



# WE ARE

[in Full Colour]



## Part 05. A Celebration of Diversity

Together, Chapters 5 and 6 provided an understanding of the contextual framework within which the South African pavilion will need to function, at *Expo 2020*.

The section to follow will explore the concept behind the design proposal for South African pavilion and its connections to the proposed alternative nation brand, which was distilled from the examination of the *hybrid culture i-jusi* in Chapter 3. Chapter 7 will conclude with a discussion of the initial design development.

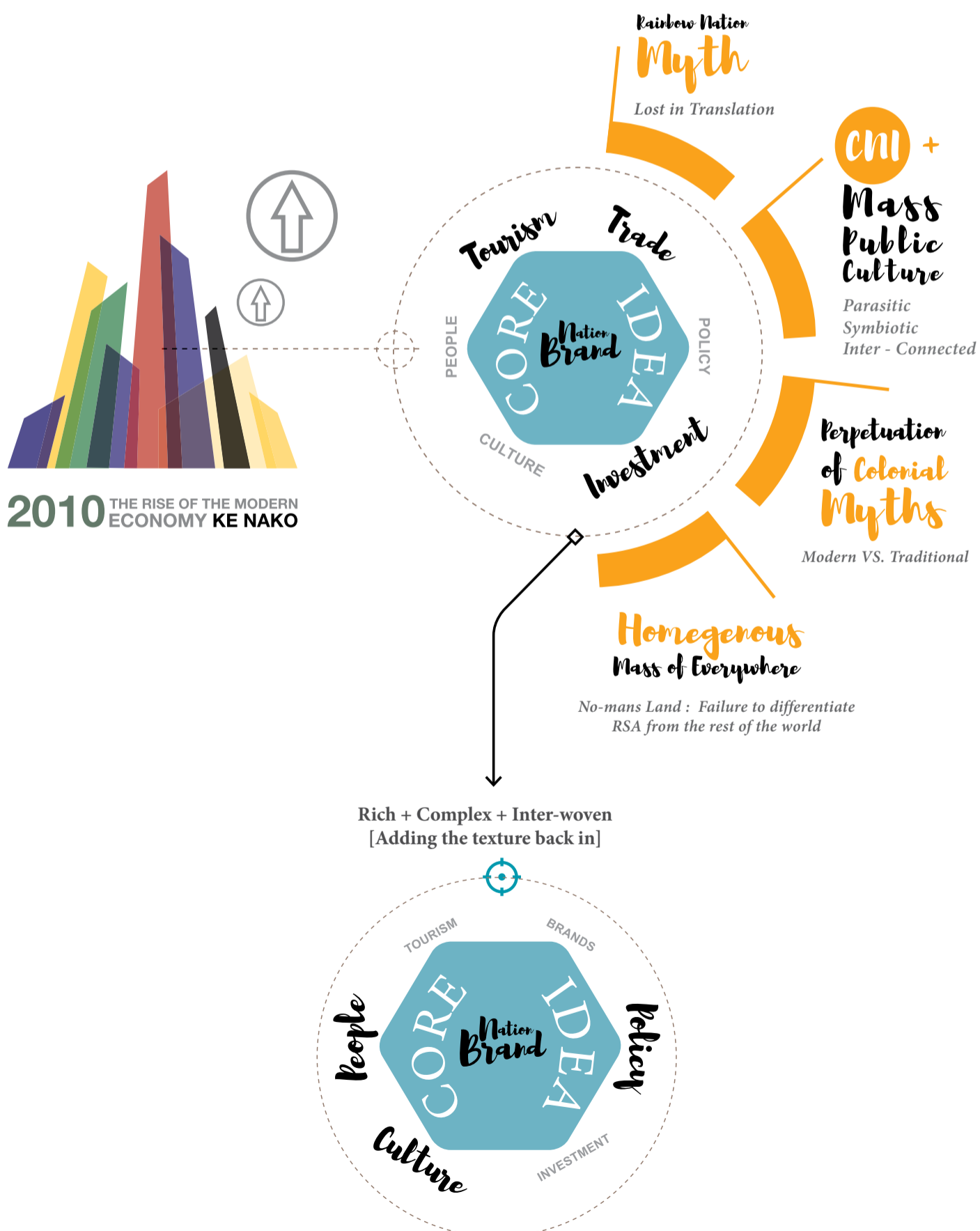
### 7. WE ARE \_ IN FULL COLOUR

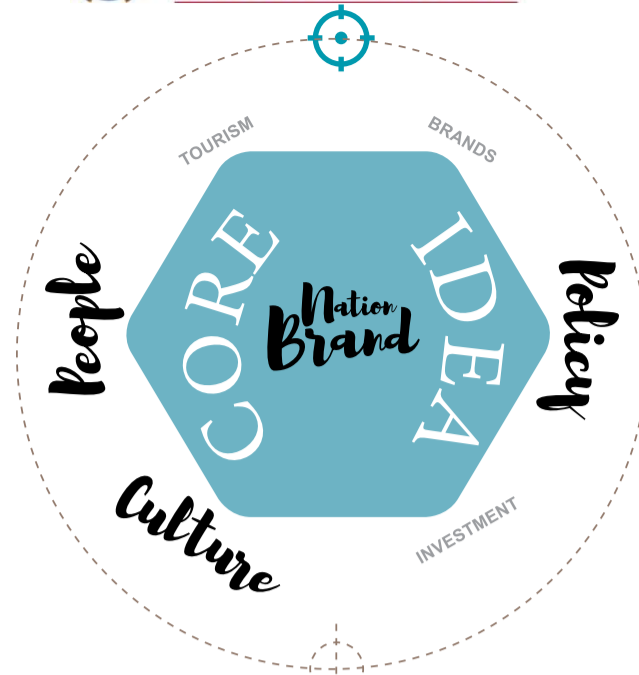
The design concept for the South African, *Expo 2020* pavilion arose from two influences.

The first being the critique of the South African pavilion at *Expo 2010*. The most significant conclusion stemming from the 2011 study (c.f. 1.1.2 and 1.1.3) was that the decision, as

dictated by governmental mandate, to focus on the promotion of *Tourism, Trade and Investment* resulted in a pavilion that was only able to express a very limited 2-dimensional and stereotypical impression of the South African nation. Ultimately, the 2010 pavilion failed to truly differentiate our nation from the rest of the world or to improve the perceptions of the country abroad.

Consequently, the conceptualisation and design of the proposed pavilion will focus on the promotion of South Africa's *People, Culture and Policies* (Figure 58). The strategic aim behind this approach is to weave the richness, texture and complexity innately present in our peoples and their cultures into the proposed pavilion, as a remedy the short comings of the 2010 pavilion.





Rich + Complex + Inter-woven  
[Adding the texture back in]



WE ARE <sup>3 5 6</sup> NOT ONLY &  
WE HAVE STRONG EMOTIONS  
<sub>4 2 1 7</sub>



WE ARE  
[in Full Colour]

An expression of South Africa's diversity in all its richness and complexity as opposed to a hollow rainbow

Figure 59: Shifting focus

The second informant is the seven indicators of the alternative nation brand proposed in Chapter 3.

The essence of, and intent behind, the alternate identity was distilled into the descriptor:

'We are Not Only, & We have Strong Emotions'

This, combined with the aim to bring our unique richness, complexity and texture back into our national pavilion as a means to differentiate ourselves from the rest of the world resulted in the concept:

'We are [in Full Colour]'

See Figure 59.

The 'Moment' the concept intends to create for every visitor is the experience of themselves, as they would appear if they were a South African. As if they too were more complex and layered in character as a result of growing-up and living in a country as diverse as ours.

That they might also come to understand that, 'ja-well-no-fine', does not mean that one concedes the point, but rather that it is an agreement to compromise based on the recognition of each other's humanity.

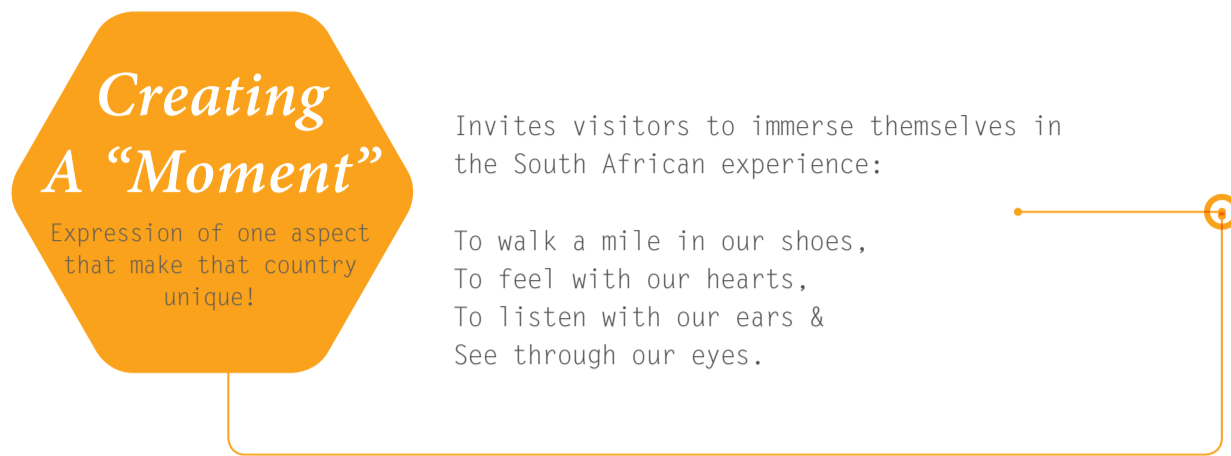


Figure 60: Translating the distillation

## 7.1. DESIGN DEVELOPMENT

The descriptor was used alone in the development of the design concept to ensure that a "single, strong, clear believable idea about what our country really is & what it stands for..." (Anholt 2009:207) was established and translated into said concept, our 'Moment' (c.f. 5.2.1. for clarification regarding the need for the creation of a moment), (Figure 60).

However, the expression of the ideas and sentiments which constitute each individual indicator were carefully considered throughout the design development process, so as not be reductive through the application of the descriptor alone, when translating the concept into the design of the pavilion.

### 7.1.1. A box is a box

Based on the South African 2010 pavilion, the initial design proposals responded to open box with the internal dimensions of 45 x 36 x 9 m, (Figure 61).

Four initial proposals were developed, each seeking to immerse the viewer in the South African experience.

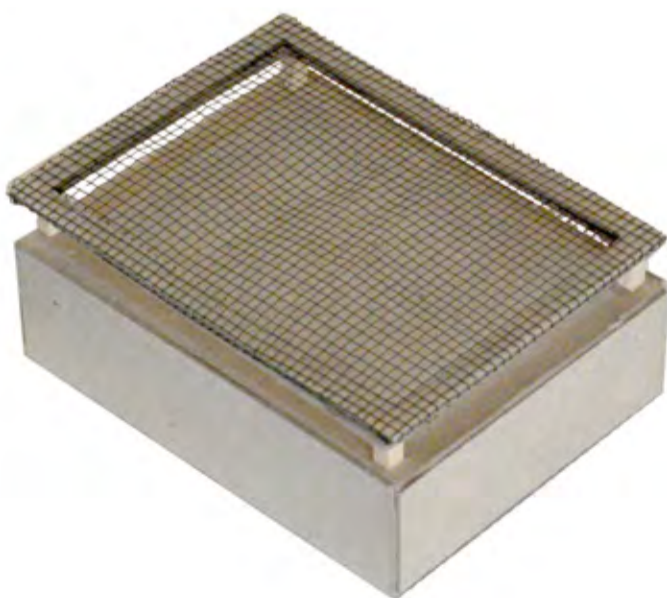


Figure 61: Box pavilion based on early masterplan renders

### 7.1.2. Initial concepts

Concept 1 developed from the idea of transforming a physical and very tactile expression of our South African culture, such as a relief carving or a wood-block print, into something more metaphysical and transcendental, such as a painting made up of light. The transformation of the tangible into the intangible is intended to be symbolic of the transformations experienced within the country since 1994 and the brighter future we are working together towards (Figure 62).

Concept 2 focused on creating an experiential journey that directly deals with the renegotiation of our national identity and the coming together of our separate pasts. The spatial translation of the printing processes and techniques; Ben Dey Dots, colour separations (CMYK) and half-tones, serves to metaphorically embody this journey (Figure 63).

Concept 3 offered an alternative spatial approach to Concept 2. Visitors enter a scenic maze and become active participants in the scene, which is constructed of overlapping layers that build up to form a single complex rich image when viewed from the front and/or back (Figure 64).

Concept 4 creates an abstract interior landscape filled with larger-than-life figures. The positive forms and space function as celebrations of our nation's modernity and future prospects, while the negative spaces and voids created in and around the characters celebrate our past and traditions as a counter balance to the modern. The intention behind the interior park space was to create a relaxed informal place in which visitors could comfortably sit down and take a break for the busy expo park while subconsciously absorbing a bit of South African culture and hospitality (Figure 65).

## 7.2. SELECTION AND FURTHER DEVELOPMENT

Concept 2 was selected for further development as it presented the most opportunities to create a rich spatial experience. Figure 66, documents the development of the pavilion through a series of quick explorative sketches:



# Concept 1

2016|04|25



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

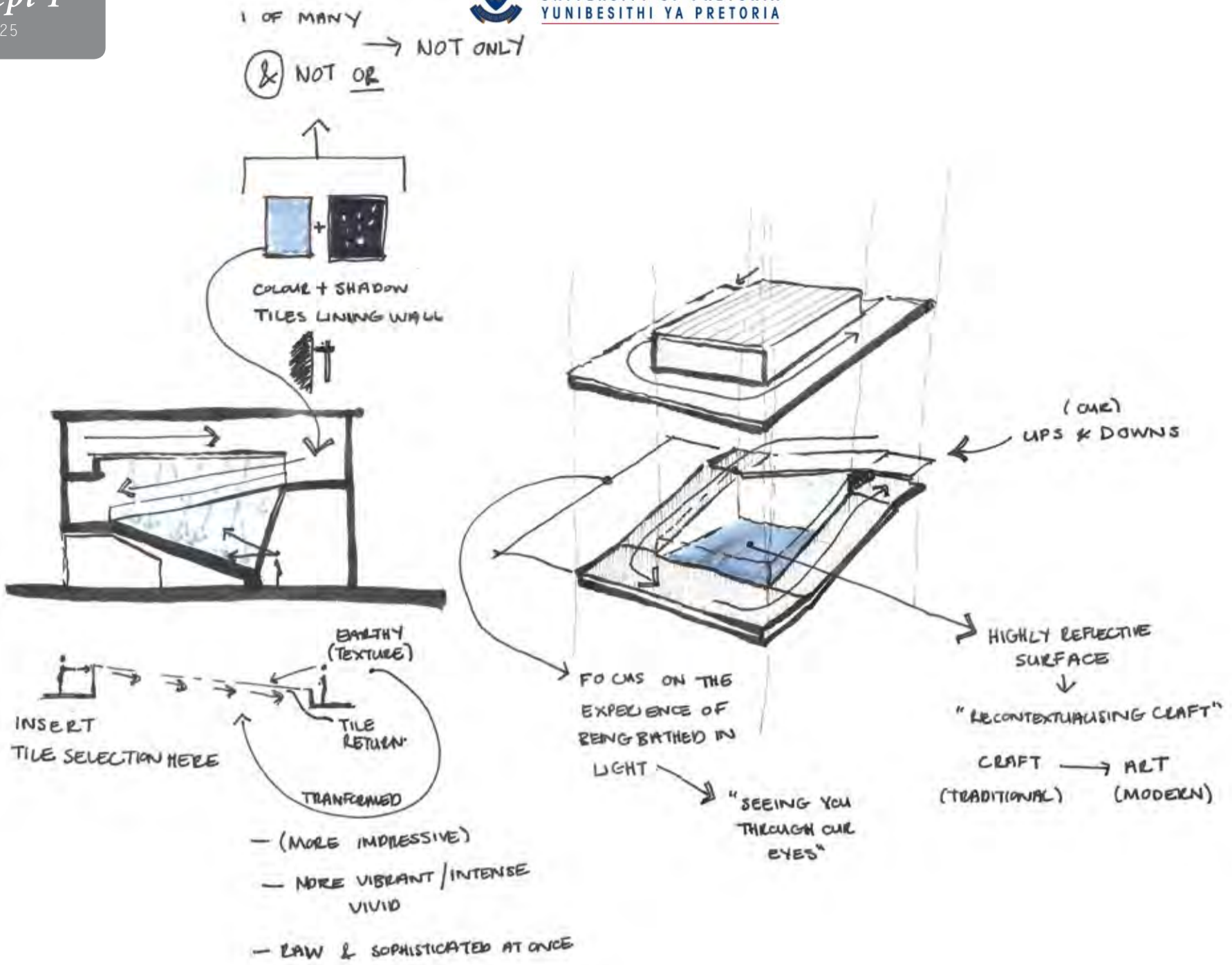
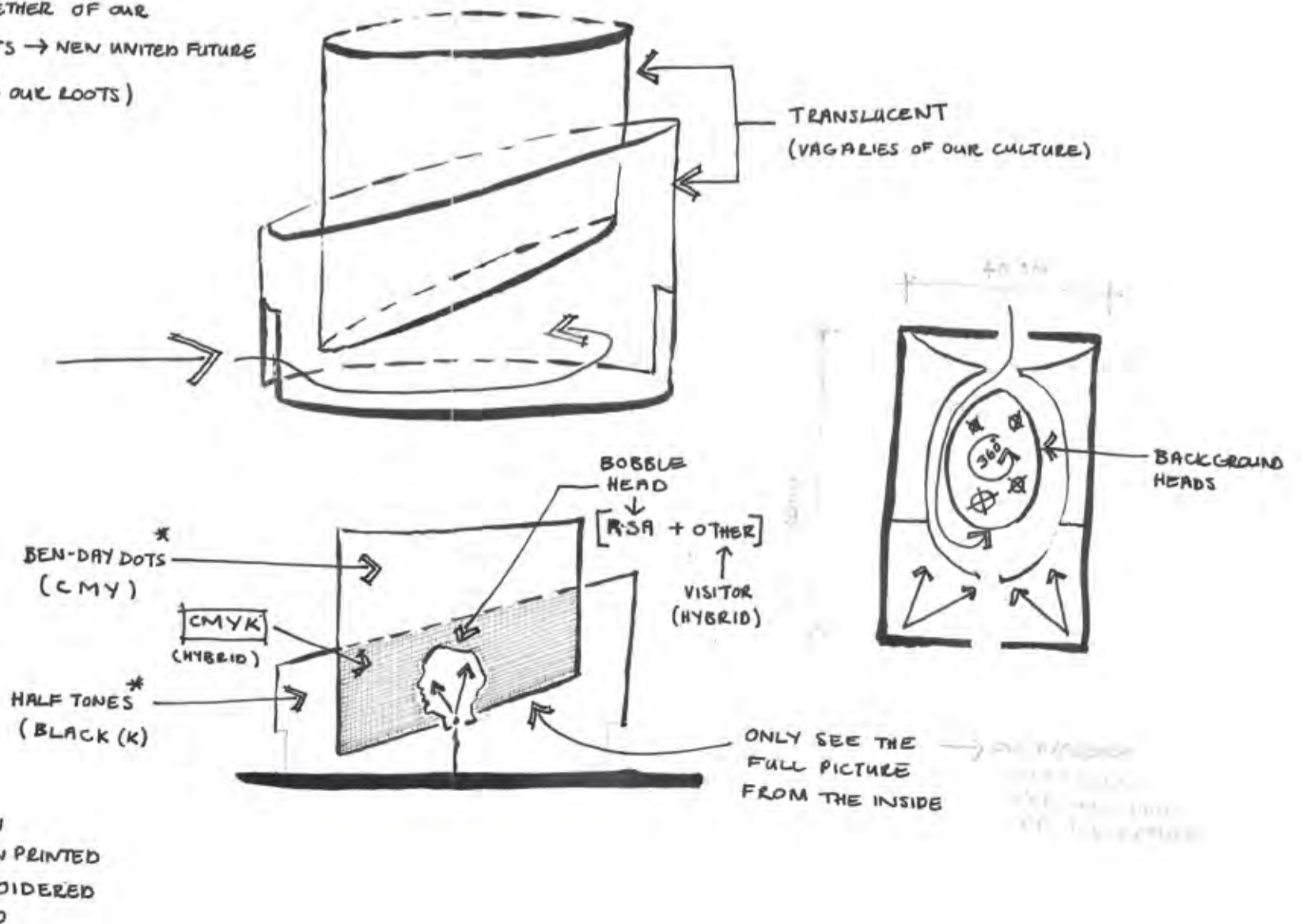


Figure 62: Initial Concept 1

# Concept 2

2016|04|25

COMING TOGETHER OF OUR  
SEPARATE PASTS → NEW UNITED FUTURE  
(TRANSMUTING OUR ROOTS)



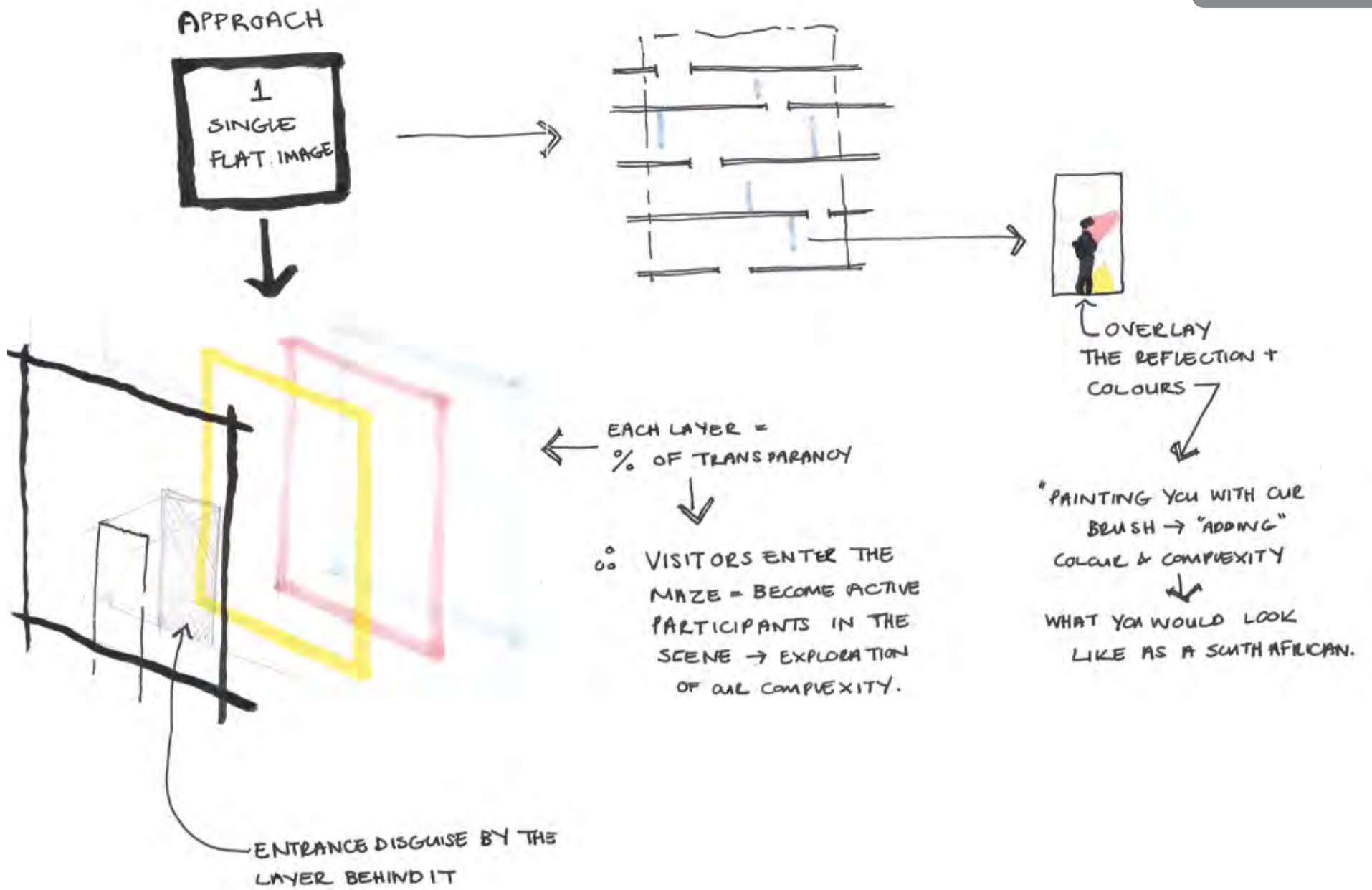
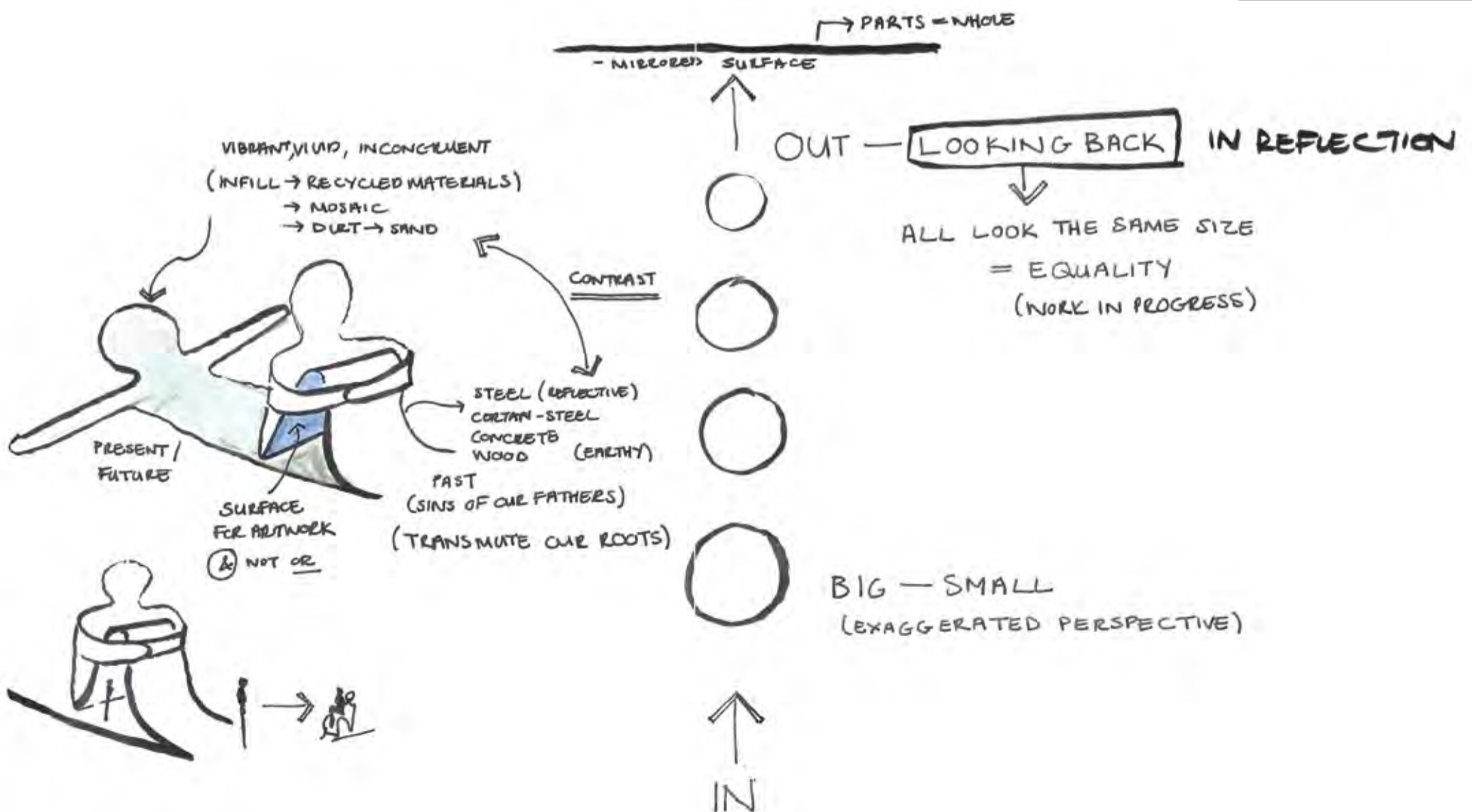


Figure 64: Initial Concept 3





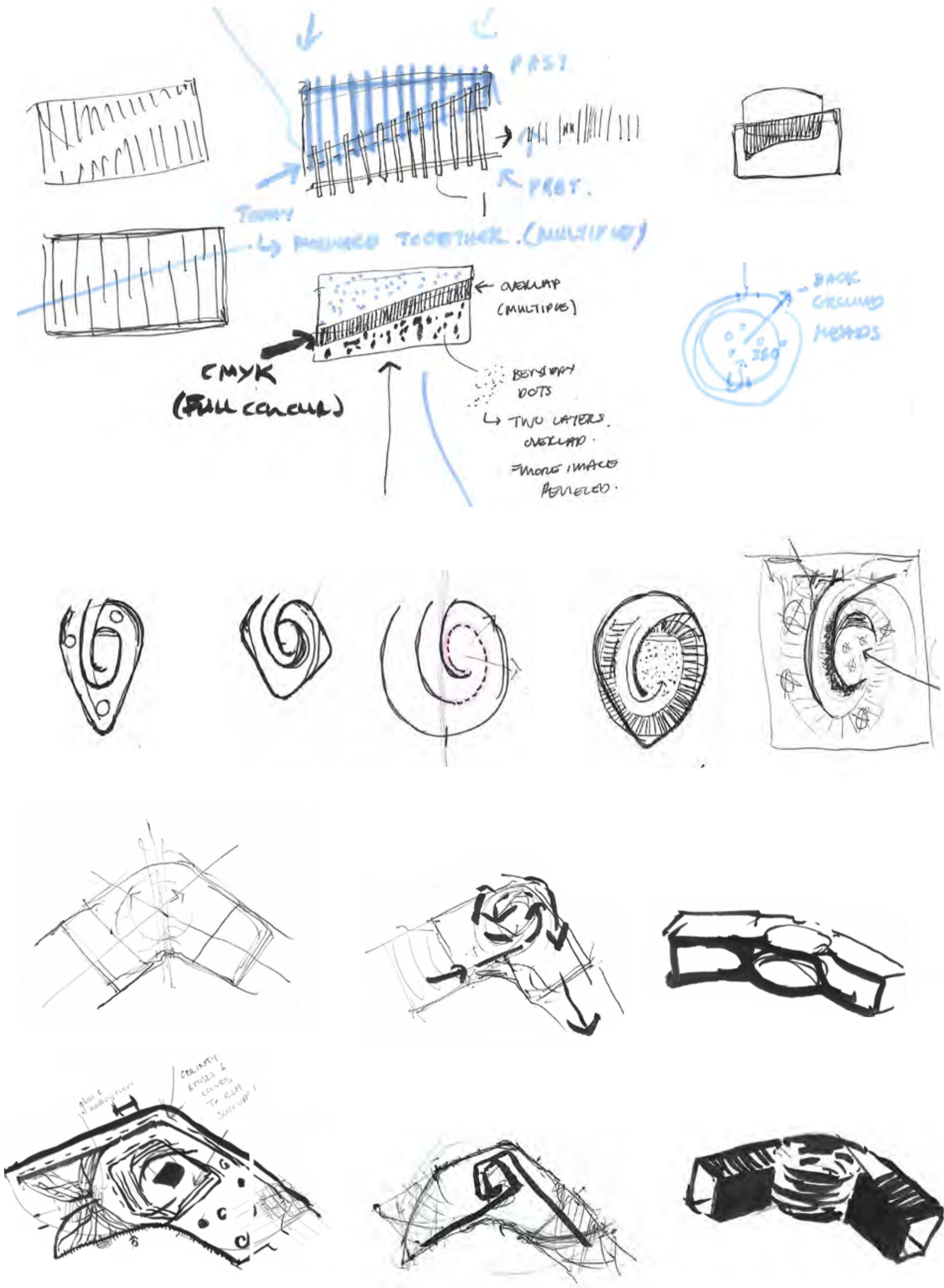


Figure 66: Quick explorative sketches

### 7.2.1. Contextual factors

With the release of the finalised masterplan for the *Expo 2020 Dubai, UAE*, on the 10 May 2016, the final site selection could be determined (Figures 50 & 51). Consequently, the floor plan for the pavilion was revised to an L-shaped layout.

The revised site and footprint offer the following opportunities (Figure 67):

- Two high visibility façades located on the Northern and Eastern elevations. Due to their location, these façades are also 'fresh' façades, having a lower heat gain potential.
- Both the South Eastern and Southern façades look out onto courtyard spaces. As the South Eastern facade is just off one of the main circulation routes it is the best suited for the location of the pavilions entrance. Still in a highly visible location but with a courtyard space out of the main flow of pedestrian traffic to facilitate queuing on peak attendance days.

- While both the entrance and the exit are shaded from the late afternoon onwards, they both receive maximum sun exposure throughout the morning and the day. Glazing with direct exposure is to be limited on these façades and shading strategies need to be developed.
- While the 2010 pavilion was a portal framed structure with a light-weight pitched roof, it has been assumed that 2020 pavilion will have a flat, light weight, insulated roof.
- The cooler temperatures combined with the intended digital light shows and projections onto pavilion façades, planned by the expo's organisers, supports the use of the space for evening functions.
- The inclusion of skylights will not only provide the pavilion with increased natural daylighting but allow for views back out of the sky, which will help to reinforce the link to the circadian rhythms.

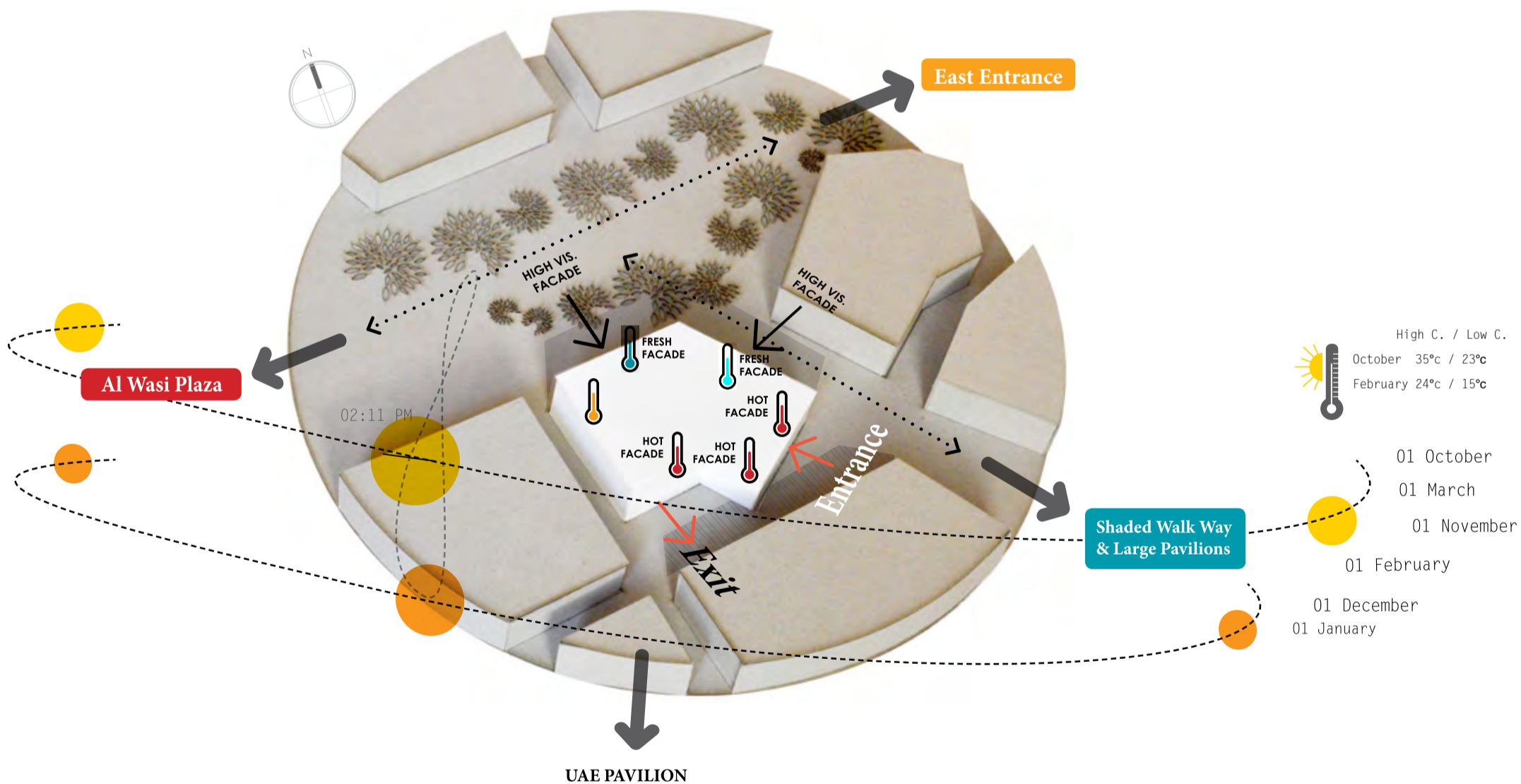


Figure 67: Site Analysis



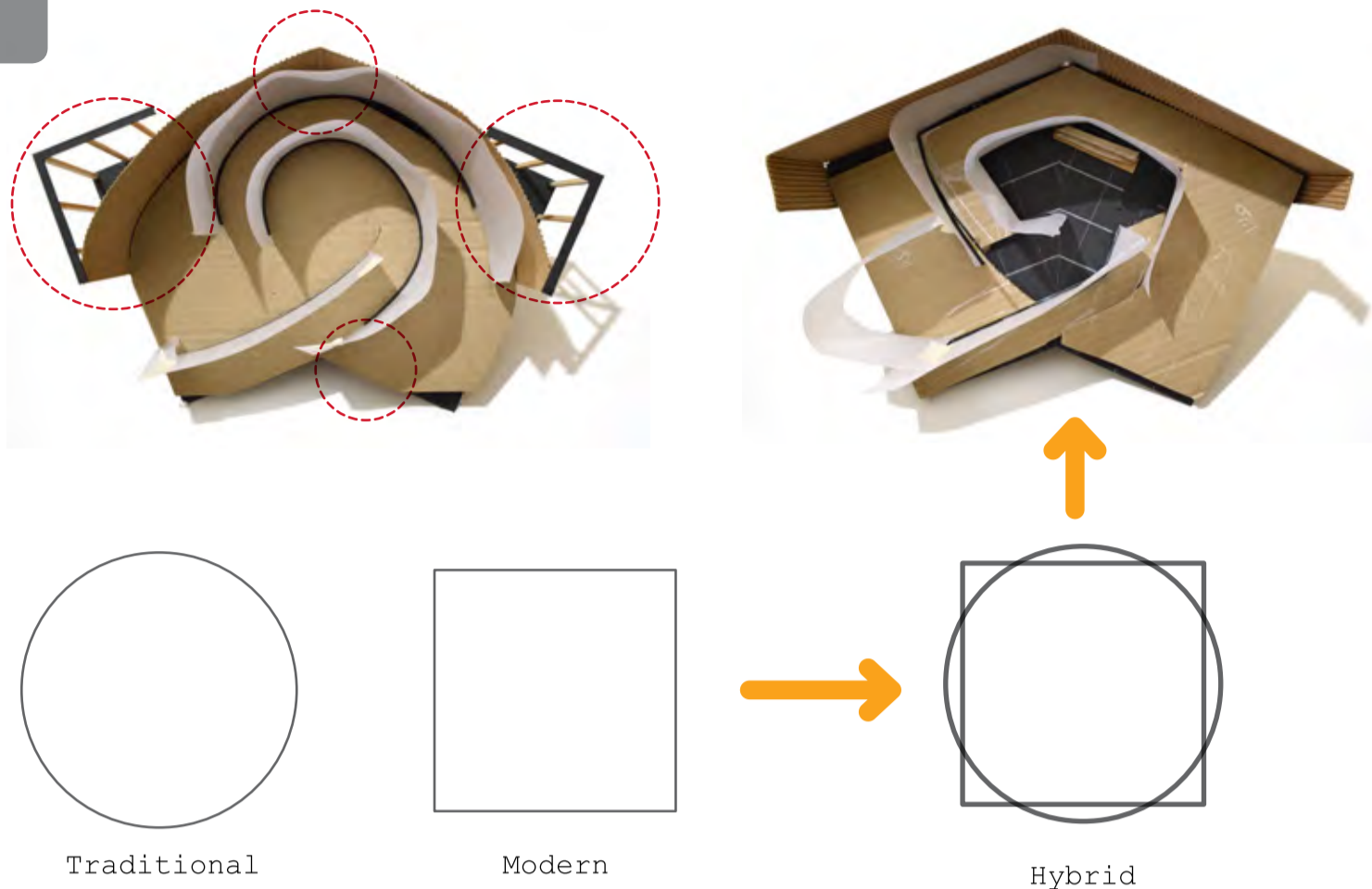


Figure 68: Transposing the initial concept

### 7.2.2. Changes in form

When the initial conceptual plan was transposed into the revised footprint, the corner spaces that resulted proved problematic. Additionally, it was decided that the purely organic, circular form needed to be altered so as to soften the dominant conceptual links to traditional vernacular building typologies, particularly those of the hut and the kraal, as they have become stereotypical (particularly in the contexts of marketing and branding). Hence, it was adjusted to respond more closely to the new floor plan. The more angular outcome speaks of a *hybrid* between the traditional (circle) and the modern (square), (Figure 68-69).

The programme of the pavilion was also altered to include two additional exhibitions spaces to the right and left of the central walk way, (Figure 69).

The bobble heads featured at the centre of the pavilion in the initial concept were moved to the western side [3] (Figure 68), while an interactive theatre was added to the south-eastern side, just behind the entrance façade[2], (Figure 69).

As the concept developed a reflection pool was added to the centre of the walk-way spiral (Figure 69) [1]. It serves as both a physical and symbolic climax to the journey narrative (in light blue). The return path along the outer edge of the spiral (in red) acts as a corridor space would in a traditional museum, with a lower level of intensity and interaction to allow visitors to return to a more accustomed equilibrium before entering into the next high intensity zone (the 4D Bobble Heads), so as to prevent the visitors from becoming over stimulated.



Figure 69: Revised layout



### 7.2.3. June Crit

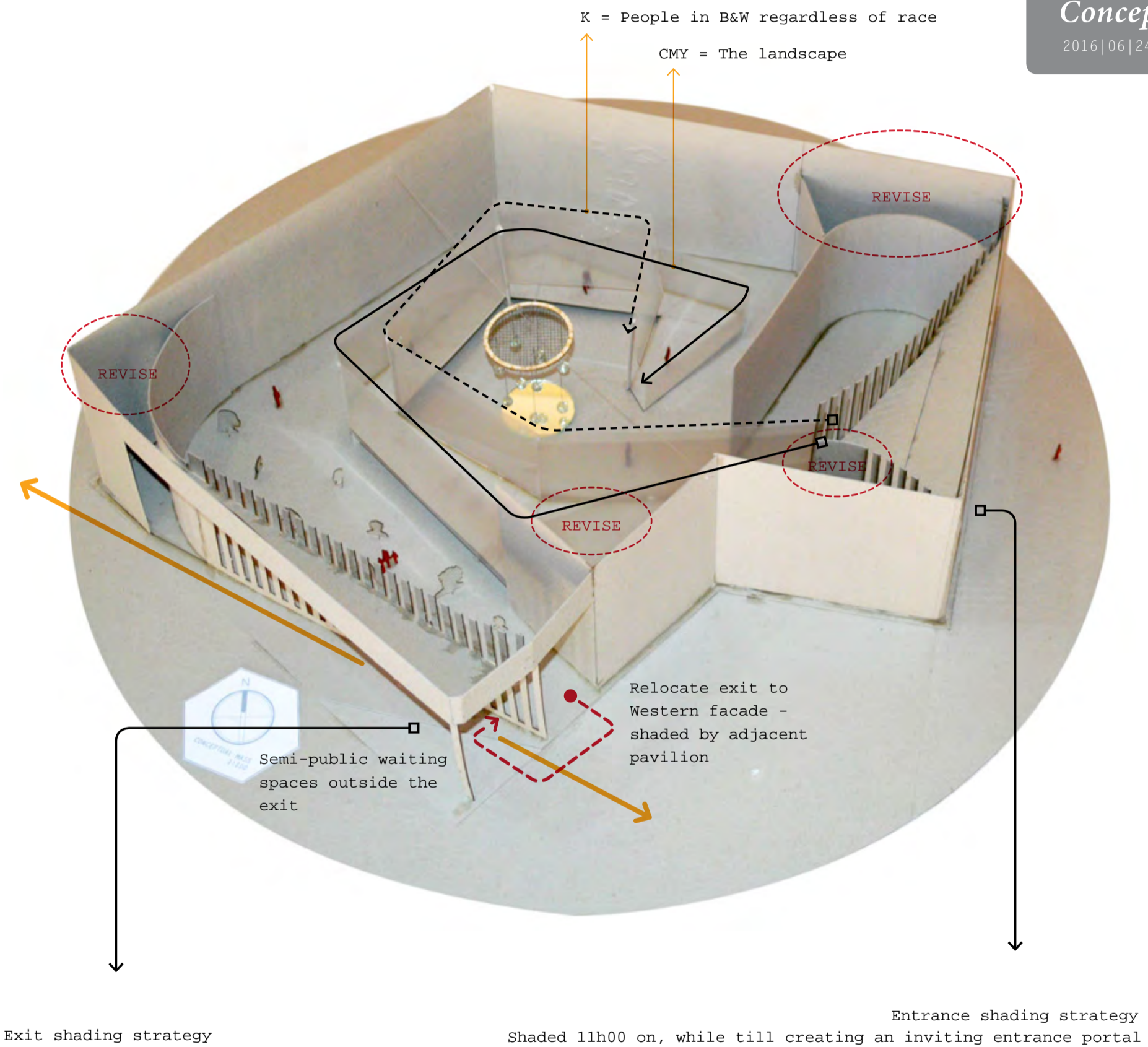
While the revisions to the interior form created a more optimised layout, the curved walls included to subtly guide visitor around the pavilion and prevent dead-end spaces, perpetuated the problem of the awkward corners. This problem in conjunction with the programmatic duplication occurring between the experiences created by the digital

theatre and the bobble heads, was solved by re-allocating the theatre zone to administrative and ancillary functions as well as accommodating a series of meeting and diplomatic facilities.

Additional comments and changes to the layout have been graphically indicated on Figure 70.

Concept 2.2

2016|06|24



Exit shading strategy

Shaded 11h00 on, while till creating an inviting entrance portal

Entrance shading strategy



Figure 70: Changes arising from June crit



7.2.4. Working 3-Dimensionally

The initial intention behind the design of the pavilion's interior was for it to function as single unit wherein the individual experiential/ programmatic zones would multiple upon each other to create a complex three dimensional space, achieved through the use of transparent and translucent vertical display surfaces. The outcomes of the design explorations of this intent in the June crit were less effective. Instead of creating a multi-layered spatial experience that immersed visitors into and allowed them to become part of the pavilions narratives, it read as an extrusion of the plan in a very 2-dimensional manner.

Upon reflection, this result was caused by the vast floor plan of the pavilion and the exaggerated scale and proportions of the elements in the different zones. The large distances between elements greatly reduced the effectiveness of the overlapping layers. Additionally, visitors were dwarfed to such an extent that they were too small to become active participants in the narrative landscape and the layering process.

Concerns were also raised about whether this approach might give away the experience of the narrative route too early.

Consequently, Concept 2.3 and 2.4 of the design took a slightly different approach to previous attempts. Rather than trying to create one single complex spatial experience, they broke the narrative into four distinct zones and focused on making the experience in each zone more immersive, (Figure 71).

As a result of this shift in design approach the metaphorical application of the print separations (CMYK) and half tones falls away for the most part. Instead, the rural narrative is divided between the mural which partially forms the raised walk-way (the 'land') and the reflection well (the 'sky' and the people). The intent is to create an experience and an appreciation for the land (more familiar to international audiences) and then enrich that experience by adding the voices and stories of the people that live in those landscapes to that experience. In this way the original intent of the pavilion is not completely lost.

The physical connection and access to the urban narrative as a progression of the rural narrative rather than a separate experience is explored on plan in Concept 2.4. By re-routing the flow of circulation under the highest point of the walkway the overall path is shorter, (Figure 72). This improves the sense of connection between the rural and the urban, as well as increasing the overall amount of time spent with the pavilion's content which would have been wasted on moving between the two zones.

7.3. TOWARDS TECHNIFICATION

In preparation for the technification of the final design a summary of the concept, the dominant design need and the correlating technical approach for each of the four zones was compiled. Additionally, the physical, accessibility and conceptual requirements for each of the four zones have been made. These are detailed on the section of Concept 2.4 (Figure 73-75).

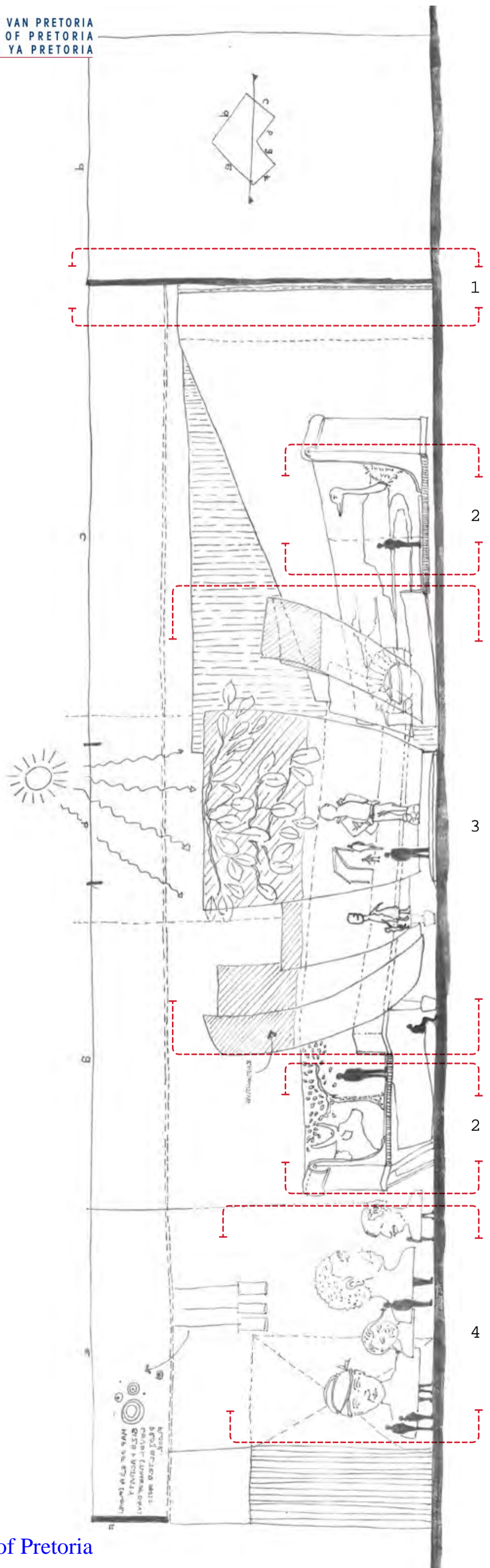


Figure 71: A shift in approach



Key

- Original circulation
- New circulation

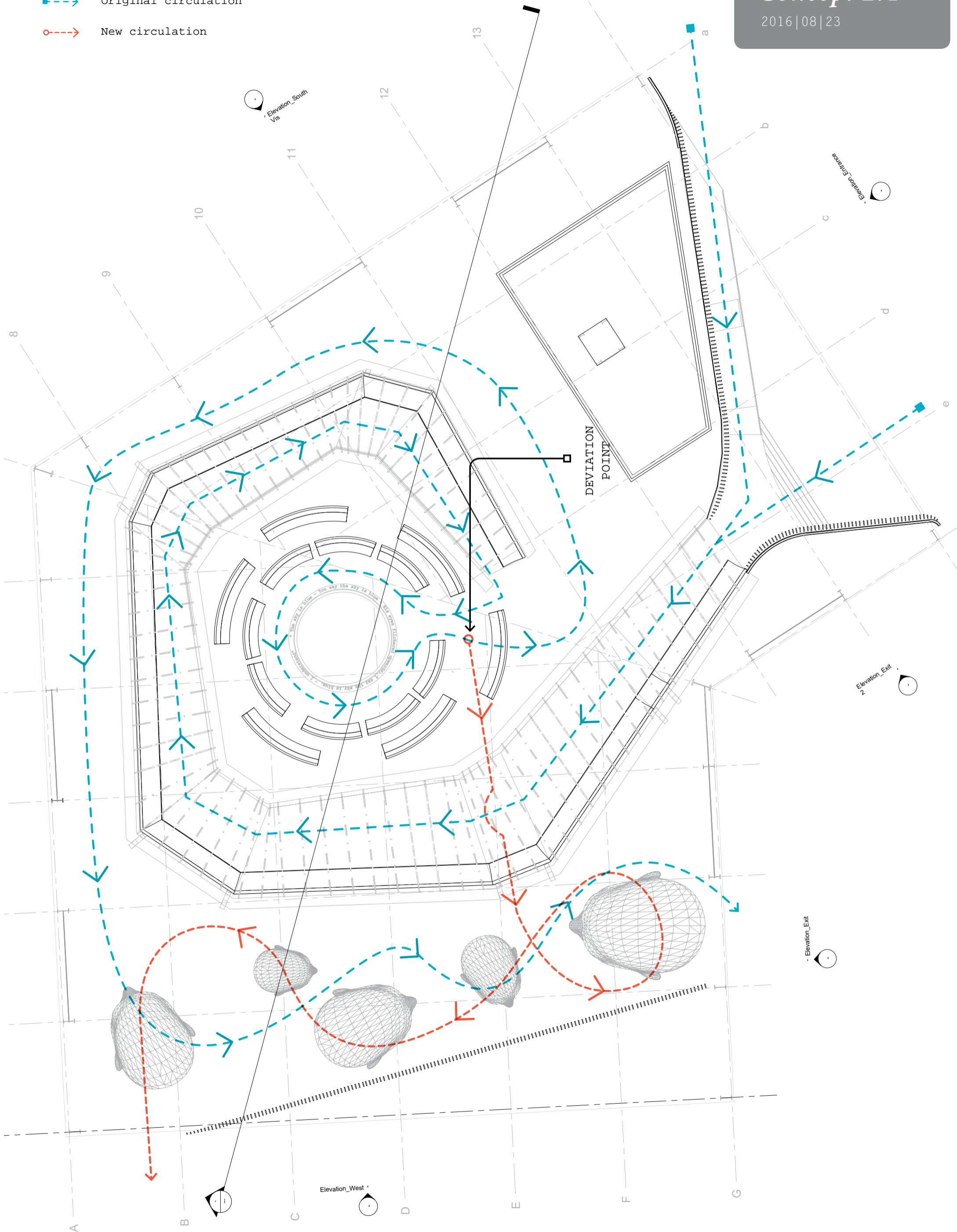
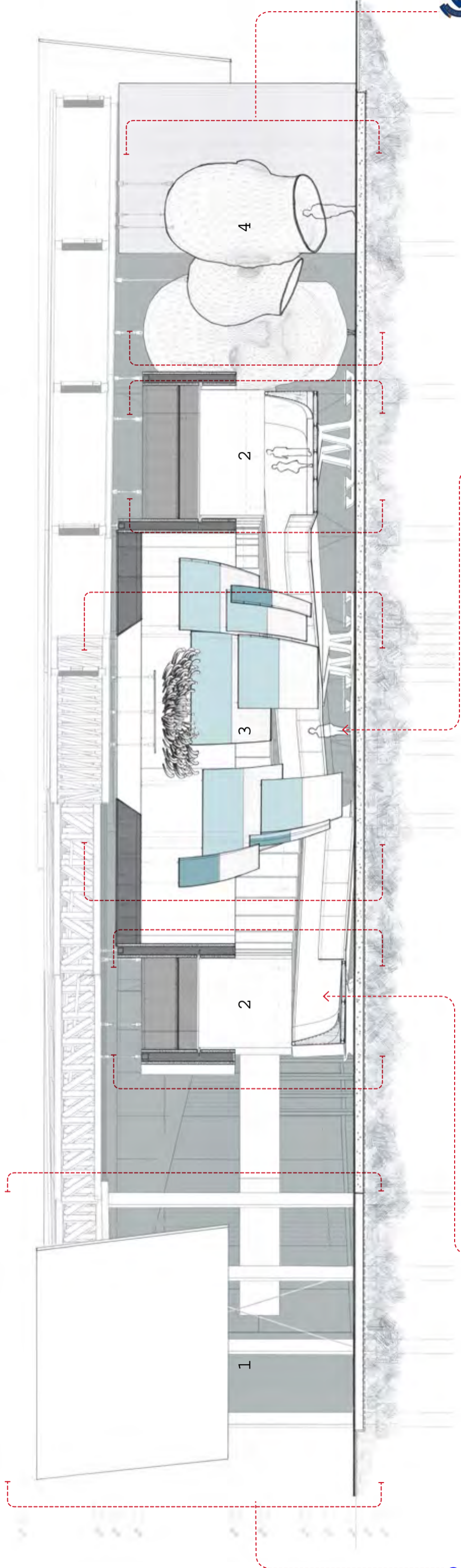


Figure 72: Revising the flow of the narrative route





**See through our eyes** SKY

2

**To walk a mile in our shoes** LAND

2

People - Rural Life

3

**To feel with our hearts**

3

People - Urban Life

2

**To listen with our ears**

4

Tectonic Expressions + Visible Connections & Joints

Tectonic Expressions + Invisible Connections & Joints

**Utilitarian Need**

Symbolic Meaning

**FUNCTION / SERVICEABILITY**

form / aesthetics

**FORM / AESTHETICS**

function / serviceability

**Symbolic Meaning**

Utilitarian Need

**HANDI / CRAFT**

- Natural Materials (Raw/Processed) or Found / Recycled Materials
- Tectonic Expressions + Visible Connections & Joints
- Design for Disassembly
- Arts & Crafts Movement Principals
- Honesty of Design / Workmanship
- Simplicity
- Truth / Nature of the Materials
- Sense of Moral and Cultural Responsibility



is about unlocking the potential for people and communities to contribute to a better future.

**The transformation of craft via the functional/serviceability requirements as defined by the built environment:**

- 1.) to meet the physical needs (the spatial relationship between rooms and the needs of the people using them, for example) and/or,
- 2.) performance requirements of a building. (to be water-proof, acoustically sound, visually accessible and so on)

(Law-W11Joan 2008:42)

Figure 73: Towards Technification

7.3.1. See through our eyes

**Utilitarian Need**

SKY

*Symbolic Meaning*

**HANDI / CRAFT**

Tectonic Expressions + Visible Connections & Joints



**Physical / Performance**

- Enclosure: Climate & Access Control
- Access
- Passive Ventilation
- Lighting

**Accessibility**

- Vertical Planes + Openings: High Contrast (Visually impaired / Blind)
- Signage (Hard of hearing / deaf + visually impaired) + Add tactile map.
- Entrance Stairs: Tread & Rise - Low + Wide  
Nosing strips - Contrast with tread & riser  
Handrails (Both sides + Middle) (900mm High)
- Ramp: Handrail (Both sides + Continuous) (900mm high + extends 300mm beyond start or end)  
Min width & slope - Gradient 1:15 -1:20 (Optimal)  
Landings
- Lighting along walkway / gathering spaces = Deaf (Signing / lip-reading)

**Conceptual**

- Curb Appeal
- Appearance of Transparency - Ties the pavilion to the circadian rhythms, in the same way we as a country & nation are tied to the circadian rhythms.

**Tactic : Openings + Plane**

- Openings in vertical plane - Lighting + Activity Inside  
Blur the boundaries between private and public  
a) Inclusion - 'Justice under a tree'  
b) Embody our civil religions - Private passions into public celebrations
- Elevated base plane - Enhance the anticipation of the unexpected.  
The simulated horizon blocks direct views into the pavilion while still offering a sneak peak to waiting & passing visitors
- The forced perspective of the entrance - Hints at the journey visitors are about to begin.

Prototype: **Half Tones : Portraits of Light**

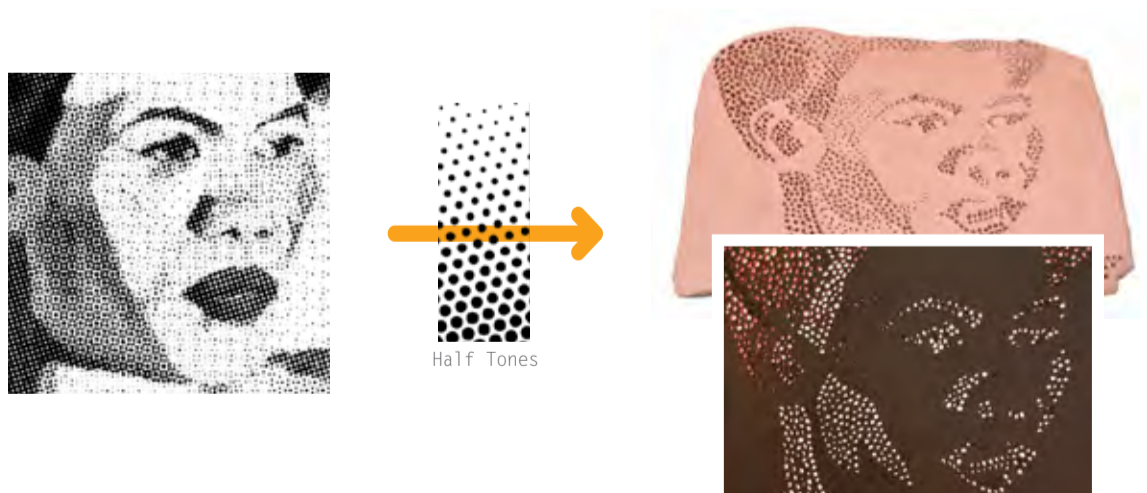


Figure 74: Building envelope prototypes



7.3.2. To walk a mile in our shoes

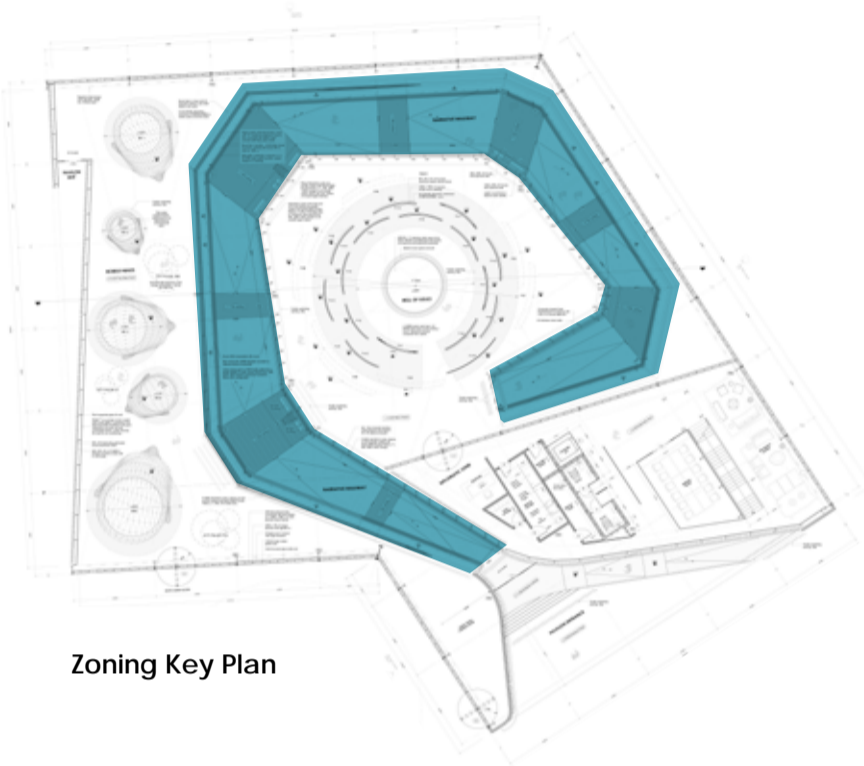
LAND

**Utilitarian Need**

*Symbolic Meaning*

**HANDI / CRAFT**

Tectonic Expressions + Visible Connections & Joints



Zoning Key Plan

**Physical / Performance**

- Raised walkway: Allow visitors to safely and easily traverse.
- Support & Display mural
- Ceiling: acoustic absorber - Stillness & tranquility of nature

**Accessibility**

- Ramp:
  - Min width & slope - Gradient 1:15-1:20 (Optimal)
  - Handrail (One side + Continuous) (900mm high + extends 300mm beyond start or end)
  - Banister
  - Landings
- Good colour contrast between vertical and horizontal surfaces
- Glare, pools of light and shadows
- Highlight potential hazards - Horizontally projecting elements
- Lighting along walkway / gathering spaces = Deaf (Signing / lip-reading)
- Auditory description of panels/petals/murals = via cellphone

**Conceptual**

- Journey through the land & historical transformation.
 

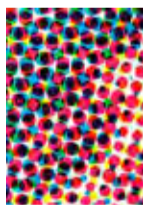
Aside from the first peoples (Khoi-khoi & San) our ancestors all immigrated to this land at one stage or another, thus by traversing the walkway visitors symbolically follow in our ancestors footsteps and thus consequently become honorary South Africans.
- The narrative is split between the land [Full colour] and it's people [Black and white regardless of ethnicity - means to neutralize race]
- The concluding quote from Alan Paton's novel, "Cry the Beloved Country" (1948), narrates this journey: Warning not to repeat the trespasses of our past

**Tactic : Movement**

- Building as circulation route
- Route width is modulated + shifting axis to increase the anticipation of the unexpected. (What is around the bend - Sense of journey & discovery)
- Movement and light - drama & narrative progression
  - ! Glare, pools of light and shadows: Difficult for the visually impaired.
  - Additional/alternative visual assists and way-finding.
- Additionally, deaf and hard of hearing, who either sign or lip read, are also affected by lack of light, as they walk and talk to each other.

Prototype: *Colour Separation & Ben Dey Dots : Past & Future Legacies*

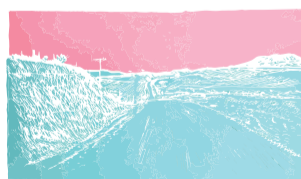
C = Cyan  
M = Magenta  
Y = Yellow  
K = Black



Colour Separations



Ben Dey Dots



OUTER LAYER  
C = Cyan  
M = Magenta  
Y = Yellow



INNER LAYER  
K = Key / Black



Static image is animated by the viewers path of travel



Figure 75: Mural screen prototypes

### 7.3.3. To feel with our hearts

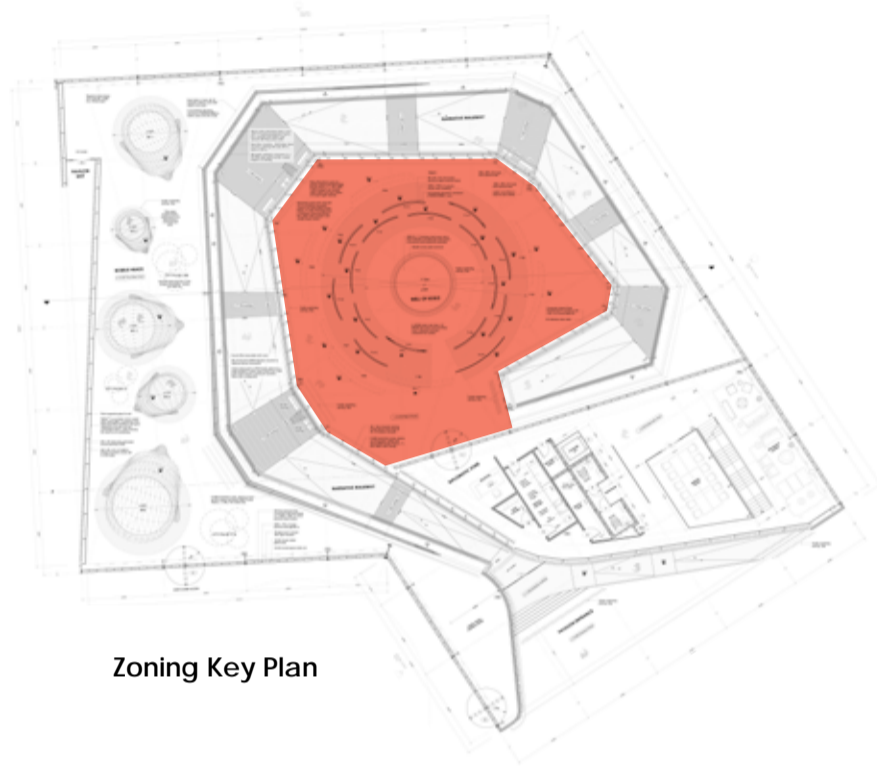
People - Rural Life

## Symbolic Meaning

Utilitarian Need

**FINE ART**

Tectonic Expressions + Invisible Connections & Joints



Zoning Key Plan

#### Part A: The reflection pool

##### Conceptual

- Reflection Pool: Recognition of each others humanity.  
"The sky is blue - you say the sky is blue, his eyes flicker upwards - I say the sky is blue - I understand." \_ Alan Paton (1948:).
- Chandelier: Embodiment of the notion of 'UBUNTU' and the interconnectedness of our collective family trees.

##### Physical / Performance

- Illuminated & back-lit by skylight above \_ Skylight needs to track sun's path (Reiteration of the link to the circadian rhythms).
- 'Leaves' light source at night.

##### Accessibility

- Threshold articulation - avoid trip hazard (Tactile + Colour contrast)
- Contrast and shadows
- Benches for rest - allow space along side for wheelchair / pram
- Lighting along walkway / gathering spaces = Deaf (Signing / lip-reading)

#### Part B: Fins - Well of Sounds/Souls

##### Conceptual

- Top section: Embodiment of an Afrocentric world view - The 360° reflective surface surrounding the chandelier creates the illusion of an infinitely interconnected family tree.
- Bottom section: Populates the walkway's landscape by overlaying the identities and stories of the people who live there. An audio recording of each person's story in their own voice and tongue will be played on a loop, with an accompanying written translation, as a celebration of the oral traditions of storytelling.

Sonic equivalent of the tree above.

##### Physical / Performance

- Top: Visually + acoustically reflective surface  
Support & framework for fabric section below + Audio housing.
- Bottom: Translucent (scrim) + acoustically diffusive.

##### Accessibility

- Threshold articulation - avoid trip hazard (Tactile + Colour contrast)
- Contrast and shadows
- Benches for rest - allow space along side for wheelchair / pram
- Lighting along walkway / gathering spaces = Deaf (Signing / lip-reading)

#### Tactic : Opening, plane & object

- Opening - access to natural light + sun path.
- Plane - Fins act as vertical space defining elements, physically separating the walkway narrative from the reflection pool, thus allowing for two separate experiences.
- Object - The reflection pool = Node of activity anchoring and separating the second interactive experience from the walkway narrative. Additionally acts as a reference point from which observers can orientate themselves.



Prototype: *Iconic or everyday / Black & White or colour: Scrim portraits - Jurgen Schadeberg, Cedric Nunn & Gideon Mendel*



Figure 76: Scrim Portrait prototypes

#### 7.3.4. To listen with our ears

People - Urban Life

##### Conceptual

- Counter-balance to the walkway and reflection pool, telling urban stories of everyday life. Stories that span the divides between rich and poor, formal and informal economies, young and the old. The 'Talking Heads' provide a means of negotiating the legacies of our past and celebrating the vibrancy of our contemporary culture.
- *Whereas the rural narratives celebrate oral traditions of storytelling, the urban stories will be told through non-verbal communications: sights | sounds | smells of the world surrounding each 'character'.*

*Where the walkway is about the 'Journey', the Talking Heads are about the moment, an experience, the now of South Africa.*

##### Physical / Performance

- Acoustically isolated
- Access
- Audio/visual capabilities

##### Accessibility

- Adjusted / accommodate a range of visitors - Height / volume
- Ramp/stair access to the depressed base plane
- 1 accessible head in which you can display various stories.

##### Tactic : Object, Movement

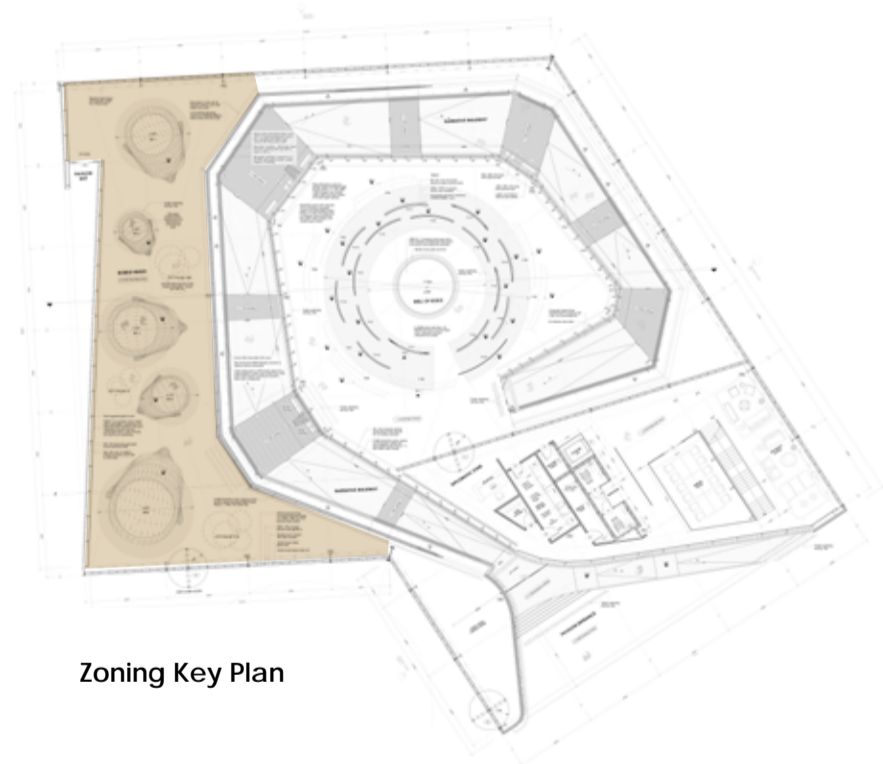
- Exaggeration of scale
- The dispersion of the stories across multiple heads encourages visitor movement and active engagement with the exhibit. Consequently, limiting the 'watching TV in public' effect, as visitor only remain static for short periods of time during each sequence. Between the sequences there is a process of discovery and exploration of each new head along with 'selfie' opportunities created by the bobble head effect of the exaggerated scale.

## Symbolic Meaning

Utilitarian Need

FINE ART

Tectonic Expressions + Invisible Connections & Joints



Zoning Key Plan

#### 7.4. CONCLUSION

Chapter 7, established the reasoning behind the strategic approach taken by the proposed pavilion to focus on the promotion of the nation's *People, Culture* and *Policies*. These factors, combined with the seven indicators informed the pavilion concept - 'We are [in Full Colour]'

Significantly, during the developmental process it emerged that it was necessary to shift way from viewing the pavilion as a single multi-layered exhibit. Instead the approach applied during the final design resolution was to handle each of the four experiential zones separately.

The chapter concluded by providing a detailed summary of the various requirements that need to be met by each of the four zones in preparation for the technification of the design.