

## PART III

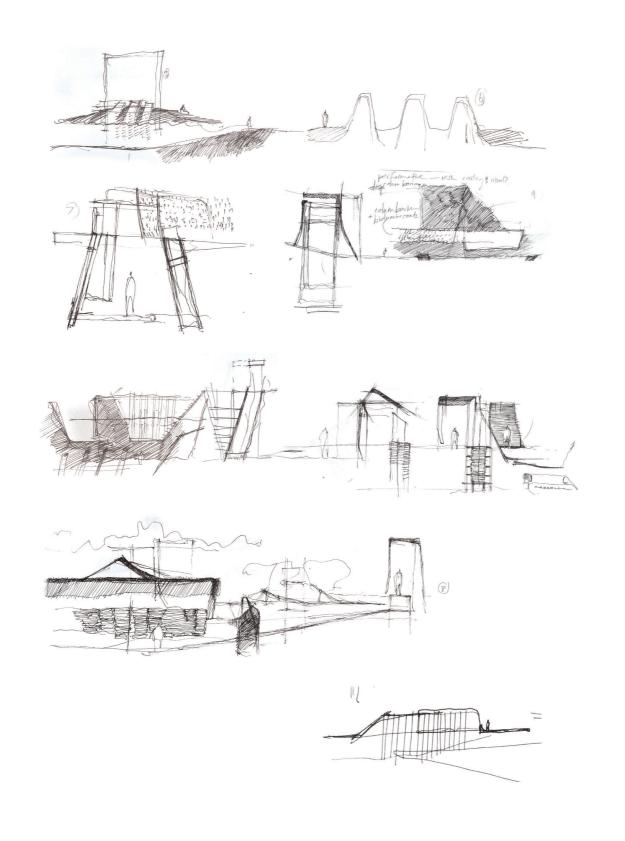
# **REVERIES**

Escape and reimagination in the second artificial landscape

fig. 6.69. (author) Initial conceptual sketches of architecture as the *first* artificial landscape.











## Chapter 7

# Design development

#### Negative as architectural insertion:

The design of the new columbaria and *Bioluminescent Conservatory* is a conceptual, programmatic, material and technological response to, and mirroring of, the unknowns inhabiting Brixton cemetery. These unknowns are created from the cemetery's *narrative of escape* (from *physical-*, *amnesic-* and *reimaginative death*) specifically manifested in its remnants, and its sublime otherness which contrasts the profanity of its context. These unknowns are furthermore encountered in the chaotic nature of the forest — in its nostalgic alienation, temporality, unrestrained growth (versus the voids interspersing its lushness) and mythological fantasy. These conditions form the material basis from which architectural *negatives* can be produced.

The insertion further responds to the proposed site development plan proposing: the addition of new crematoria, articulation of existing pedestrian corridors which will bind the proposed residential, commercial and recreational developments with the *Knowledge Precinct*, newly created passages traversing the cemetery and binding its denominational sections, and the bus stops which also serve the hospital and surrounding schools.

**Design strategy:** Materializing the *negative* into the second artificial landscape.

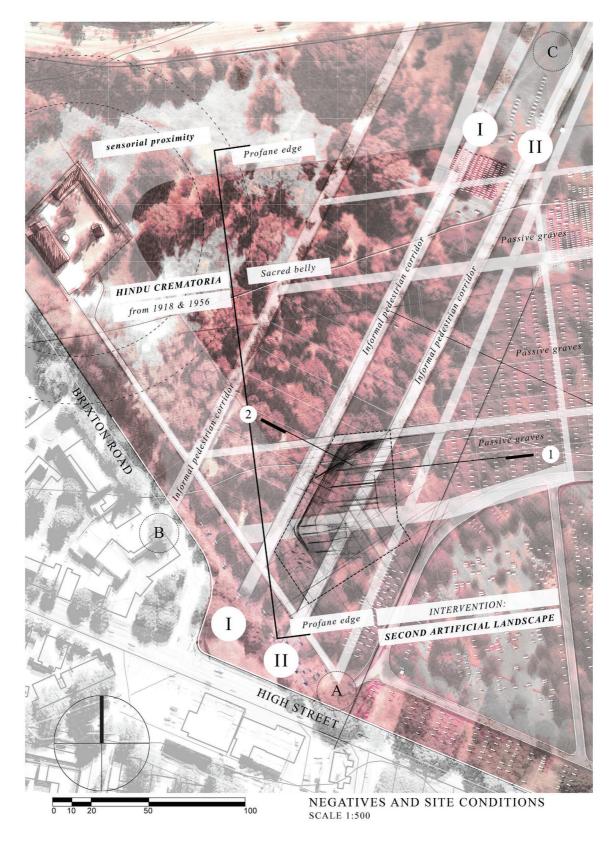
## **Processional escape**

The *negative* is, therefore, adopted as a design strategy with which to create and articulate the *second artificial landscape*. The following section will outline conditions on the site which allow for a sensitive architectural response with specific relevance to the *negative*.

fig. 7.70. Initial conceptual sketches exploring the layering of steel elements over the moulded concrete structure.











## Responding to existing conditions

## Situating the second artificial landscape amongst the remnants.

Acknowledging the cemetery's current state of uninhabitability due to its loss of significance, not only creates a condition which necessitates its reanimation, but also opens the amnesic conditions on site to in(ter)vention and reimagination. In addition to the cemetery being gradually claimed by the forest, creating precarious conditions for the sporadic pedestrian, the density of graves scattered throughout the site creates a further impediment towards intervention. For this reason, the site is chosen on the south western periphery of the cemetery, firstly, due to the sparsity of graves in this area, which, being in proximity to the crematoria, has been appropriated mostly for Hindu burial (one can see remnant copper plaques retained from the cremation process nailed to the blue gum trees surrounding the crematoria). Secondly, a triplet of pedestrian corridors have formed in this area, stretching between the southern and northern edges and defined by towering blue gum trees. These corridors narrow as they gradually pierce the forest, immersing the dweller, at least viscerally, in the cemetery's sacredness. The dweller is beckoned by the forest's lush otherness, while traversing its profane periphery. Although the forest's density offers the dweller repose from the immediate context, these corridors are travelled through infrequently, both to avoid the peril lurking within as well as the sensory confrontation of the nearby crematoria.

These corridors, being voids that stretch through the forest, offer a sensitivity to the intervention's placement. It provides negative space within which the *second artificial landscape* can be situated without damaging the cemetery's or forest's material. These negatives, furthermore, provide a space exposed to bountiful sunlight in which the conservatory can be situated, which, in binding the new residential and commercial enclaves to the *Knowledge Precinct*, creates a habitable garden for the dweller to be immersed in. This *negative* of the artificial forest unveils itself on entrance, subsuming the dweller in the forest's wonder, reanimating the forest.

Furthermore, the site is situated on the fringe of grave clusters — sanctified ground surrounds the intervention, drawing the second artificial landscape into its sacredness,

fig. 7.71. Existing *negatives* and site conditions.





however, also demanding reverence in its reaction to this sublime material. The graves, here, as in most of the cemetery, are laid out in disarray, however, two main axes can be identified to which the intervention responds. Firstly, the graves on the eastern edge of the intervention are traditionally orientated, with an east-west alignment, forming the first, memorialization grid of the architectural response. The volume of graves existing on this axis identifies this as the main amnesic material to respond to. This memorializing granite surface is overgrown and abandoned, creating the conditions to which the archiving, documenting and exhibiting (as forms of memorialization) programs of the intervention will respond, to reanimate the amnesic material. This include the Bioluminescent Conservatory (constantly archiving new bioluminescent species), Cabinets of Obscurities, and Inventory of Effigies. Secondly, the few graves which are found bordering the site to the south, are aligned perpendicularly to the corridors stretching past them. This gives a second axis to which the architecture responds; however, seeing that the majority of burial space designated to this axis is unoccupied, it is left in perpetual anticipation. Suffused with this negative potential, it is regarded as the reimaginative grid. The architecture manifests, here, through the reimaginative program — the Spectral Garden, Imaginarium and Maturation Loculi, in relation to the new columbarium which is also created here.

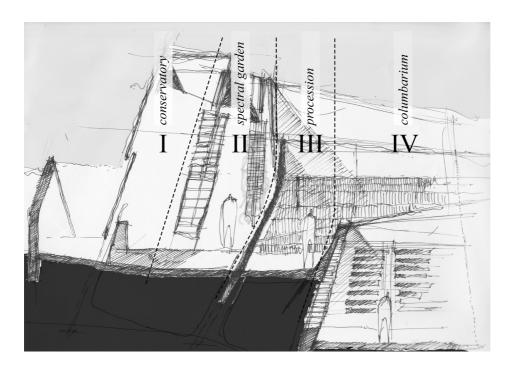


fig. 7.72.Thresholds of escape. Descent through the *Bioluminescent conservatory*.





Lastly, while the soil conditions on the northern half of the cemetery is mainly consistent of quartzite and minor conglomerate, the southern edge consist primarily of shale. This soil condition is favourable for the process of piling and moulding prescribed by the tectonic concept, as it has its own structural integrity, while also allowing piles to be load bearing from the traction between the concrete and its rocky texture, eliminating the need for piling foundations.

### 1\_ Thresholds of escape

In recognizing the cemetery and its ruination as a consequence of the artificiality of escape, the second artificial landscape is conceptually articulated as thresholds of escape. This becomes the first reimagination of artificiality, translated through the negative, into material architecture. The strategy is then to intervene with the negatives on three levels, as the dweller gradually descends into the second artificial landscape.

The thresholds of escape expose the dweller, firstly, to the remnant material and traditional, existing graves of the cemetery, through a first layer of circulation guiding the dweller through the new and existing corridors of the forest (the first artificial

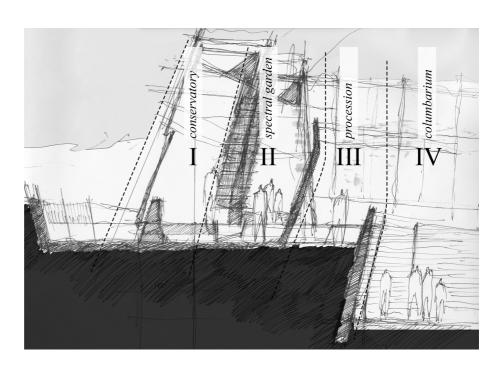


fig. 7.73. Thresholds of escape. Descent into the columbarium







landscape), leading to the columbarium. From here, the dweller is lured into a second layer of escape, articulated through the performativity of the negative which manifests as the second artificial landscape. This constitutes the material intervention, with its main proponents being the columbarium and the Spectral Garden, which are introduced, respectively, to reanimate the cemetery and the forest. The negative suffuses this layer with artificiality through its program, in the form of fleeting wonder captured by the Spectral Garden, the ephemerality of exhibitions hosted in the Inventory





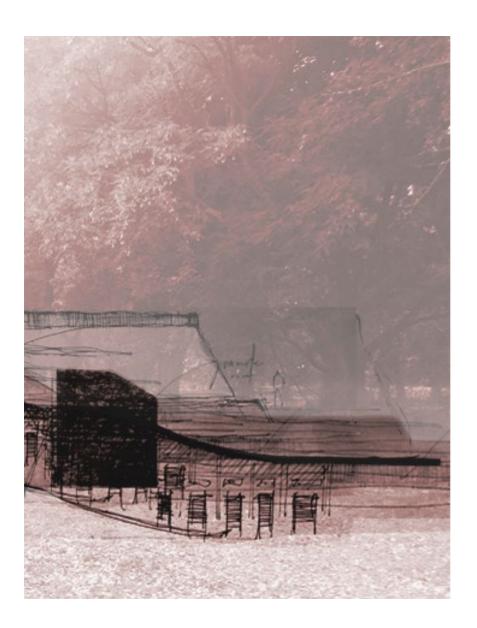
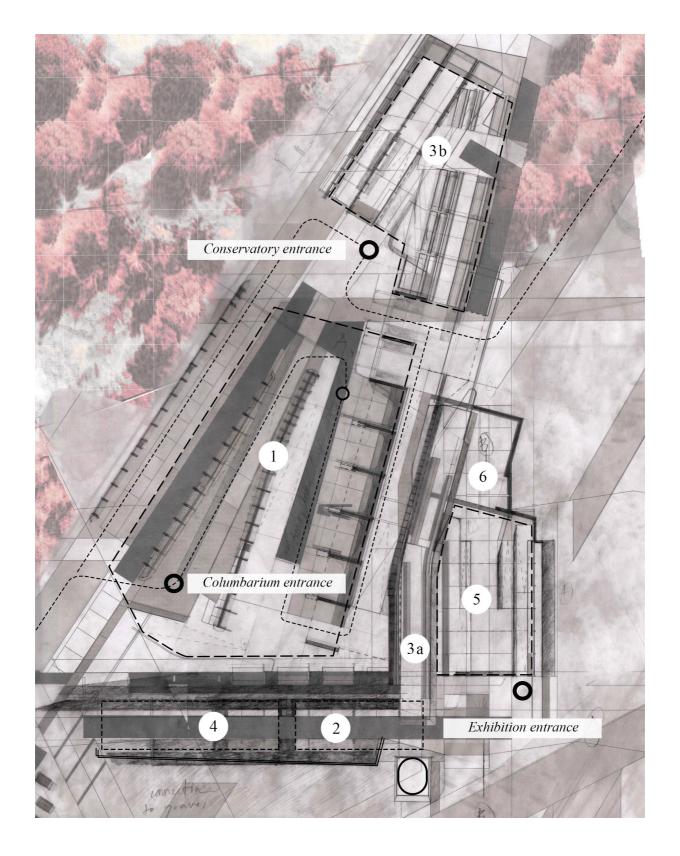


fig. 7.74. Initial conceptual sketch of performative layering as design and techtonic strategy.

of Effigies and the synthetic production and cultivation of bioluminescent botany in the *Bioluminescent Conservatory* and *Maturation Loculi*. The *negative*, furthermore, performs its artificiality through its materiality, which becomes the second performative *reimagination* of artificiality, translated through the *negative*, into architecture.

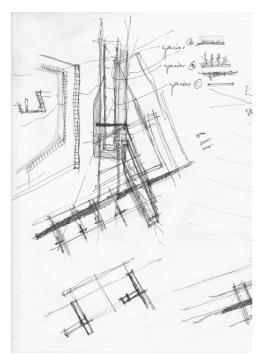












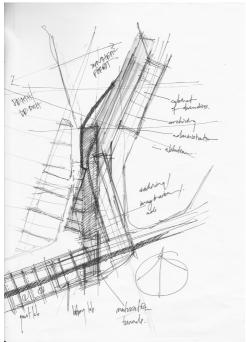


fig. 7.75. Second iteration design development.

fig. 7.76. Second iteration design development.

fig. 7.77. Plan layout development.

#### First design iteration:

Program placement:

- 1 Columbarium:

  New burial typology introduced to the cemetery.
- 2 Bioluminescent Conservatory Bioluminescent botanical research conducted from which to create the new artificial forest.
- 3 a/ Spectral Garden
  Cultivation and propagation of new bioluminescent botanical species which are transplanted into the hydroponic system of the columbarium.

b/ Maturation Loculi

Cultivation of propagation of new bioluminescent botanical species in laboratory conditions.

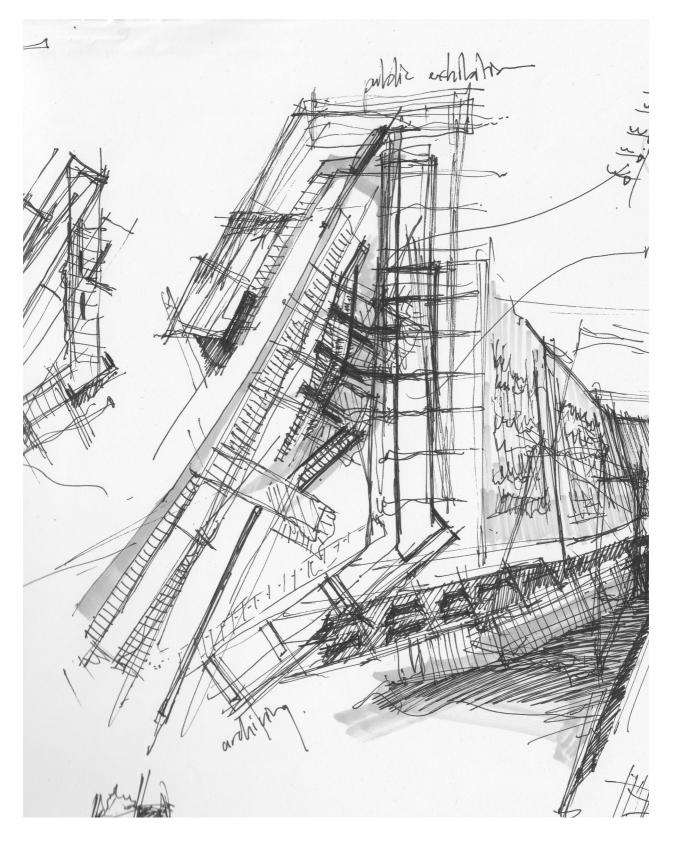
- 4 Cabinet of Obscurities
  Guest laboratories for opened to nearby education
  al institutions for conduction synthetic biological
  research.
- 5 Inventory of Effigies
  Exhibition of research conducted and botanical species developed in the Bioluminescent Conser vatory and Cabinet of Obscurities.
- 6 Imaginarium

  Research facility for the interpretation of research displayed and archived in the Inventory of Effigies.

The design intervention considers the existing site conditions and negatives mapped in proximity to the project and the need to make the cemetery accessible by articulating the intervention as a series of thresholds into which the dweller can escape. These guide the dweller through the existing cemetery into the new columbarium and garden.











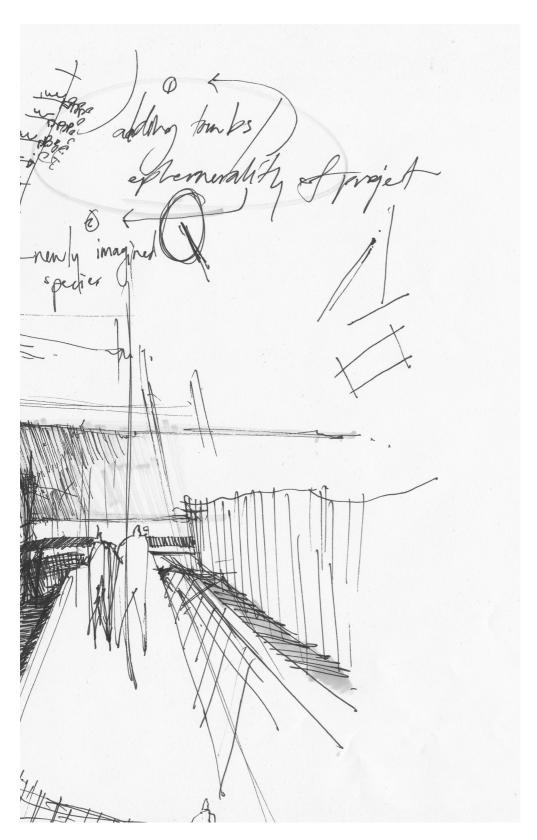
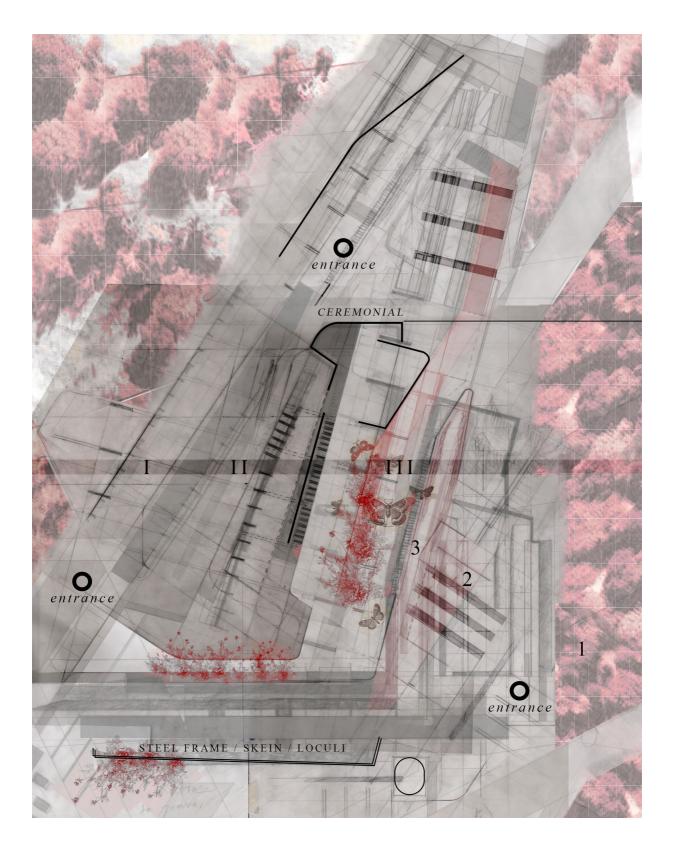


fig. 7.78. Conceptual sketch: thresholds of escape and articulation of the negative skin.

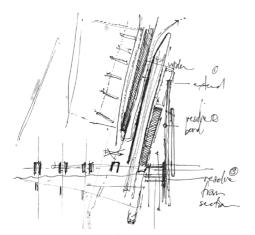












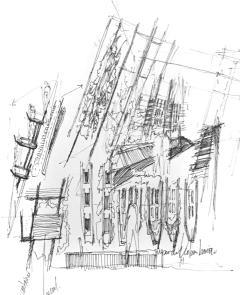


fig. 7.79. Concept sketch. Articulating the thresholds of escape.

fig. 7.80. Concept sketch. Planters interspersing columbarium in the Spectral garden.

fig. 7.81. Plan. Second iteration.

The intervention thus responds to:

- Existing north-south pedestrian corridors stretching through the cemetery,
- The lost significance of existing graves/traditional burial,
- Existing axes used to arrange the graves (responding specifically to the east-west orientation and the subtle oblique from that axis in the section between the two pedestrian corridors)
- The inaccessibility to the forest,
- The existing hindu crematoria.

The exploration resulted in a bi-axial spatial configuration where programs dealing with memorialization, collection and archiving was arranged according to the east-west axis used for burial, while the slight oblique of this axis between the two pedestrian corridors was used as a guide from which to organise programs that are host to reimagination. The use of these axes resulted in rationally arranged, yet ill defined circulation.

#### Second design iteration:

Articulating the thresholds of escape:

- I Traditional graves (remnant)
- Il Columbarium (new reanimating burial typology)
- III Spectral Garden (new bioluminescent garden interspersing the graves of the columbarium, inspiring reverie)
- 1 Existing forest (remnant)
- 2 Display of botanical research in the *Inventory of Effigies* (new typology to reanimate the forest)
- 3 Imaginarium (situated adjacent to the *Spectral Garden*, thereby binding death with reimaginative death)

The rational organization of the circulation and program of the first iteration was articulated to create moments of











fig. 7.82. Site Plan. Third iteration.

pause along the approach to the intervention and throughouth the columbarium, thereby emphasizing the *thresholds of escape*. The dweller is furthermore drawn into the intervention through a series of layers which, as described above, introduce new programs which not only reanimate the existing conditions by introducing the new typologies, but furthermore, has the potentiality to invoke reverie through these programmatic *negatives* of the cemetery and forest.

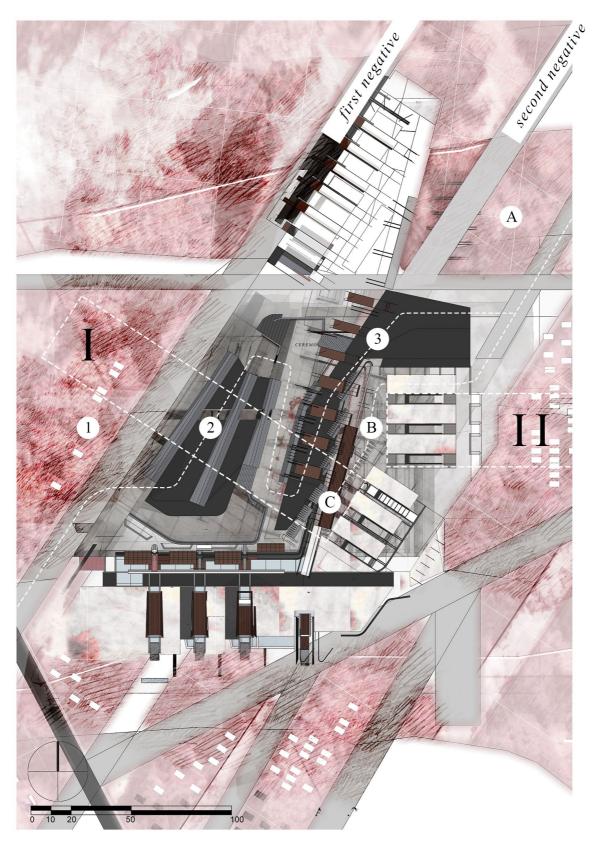
Ceremonial space was added to accommodate ritual space and to resolve edges in the columbarium, while a tectonic steel canopy structure, able to host the hydroponic system for the bioluminescent botany, was designed to cover the procession through the columbarium.

#### Third design iteration:

While the use of two axial systems according to existing graves became a fundamental drive in the organization of the circulation and programs, the use thereof was not thoroughly explored. The third iteration emphasized the use of these grids within the building and its relation to the context by creating a series of slender oxidized steel roofs which provide cover to the subterranean moulded concrete elements which form the walls to the program. These roofs, covering the Imaginarium, Inventory of Effigies and Cabinet of Obscurities protrude from the surface and extend into the cemetery, not only following these grids, but bolstering them through the programmatic intervention (as depicted in the diagram on the following page). The mass of the Maturation loculi north of the columbarium has, furthermore, been fragmented by repeating the same form, allowing a softer edge between the weathering steel structure and the surrounding forest.











The primary shortcomings of this iteration are related to the lack of circulation on the southern and eastern edge of the building, the lack of adequate entrances to the building and the creation of uninhabitable spaces between the protruding steel roofs. These issues are addressed in the final iteration.

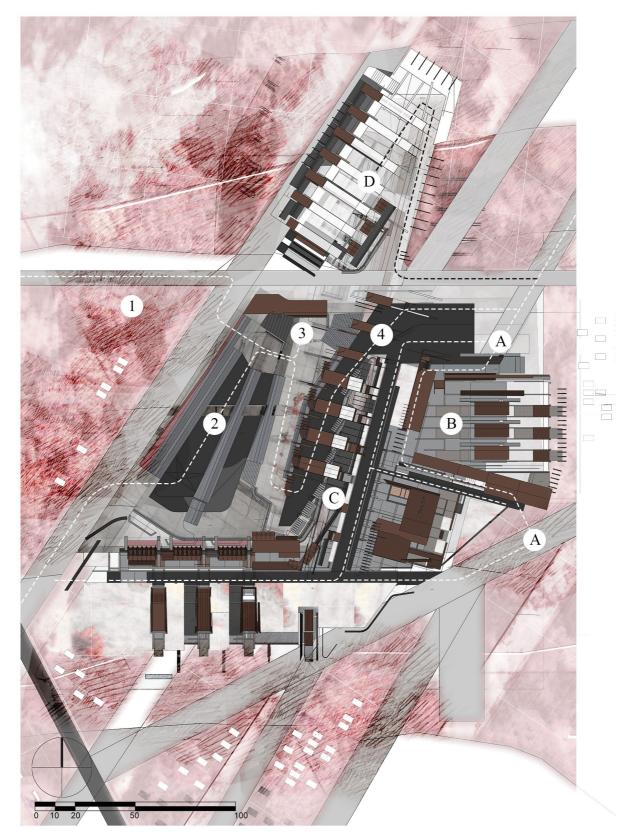
fig. 7.83. Plan. Third iteration.

Procession through the thresholds of escape:

- 1 Traditional graves within cemetery,
- 2 Columbarium as new burial typology,
- 3 Procession through traditional and new burial into the *Spectral Garden* where bioluminescent plants intersperse the columbarium.
- A Existing forest, made accessible through the intervention of the columbarium and conservatory,
- B *Inventory of Effigies* exhibit the newly synthesized bioluminescent botanical species,
- C Synthesizing and propagation of the new bioluminescent botanical species, creating an artificial landscape within the building.
- Axis of ruined graves surrounding the intervention existing at an oblique to the common axis is appropriated for programs hosting with reimagination (3 & C),
- Common axis of existing ruined graves surrounding the intervention on the eastern edge is appropriated for programs hosting memorialization, collection, archiving and exhibition (2 & B).











#### Final design iteration:

Final procession through the thresholds of escape:

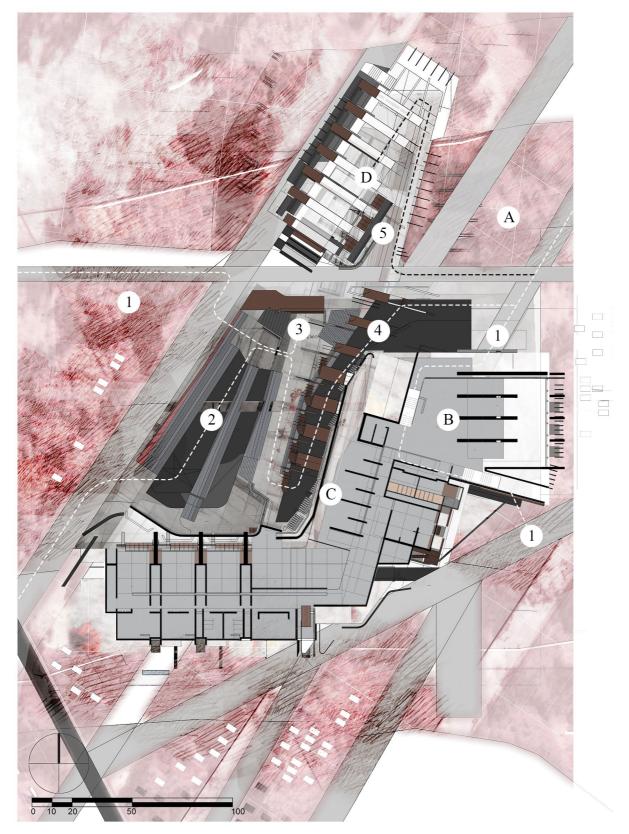
- 1 Traditional graves within cemetery,
- 2 Columbarium as new burial typology,
- 3 Ceremonial space for burial ceremonies,
- 4 Procession through traditional and new burial into the *Spectral Garden* where bioluminescent plants intersperse the columbarium.
- A Entrances to the *Inventory of Effigies*, research facilities and archives.
- B *Inventory of Effigies* exhibit the newly synthesized bioluminescent botanical species,
- C Synthesizing and propagation of the new bioluminescent botanical species,
- D Propagation and maturation of the new bioluminescent botany to be used in the columbarium and Spectral Garden.

The final iteration resolved the circulation issues presented by the third iteration, firstly, by consolidating the uninhabitable spaces between the elongated, extending roofs into one articulated roof mass with roof lights allowing an abundance of natural light to illuminate the subterranean spaces of the *Inventory of Effigies* and *Cabinet of Obscurities*. Secondly, circulation is added between the columbarium and the research and exhibition facilities in the form of a pedestrian corridor which allows for north-south passage through the building. Entrances (A) are added to the northern and southern sides of the *Inventory of Effigies* to allow more convenient entrance, while entrance to the Maturation Loculi is made semi private (D).

fig. 7.84. Plan. Fourth iteration.









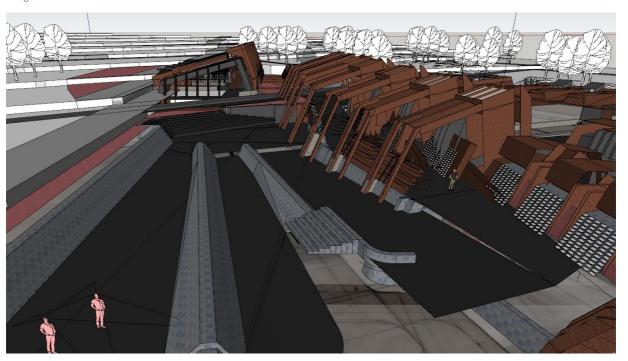


### Final iteration: plan

- 1 Entrances to the columbarium and research facility,
- 2 Processional descent into the columbarium,
- 3 Ceremonial space in the columbarium,
- 4 Procession through traditional and new burial into the *Spectral Garden* where bioluminescent plants intersperse the columbarium, leading to the entrance of the *Inventory of Effigies*,
- 5 Entrance to the Maturation Loculi is semi private and isolated from the rest of the program in order to not distract from the significance of the columbarium and *Spectral Garden*.
- A Entrances to the *Inventory of Effigies*, research facilities and archives.
- B *Inventory of Effigies* exhibit the newly synthesized bioluminescent botanical species,
- C Synthesizing and propagation of the new bioluminescent botanical species,
- D Propagation and maturation of the new bioluminescent botany to be used in the columbarium and Spectral Garden.

fig. 7.85. Plan. Final iteration.

fig. 7.86. Perspective towards *Maturation Loculi* with *Spectral Garden* in the foreground.



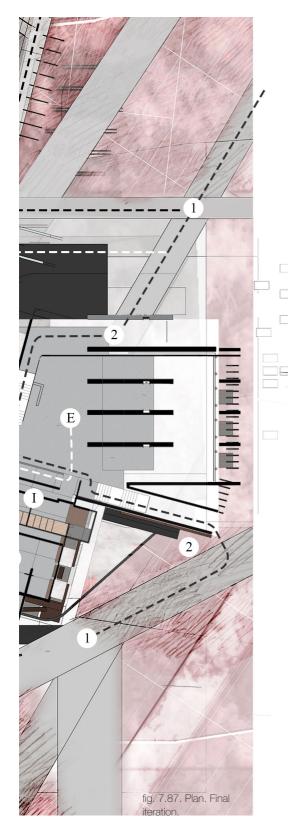












### Final iteration: circulation and program

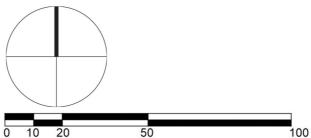
- 1 Arrival to columbarium and *Inventory of Effigies* (E), (Public)
- 2 Processional descent into the *Inventory of Effigies*, (Semi-public)
- 3 Further descent into the Imaginarium archives (D) (Semi-private), Cabinet of Obscurities (A) (Semi-private), and Bioluminescent Conservatory (C) (Private)
  - **Cabinet of Obscurities** (guest laboratories) (Semi-private),
  - Shared guest laboratories (Semi-private),
  - **Bioluminescent Conservatory** (dedicated syn thetic bioluminescent biological laboratory) (Private),
  - **Archives** (Semi-private),

С

D

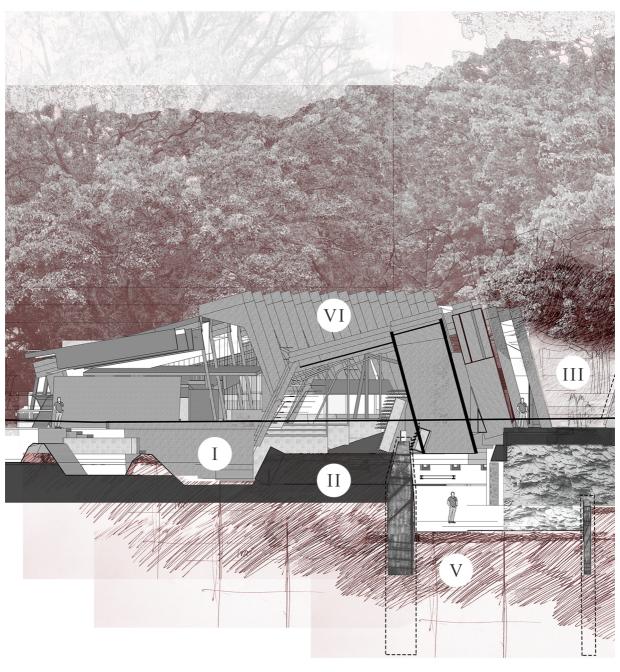
F

- **Inventory of Effigies** (public exhibition gallery) (Semi-public),
- F **Maturation Loculi** (propagation and maturation of bioluminescent botany) (Semi-public),
- G *Imaginarium* (Private),
- H **Administration offices** (Private),
- Public and staff ablutions (Private).





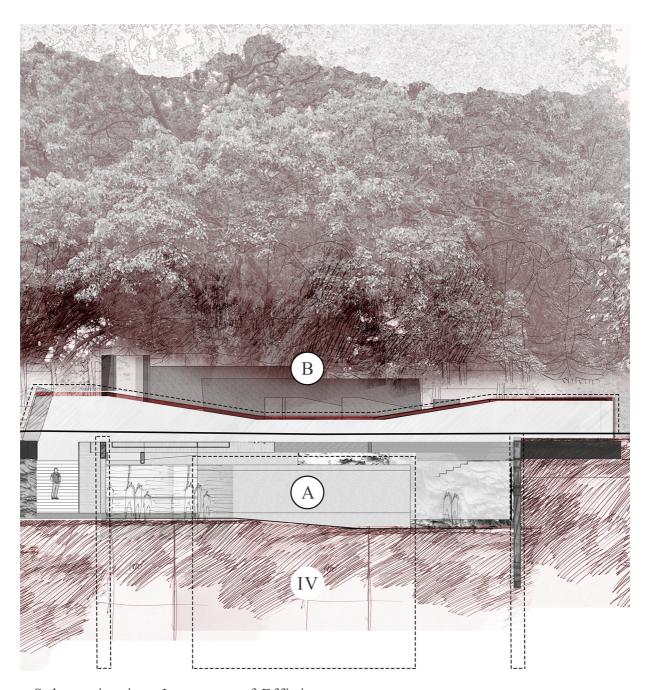




I_ Descent into columbarium	$IV_{-}$
II_ Immersion in Spectral Garden	V_ I
III Arrival at subermged structure	VI







\_ Submersion into Inventory of Effigies Imaginarium

\_ Maturation Loculi

fig. 7.88. Section of fourth iteration indicating the construction of the two types of negatives, indicated in the diagram as A and B.







fig. 7.90. Perspective showing entrance to the *Inventory of Effigies*.

fig. 7.89. Perspective showing descent into the *Inventory of Effigies*.









fig. 7.91. Perspective of the columbarium in relation to the *Maturation Loculi* (seen in background).

fig. 7.92. Interior perspective of the *Inventory of Effigies*.

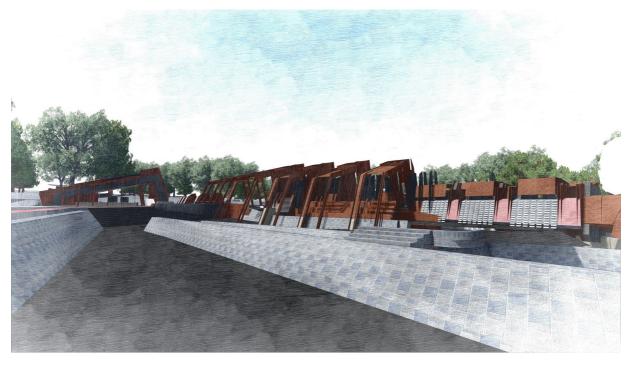








fig. 7.93. Perspective showing both concrete and steel negatives in the Cabinet of Obscurities.

fig. 7.94. Perspective showing formalized pedestrian corridor past the *Maturation Loculi*.









fig. 7.95.Perspective showing *Maturation Loculi* in relation to the *Spectral Garden* (seen in background).

These perspectives of the design development process indicate the fragmentation of massing above ground. In doing this, the steel *negatives* which cover the stereotomic concrete *negatives* produced by the performative moulding process is articulated. The fragmentation of the these structures' massing not only emphasizes their tectonic constrast to the stereotomic concrete base, but also serve to dissolve the structure into the forest, while the bioluminescent botany which intersperse the steel *negatives*, further shroud the structure within the forest.

The interior perspectives, futhermore, indicate the play of light accomplished through the articulation of the steel *negatives*, as well as indicate the junctions between the steel skin and concrete base.





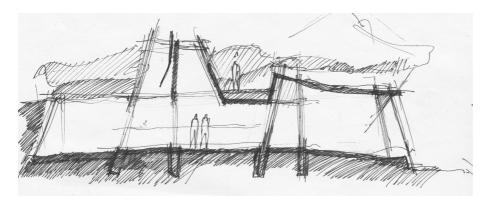


fig. 8.96. (author) Conceptual sketch of the articulation of the steel skin.

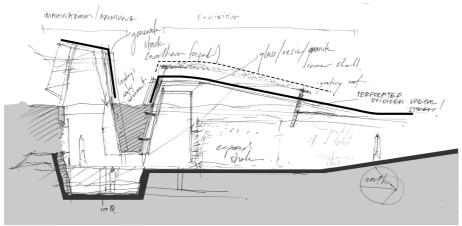


fig. 8.97. (author)
Conceptual sketch of the layering of the moulded concrete and articulated steel negatives.

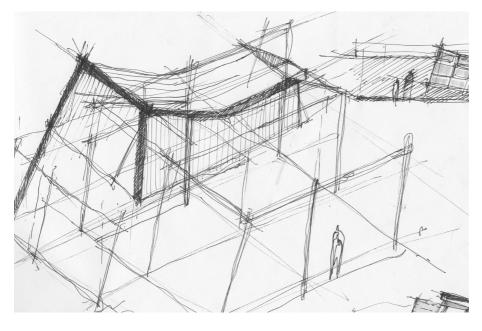


fig. 8.98. (author)
Conceptual sketch of a granite roof mass which protrudes from the cemetery's surface to form a new artificial surface.

