and No.
- Is it Cast Iron? Yes and No.
- Poor Concrete! Still looking for its own at the hands of Man.\(^{65}\)

Some following up questions, for instance, would be: how to make concrete stronger, to eliminate its imperfections, to make it smoother and finer. In so arguing, the problems of concrete seem to be technical: resolve these problems and it will lose it unpopularity to be memorable.

Stelae have long been put to commemorative and memorial purposes,\(^{66}\) but not concrete. What do

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\(^{62}\) Joray, Concrete in Contemporary Art, 9.

\(^{63}\) Forty, "Concrete and Memory," 94.

\(^{64}\) Forty and Küchler, The Art of Forgetting, 13.

\(^{65}\) Quoted in Forty, Concrete and Culture, 10.
Schlör and Hohmuth mean while underscoring the “high-quality concrete” in Eisenman’s undulating field of concrete stelae? This could be another essential question to ask after knowing why the choice of concrete is for Eisenman. As a pure material in the Memorial to the Murdered Jews of Europe in Berlin, concrete has been treated as neutral medium while its so-called “high quality” come into being, somehow giving it exemption from the system of meaning attached to other materials for fear that any kind of debate would take place again. What is odd for Forty is how can a material so generally thought of as unaesthetic, as amnesiac, have become at the same time the material of choice for the preservation of memories? In Berlin, Eisenman need exactly concrete’s association with the erasure and obliteration of memory makes everywhere the same, or even nowhere; but be there, not elsewhere.

To do that, Eisenman had to make unique request of his concrete, which must be outstanding enough—yet not a colossal slab with names—to express highest respect to those murdered Jews, as well as humble enough—through enduring dark, persistent plain—to be very “receptive to the incalculable, demanding that we appropriate it, bring it to life, fill it with meaning.”67 In fact, most of descriptions of the memorial use the term “stone” when they mention the concrete, such as Rauterberg’s “sea of stones”68 and Pickford’s “memory-stone,”69 and even Eisenman himself wanted those stelae “to have the quality of concrete without being concrete.”70 The truth is nowhere has a field of stelae been created on such a colossal scale, or to such powerful effect, as at the Memorial to the Murdered Jews of Europe.71 “I had an idea about silence, I wanted the [memorial] to speak without speaking,”72 averred Eisenman, we now must go on and ask what kind of stone-like quality of the silent concrete is in Berlin, problematically used for the commemoration of murdered Jews of Europe.

Eisenman chose concrete, rather than limestone, sandstone, or granite, but the finish of the stelae is reminiscent of the roughness and violence of the Holocaust. Provided using stone as most discourse follows, exposed masonry surfaces usually, if not always, show signs of weathering and of time.

66 The Ancient Persians, Egyptians, Greeks and Romans all erected monolithic stone blocks, from the minute to the massive, to record battles, mark graves, celebrate victories and commemorate significant events. Elias, “Standing Stones as a Jewish Memorial,” 9.
68 Ibid.
70 Peter Eisenman: Building Germany’s Holocaust Memorial, directed by Michael Blackwood (New York: Michael Blackwood Productions Inc., 2006). DVD.
However, by employing a dense and rich mixture of aggregates instead, the concrete finish of this 2,711 stelae in Berlin is entirely unblemished and seems impervious to the effect of age and weather (Figure 15 & 16). At the Memorial to the Murdered Jews of Europe, Eisenman’s choice of finish was infinitely superior to other concrete memorials, his project will be everlastingly protected against the attacks of time and of cyclical pillage of the tourists. It will also be saved from the invasion of vegetable growths.

Where and how those concrete stelae stand? Let’s start from an Eisenman’s own reminder:

[T]hese stelae are not the result of the imagination or genius of the designer, were already there, hidden among the ivy of the gardens, by the soil, by the dust of the city's demolition once carefully piled up at the edges of the park, similar to what was done with the ruins of the huts in the Bergen-Belsen concentration camp. These stones had always been there, in the heart of the city that had grown in an orderly fashion, been destroyed, and then rebuilt: a secret that the architect has merely emphasized, without presuming to give it a name.  

Actually, he simply used a roughly rectangular grid system to appear from afar as a gridded field of sober markers embedded in rolling topography, which drops to 2.4m below street level in places.  

According to Elias, “the site is in an area that was known as the ‘Dead Zone’ during the Cold War and had lain empty since the Second World War.” It was cleared of existing foundations and its topography of craters and dips modulated to create a series of terraces on which the founding level for large groups of stelae would be constant.

Within this uneven landscape, project engineer Buro Happold realized what are essentially rectangular strip foundations, or footings, to support those stelae. To do that, each stele rests on two single reinforced concrete strips, cast in a steel shutter, over a fill-layer of sand (Figure 17 & 18). Even though each of them varies in height to create a wave-like motion in response to the subtly rolling terrain, a grid plan for these stelae was laid down (Figure 19), and the site’s soil was then excavated to create individual “terrace” of compacted soil where the concrete pillars would sit (Figure 20). Precision was seriously required to create the top plane for each unique foundation, thus ensuring the exact individual stele tilt, from 0.5° up to a maximum inclination of 2° (Figure 21) while only a few stele remain

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73 Ibid, 94. And Dal Co expanded this by saying: “The architect has acted as a geologist, archaeologist, and perhaps even biologist, all at once, if, as Jünger leads us to believe, the study of the layers of geological sedimentation calls for skills similar to those that anyone wishing to discover the past of our cities must possess.” Ibid, 95.
75 Elias, “Standing Stones as a Jewish Memorial.” 10.
76 The following explanation concerned with construction details is based on Elias’s “Standing Stones as a Jewish Memorial” and Deborah Snoonian, “In Berlin, Meticulous Sitework and Off-site Production Help Piece Together a Sober Memorial.” Architectural
upright. Before placing the prefabricated hollow concrete pillars, extra supporting “bumps” fitted with rubber gaskets were added to each footing to accommodate the varying weights and tilt angles of every stele (Figure 22).

Precast off-site in advance, each hollow concrete stele has four sides and a top: “a wall thickness of 120-150mm for the vertical faces and 160-250mm for the top surface.” As matter of fact, there has never been a field of stelae on such an enormous scale, Happold had to develop a close coordination of design and engineering issues during construction comparable with industrial manufacturing to achieve the huge numbers asked by Eisenman:

The shuttering system was designed so that after 48 hours, each stele could be lifted, rotated and positioned in a workshop prior to the removal of the steel formwork, eliminating any contact [with air or water] to the fresh concrete surfaces and improving consistency of finish.

To be more specific, based on the prefabrication procedure quoted above, we need to see further what quality of concrete, like stone, required by Eisenman. Stelae were cast at a mass-production rate of 10 or 11 every single day, about 60 per week, depending on their size. A three-piece steel shuttering system enabled pours of up to 18 cm for each side (Figure 23). A thicker top enabled the stelae to be cast upside-down, facilitating concrete placement as well as compaction. Galvanized steel reinforcement was carefully calculated to minimize crack widths to less than 0.1mm. The legible emphasis here is on the totally seamless, monolithic effect of the concrete facing, there is no trace whatsoever of joints between areas of concrete except for turning edges.

Monolithic casting in a high-slump concrete mix (to DIN 1045), as Elias points out, gave rise to an aesthetically more permanent presence that met with the approval of both Eisenman and the client Stiftung Denkmal für die ermordeten Juden Europas. According to Sidney Mindess and Francis Young, determined by trial mixes, the Standardization of DIN 1045 suggests that reinforced, self-compacting concrete to be made with crush brick to create a reasonably dense texture. In the current edition of DIN Record 193 (2005): 165. Also, a professional-report-like portfolio is very helpful: Klaus Frahm, Memorial to the Murdered Jews of Europe (Berlin: Nicolai, 2005).

Trials were also conducted on two-piece, five-piece and monolithic forms. Elias, “Standing Stones as a Jewish Memorial,” 12.

Ibid, 10.

The designer team and fabricator, Firrna Geithner, checked each stele against an approved prototype before authorizing it for shipment to the site. Snoonian, “In Berlin, Meticulous Sitework and Off-site Production Help Piece Together a Sober Memorial,” 165.

“The stelae are monochromatic, and their ends, like the stitches of a net that intertwine to form a tight mesh, form an outline curved in several directions, which the dancing light transforms into something resembling a veil suspended above the ground.” Dal Co and Taylor, “Existing in the Absence of Names,” 93.
1045, minimum binder contents for dense concrete with cement contents of 300, 270, or 240 kg/m² are specified, depending on grading of aggregate and other conditions.\textsuperscript{81}

In addition, each stele was inverted to upright before the shuttering was removed and stored in a controlled-led workshop environment. Before leaving for on-site installation (Figure 24), not only optimal curing but also surface treatments were applied to every stele to avoid efflorescence and to protect them from graffiti. The memorial, after all, is traditional in the sense of using material such as concrete, as Forty said, which is a common means for the construction of memorials. However, it is not only rigorous but also innovative in its form and design at the Memorial to the Murdered Jews of Europe since for Eisenman, "it is to architecture after the demise of modernist abstraction and to ground as a condition of presence that this work appeals."\textsuperscript{82}

Rosalind Krauss argues that the grid, the quintessential repetitive and reproducible structure, holds a privileged place in modern art; that the assumed objectivity and a symbolism the grid embodies are self-sustaining illusions:

In the cultist space of modern art, the grid serves not only as emblem but also as myth. For like all myths, it deals with paradox or contradiction not by dissolving the paradox or resolving the contradiction, but by covering them over so that they seem (but only seem) to go away. The grid's mythic power is that it makes us able to think we are dealing with materialism (or sometimes science, or logic) while at the same time it provides us with a release into belief (or illusion, or fiction).\textsuperscript{83}

Here, the grid, in Eisenman's memorial in Berlin, finds its unavoidable analogy in psychoanalysis, repression is embodied through repetition because they are there as repressed elements, and they function to promote endless repetition of the same conflict: concrete; as Forty said, more precisely, to "concrete over."\textsuperscript{84} However, that was not, as he defined, to simply end nature's dominion over the surface of the earth, but instead, it is those who make things out of concrete—among them Eisenman—generally discourage us from seeing it as a historical material. Though Forty declared that concrete has no history: it is always new, always fresh,\textsuperscript{85} that is not the case on the field of stelae in Berlin, in which we have to admit that it opens up possibilities, but at the same time closes off access to the history, and every concrete structure, in one way or another, announces this to us (Figure 25). In

\textsuperscript{82} Eisenman, "The Silence of Excess," n.p.
\textsuperscript{84} Forty, "Concrete and Memory," 80.
\textsuperscript{85} Forty, "The Material without a History," 38.
short, standing in Eisenman’s *stelenfeld*, it is not the intersection of concrete and memory, but concrete itself that concerns us.

5. Conclusion: Memorial is not Concrete

I did not speak in the language of architecture; I spoke with its silence. People will always try to relate architecture to something, [but to me,] it looks like what is: a series of objects in space, no more. It has nothing to do with Jewishness *per se*. It is not about memory. Am I thinking about the Holocaust when I go to the memorial? Not me! (Peter Eisenman)

Once in the memorial, you are surrounded by concrete: the paving is rough, but the walls are concrete slab of superfine quality, exposing a dense and rich mixture of aggregates, yet the finish of them is not crude or barbaric at all. What we see in this Berlin memorial is concrete used precisely for the same reason as it is generally despised: for its anti-natural properties, the fact that it does not succumb to the same processes of aging and decay as a result of its particular process, rather than merely being a *material* on hand, as Forty argued:

> [S]uch a feature of the aesthetics of concrete undoubtedly has something to do with its common, but mistaken, designation as a material. Concrete, let us be clear, is not a material, it is a process: concrete is made from sand and gravel and cement, [anything can be loose even brick, but these things] do not make concrete; it is the ingredient of human labor that produces concrete.

Eisenman’s design of “concrete labor” for building the memorial creates a kind of sensory deprivation, which forces the visitors to concentrate upon the sky, and the present, otherwise there is nothing but concrete as of a perfect being. The concrete surroundings do not invite any kind of reflections on history, or even on the passage of time; memory, if there can be such a thing in the field of stelae, is of the moment, here and now, something cannot be captured or preserved. “These physical feelings are intended to stimulate emotional ones; people should feel the purpose of the memorials rather than think them.” Those concrete pillars—Quentin Stevens and Marco Belpoliti just called them “sculpture”—are a major component of this memorial’s material function, whose industrial perfection

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86 Åhr, “Memory and Mourning in Berlin: On Peter Eisenman’s Holocaust-Mahnmal,” 284. Many content of this article is based on author’s interview with Eisenman, and that is exactly where this quotation from.


of stelae is not generally welcome when it comes to public art and civic space because that concedes the lack of historical specificity itself when it denies access of everyday participation, such as circumstance for plant to grow or opportunities for artist to draw. Acting like an indestructible stone fails to meet Åhr, Johan’s expectation that “the Holocaust-Mahnmal [would] suggests that an awareness of Europe’s past must guide its future.”

Taken together, we see the process by which concrete was in certain circumstances, along with a specific industrial programming, made into a memory-signifying material. And what is clear at the Memorial to the Murdered Jews of Europe is that it was not even for any memory-bearing properties as such that concrete was chosen as a medium for memorial, but rather for contingent reasons: for the opportunity it gave to make seamless objects; for its nature-suppressing qualities to have a place empty of housing, commerce, or recreation; and for the political associations it has in certain circumstances, like the intertwined relationship between two design competitions,

It has to be said that the large majority of concrete memorials betray a naïve optimism about the capacity of solid objects to perversive memory: in too many memory-work projects concrete has been used on no specific purpose but the reason that it offers the appearance of dense mass and indestructibility, as if an excess of these properties would be enough to guarantee the prolonging of human memory. In spite of Pierre Nora’s claim: “[T]he lieu de mémoire is double: a site of excess closed upon itself, concentrated in its own name, but also forever open to the full range of its possible significations,” a misplaced power should not have been rested upon objects to prolong human memory for it is not the physical decay of monuments that makes them so ineffective at preserving memory. In this sense, excessive concrete in Berlin is still based on the tradition of excess as

90 Åhr, “Memory and Mourning in Berlin: On Peter Eisenman’s Holocaust-Mahnmal,” 287.
91 “How to proceed? In what we would call an extension of the original process and not its replacement, we agreed to invite the nine finalist of the 1995 competition in addition a dozen or so other world-class artists and architects to submit new designs.” Young, At Memory’s Edge, 200.
92 In all of the early cases where concrete was used for memorials, before it had become, as is the case now, the conventional material for memorial building, the choice of concrete relied upon other arguments. Of the possibilities, in might be the relative indestructibility of concrete, increasing the chances that what might otherwise be forgotten will be preserved for perpetuity, that made it the preferred medium: “the larger and denser the block of concrete, the safer the memory would be.” Forty, “Concrete and Memory,” 82.
94 It is not in the later generation of Holocaust memorials that there has been a more questioning attitude to this approach, and concrete has come to be more used in certain cases more as a material into which memories sink, never to be recovered. Forty, “Concrete and Memory,” 94.
plenitude because Eisenman fails to tell us or even determine for himself what an alternative concept—in addition to the metaphysical discourse stemmed from technical achievement throughout the building process—of excess might be.

The question of historical content begins at precisely the moment the question of memorial design ends. Memory, which has followed history, will now be followed by still further historical debate in the upcoming future.95 James Young, the only foreigner and Jews of the committee charged with choosing an appropriate design for Germany’s national memorial to Europe’s murdered Jews, had proposed some critical questions after Eisenman won the competition:96 “what will Germany’s national Holocaust narrative be? How will the memorial’s text actually read? Who will write it and to whom will it be written?” And not least, “what is it to be remembered here in this waving field of pillars?” From this paper’s point of view, concrete seems to be the general answers to these questions. But memory, after all, is not concrete.

References


96 Young, At Memory’s Edge, 223.


Figure 1. Aerial view of the Field of Stelae from northeast.\textsuperscript{97}

Figure 2. Petition of the citizens’ action group “Perspektive Berlin” (Frankfurter Rundschau, 30 January 1989).98

Figure 3. Urban planning map for the memorial property, showing nearby construction projects.\textsuperscript{99}

\textsuperscript{99} Ibid, 315.
Figure 4. Layout of the memorial, including the foundation contours for the field of stelae and the outline of the underground Information Center at the south-east corner.\footnote{Judit Solt, “Schleichende Beklemmung: Peter Eisenman, Denkmal für die Ermordeten Juden Europas, Berlin.” Archithese 35 :74.}
Figure 5. The zoning of function at the Information Center.\textsuperscript{101}

\textsuperscript{101} Sibylle Quack, \textit{Auf dem Weg zur Realisierung: das Denkmal für die ermordeten Juden Europas und der Ort der Information: Architektur und historisches Konzept} (Stuttgart: Deutsche Verlags-Anstalt, 2002), 36-37.
Figure 6. Peter Eisenman and Richard Serra, first proposal for Berlin’s Memorial to the Murdered Jews of Europe, 1997. The waving field of pillars consists of more than 4000 concrete stelae.¹⁰²

Figure 7. Peter Eisenman, second proposal for Berlin’s Memorial to the Murdered Jews of Europe, 1998. This revised design is with trees, parking spaces, and 2,711 concrete stelae instead of around 4,200 ones.\(^{103}\)

Figure 8. A man is walking the narrow waving path in the memorial.\(^{104}\)


\(^{104}\) Schlör and Hohmuth, *Memorial to the Murdered Jews in Europe, Berlin*, 125.
Figure 9. Looking upward while standing in the memorial.\textsuperscript{105}

Figure 10. Model for the Holocaust Memorial by Christine Jackob-Marks, 1995.\textsuperscript{106}

\textsuperscript{105} Ibid, 44.

\textsuperscript{106} Stavinski, Das Holocaust-Denkmal, 318.
Figure 11. Model for the Holocaust Memorial by Jochen Gerz, 1997.\textsuperscript{107}

Figure 12. Model for the Holocaust Memorial by Gesine Weinmiller, 1997.\textsuperscript{108}

\textsuperscript{107} Ibid, 319.
\textsuperscript{108} Ibid, 320.
Figure 13. Model for the Holocaust Memorial by Daniel Libeskind, 1997.\textsuperscript{109}

Figure 14. Model for the Holocaust Memorial by Dani Karavan, 1997.\textsuperscript{110}

\textsuperscript{109} Ibid.

\textsuperscript{110} Young, \textit{At Memory’s Edge}, 205.
Figure 15. Rain on the top of concrete stelae.\textsuperscript{111}

\textsuperscript{111} Schlör and Hohmuth, \textit{Memorial to the Murdered Jews in Europe, Berlin}, 53.
Figure 16. Snow on the top of concrete stelae.\textsuperscript{112}

\textsuperscript{112} Frahm, \textit{Memorial to the Murdered Jews of Europe}, 68.
Figure 17. Left to right: concrete foundations; fill between the foundations; stele setup; fill and paving\textsuperscript{113}

Figure 18. Stelae Foundation works on the site (1).\textsuperscript{114}


\textsuperscript{114} Frahm, Memorial to the Murdered Jews of Europe, 49.
Figure 19. The height of each stele, categorized by different colors in this diagram, was decided by the topography of the real site.\textsuperscript{115}

Figure 20. Stelae Foundation works on the site (2).\textsuperscript{116}


\textsuperscript{116} Frahm, \textit{Memorial to the Murdered Jews of Europe}, 25.
Figure 21. Detail of stelae footing connection.\textsuperscript{117}

Figure 22. Stelae Foundation works on the site (3).\textsuperscript{118}


\textsuperscript{118} Frahm, \textit{Memorial to the Murdered Jews of Europe}, 49.
Figure 23. Off-site production of stelae.\textsuperscript{119}

Figure 24. Each stele was lowered into place with a crane.\textsuperscript{120}

\textsuperscript{119} Ibid, 42.

\textsuperscript{120} Ibid, 43.
Figure 25. A concrete stele in the memorial.\textsuperscript{121}

\textsuperscript{121} Rauterberg, Binet, and Wassmann, \textit{Holocaust Memorial Berlin}, n.p.