A Research and Educational centre: Exploring the Connection Between the Natural Environment and Architecture.

Learning from the mysteries of nature.

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IN BETWEEN
IN
SIDE
IN
NATURE
01 REVISION
Main aspects pointed out by examiners for revision:

1. Academic analysis and critique
   - Further criticism, analysis, comparison and argument regarding the movements studied.
   - In-depth analysis of case-studies.
   - More academic analysis than poetic manifesto.
   - Less repetition of points.
   - More information regarding the modern movement and it’s critique.

2. Nature vs Landscape
   - Clarify the difference between the terms.

3. Visual analysis
   - Clarify placement of site and all reasoning that aided in this decision.
   - Clarify the sensitivity to site in the design.
   - Explore the full conceptual stages of the design.
   - Fully include all scientific and romantic reasoning behind design decisions.

4. Design
   - Include fully annotated technical details.
   - Show fully the biomimetic and biophilic response.
   - Carefully explain all sustainable aspects of design.
   - Show the consideration of the design among the trees.
   - Include the full design considerations for the rest of the site.
   - Explain the sensitivity and sustainable aspects of the wetland.
   - Give a detailed account explaining chosen form and structure.

5. Socio-economic application
   - Scale down the concepts and demonstrate their application in a different economic and social setting.
   - Show low cost options for an RDP house design.
This revision is included:

EDITED: (Page 24) Chapter 02: Research: The research narrative is explained in step by step detail. It explains the path of the research to finding a design solution.

NEW CHAPTER: (Page 30) Chapter 02: Nature vs. Landscape: The concepts are clarified and defined. This is specifically in terms of the research.

EDITED: (Page 34) Chapter 03: Genius Loci: The argument is set out more clearly, and sketches have been included to analyze each case study. The links to nature are clearly shown for each example. Modernism is explored further on pages 41 to 49.

EDITED: (Page 54) Chapter 04: Biophilia: The argument has been edited more to the point. All case studies have been sketched and analyzed further.

NEW CHAPTER: (Page 64): Chapter 04: Green Building: This chapter explores the relevance of sustainability. It also shows the current systems put in place over the world to regulate green law in architecture.

EDITED: (Page 72) Chapter 04: Nature meets Architecture: The case studies have also been done more in depth with sketches. The argument has been edited further for less repetition.

EDITED: (Page 102) Chapter 04: Nature and Sustainability: Each sustainable solution has a new paragraph to explain the relevance to Johannesburg. Sketches are included to show relevant examples that can be applied later.

EDITED: (Page 120) Chapter 05: Organic architecture: The writing is edited and the movement is analyzed more thoroughly. Case studies are sketched and explained thoroughly. Design choices are drawn from the case studies to be explained in a later chapter.

EDITED: (Page 134) Chapter 06: Phenomenology: The same edit as chapter 05.

EDITED: (Page 150) Chapter 07: Critical regionalism: The same edit as chapter 05.

NEW CHAPTER: (Page 162): Chapter 08: Analysis and comparison: This chapter takes everything learned from the previous three chapters and creates a design toolbox for later design. It also argues the strengths and weaknesses of the movements.

EDITED: (Page 170) Chapter 09: Biomimicry: The same edit as chapter 05.

EDITED: (Page 194) Chapter 09: Life’s principles: Additional information on the nine principles of biomimicry. These express how biomimicry will achieve sustainability in the design.

EDITED: (Page 214) Chapter 11: Precedents: Sketches on relevance to certain case studies as well as an additional case study for the project’s landscape design.
EDITED: (Page 236) Chapter 11: Visual Analysis:

Page 238-239: Initial concept.
Page 240-241: Site and edge conditions.
Page 242: Scientific and romantic reasoning introduction.
Page 243: Broad context - social, economic, etc.
Page 253: Climate in Johannesburg and influence of this.
Page 254: Orientation on ridge and benefits.
Page 255: Scaling of the project to show relevance and sensitivity.
Page 256-257: The axis of the site explained.
Page 268-269: Show placement and sensitivity of desired built form in regards to the best place for it to be.
Page 286-287: Conceptual options for where the building's sprawl would be, then its limitations.
Page 290-291: The ideas for landscaping the rest of the site and how this would link to the design. Ideally it is the program for the entire site.
Page 292-301: Use the toolbox created from the previous movements to give a more romantic study of the site. This can then be used to create genius loci.
Page 304-305: The final decided form and spread of the building design.

NEW CHAPTER: (Page 306): Chapter 11: Sustainable Aspects: These are the main sustainable, biomimetic and biophilic responses in the building explained before the final design.

EDITED: (Page 316) Chapter 11: Architectural Response: The updated drawings have been added to this chapter.

NEW CHAPTER: (Page 338): Chapter 11: Technical Details: These are the important details from the site that required complex detailing.

EDITED: (Page 350) Chapter 11: Diagrams and Models: The updated model from the design has been added.

NEW CHAPTER: (Page 358): Chapter 11: Design Applied: The main sustainable and place-making techniques are scaled down in cost to suit an RDP development to show the possible use of this research for any other project.