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## **Construction &** Complexity

building research resilience and a meaningful toolkit for Master's and PhD studies

WITH: Dr Yolandi Burger

**TOPIC: NAMING THE WORLD: INSIGHTS INTO ENVIRONMENT AND IDENTITY THROUGH INQUIRY BY DESIGN** 

DATE: 30 January 2025 TIME: 17h30 to 18h30

Research Fellow @ Loughborough University Postgraduate Supervisor @ IIE-Vega School

The work presented in this presentation is part of my research at Loughborough University













# NAMING THE WORLD

INSIGHTS INTO ENVIRONMENT AND IDENTITY THROUGH INQUIRY BY DESIGN

#### **A CASE STUDY OF NELSON MANDELA**

There is a world named after Nelson Mandela, as evident in the Archive of the Centre of Memory (ACoM) at the Nelson Mandela Foundation (NMF), which includes\*:

Streets 163	Buil
Gardens 24	Neig
Bridges 9	Squa
Schools 64	Univ
Hospital 1	High
Sports stadiums	Plaz
Parks	and

\*Estimated number of items as per AcoM on 2021



- Idings 50
- ghbourhoods 7
- ares 17
- iversities/educational 56
- hways
- zas
- so more...









"There is no easy walk to freedom anywhere"

Links

22

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# INQUIRY BY DESIGN

JOHN ZEISEL (2006: 160)

### MEMORIALISING MANDELA IN THE METROPOLIS | NAMED AFTER NELSON

- framework for exploring graphic heritage.
- Seeking out portrayals of Nelson Mandela in places named after him aligns with Zeisel's work on Observing Physical Traces, which concerns systematic approaches to looking at physical surroundings. Zeisel's methodology allows for the development of concepts, the formulation of hypotheses, and
- empirical testing.
- The project explored the related notions of toponymy (place naming) and topophilia (love of place or physical environment) in connection to places named after Mandela.
- The Named after Nelson exhibition was an impact project that communicated the insights and narratives from the Memorialising Mandela in the Metropolis research project to a public audience.
- Large international project team lead by Dr Robert Harland (principal investigator).



Design Inquiry is central to the approach followed in the project and provides the methodological





#### NELSOM MANDELA **CENTRE OF** MEMORY

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## NELSON MANDELA PARK

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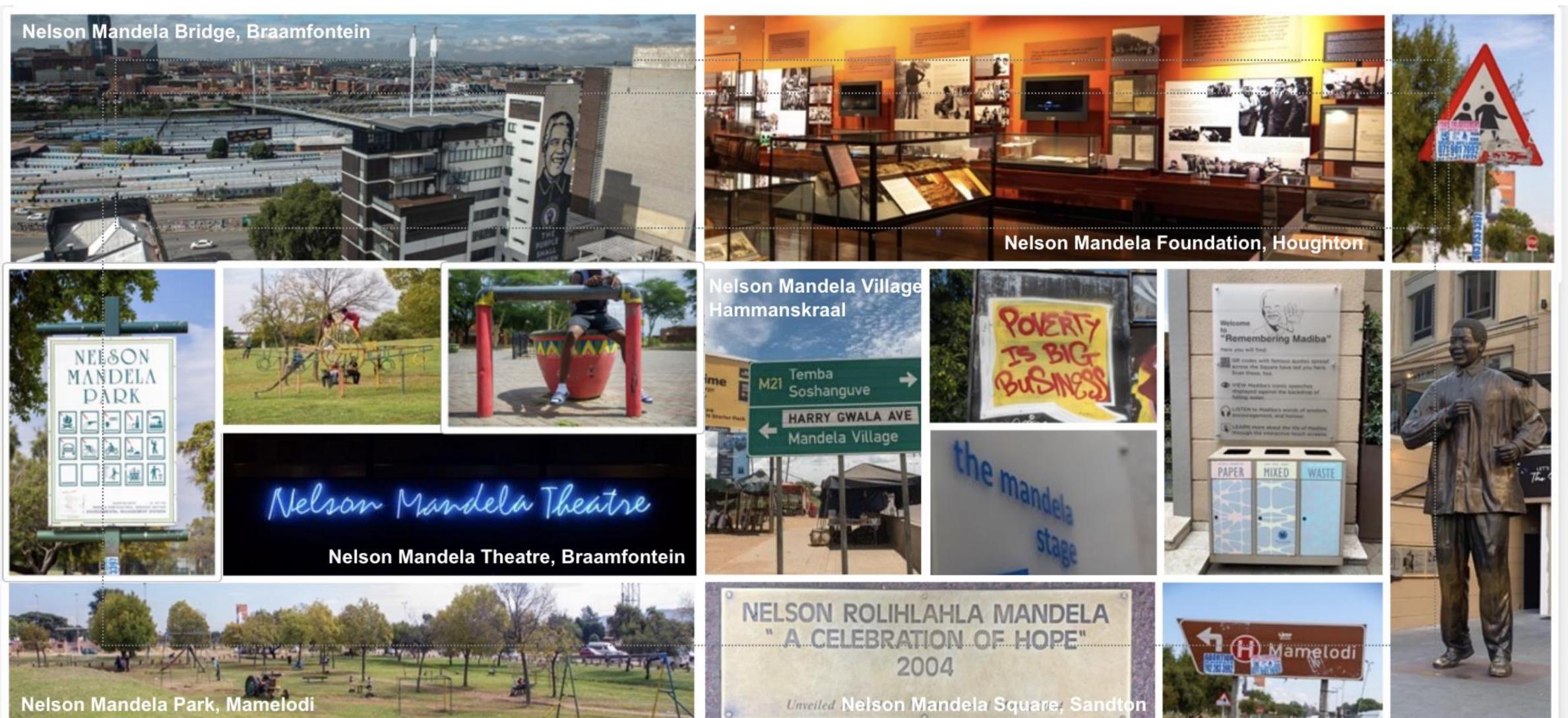
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# SIX LOCATIONS

#### IN GAUTENG, SOUTH AFRICA





# INQUIRY BY DESIGN

#### JOHN ZEISEL (2006)

Table I: Aspects of design inquiry that guide this study (adapted from Zeisel, 2006) to look for

Ŧ	INTERNAL PRODUCTION OF THE REPORT OF THE REP	Char galae and stady (adapted i	
	Doing research	Observing physical traces	Physical traces to
	Developing concepts Characteristics Approaches Preconceptions Formulating hypotheses Classifying hypothesis	Qualities of the method Imageability Unobtrusive Durable Easy Recording Devices	By-products of use Erosions Leftovers Missing traces Adaptations for us Props
	Explanatory hypothesis	Annotated diagrams	Separations
		Drawings	Connections
	Empirical testing	Photographs	
	Observing	Counting	Displays of self
	Sampling		Personalisation
		What to Look for	Identification
		By-products of use	Group members
		Adaptations for use	
		Displays of self	Public messages
		Public messages	Official
		Context	Unofficial
			Illegitimate
	(2006: 34)	(2006: 160)	(2006: 170)



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JOHN ZEISEL

### INQUIRY BY DESIGN

Environment / Behavior/ Neuroscience in Architecture, Interiors, Landscape, and Planning

FOREWORD BY JOHN P. EBERHAF



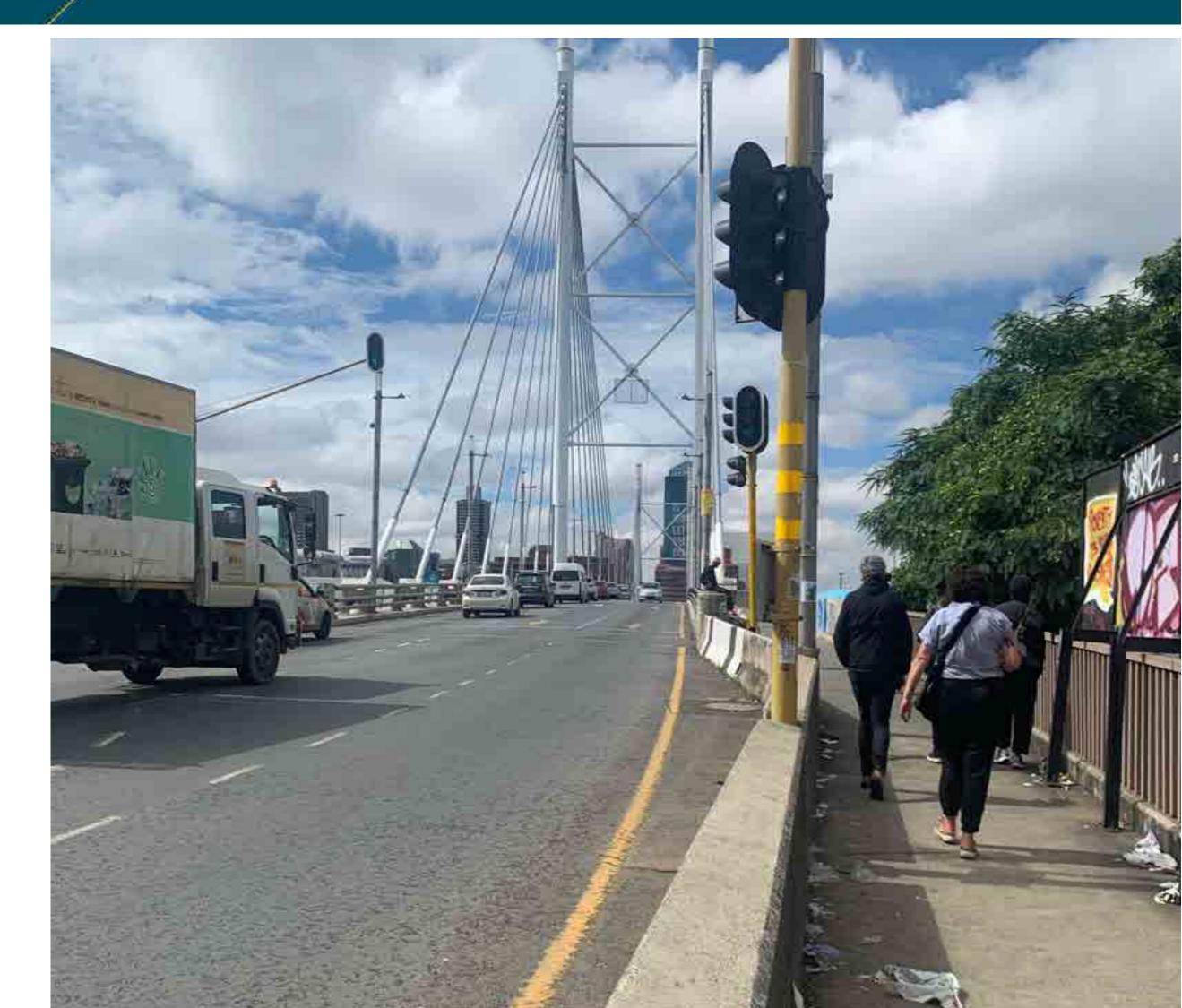
# **OBSERVING PHYSICAL TRACES**

JOHN ZEISEL (2006: 160)

### **AS A METHODOLOGICAL FRAMEWORK**

- Explorative in nature
- Consciously curious about the phenomena
- Systematically looking at physical surroundings to find reflections of previous activity
- Informs design and urban practice
- Suits the natural ebb-and-flow of the interdisciplinary research team
- Stand-alone or can be complemented by human interactions:
  - Observing Environmental Behaviour
  - **Focused Interviews**
  - Standardised Questionnaires
- Geographic Information Systems (GIS) may add a quantitative element.





JOHN ZEISEL (2006: 161)

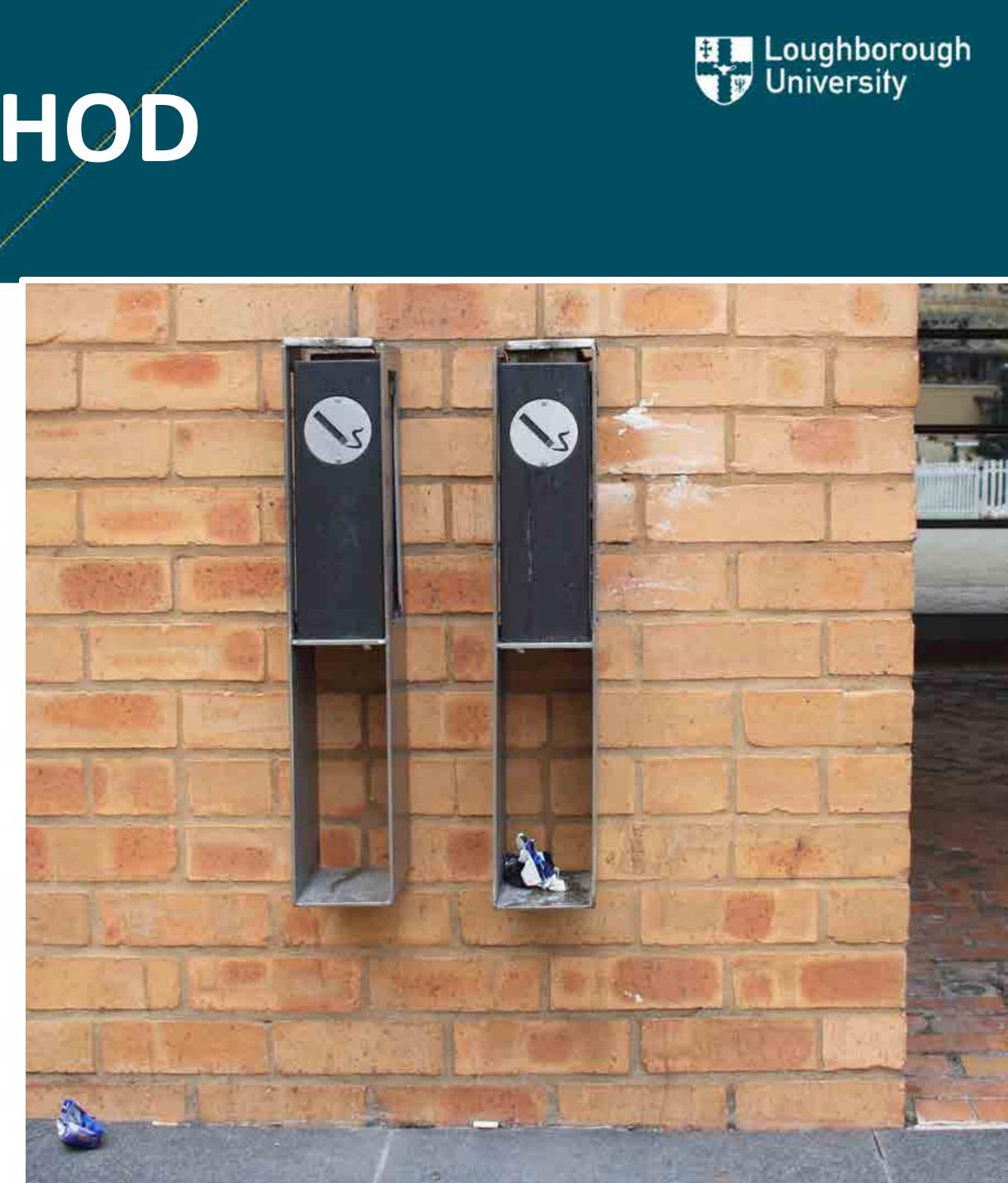
#### IMAGEABLE

- Observation of physical traces provides rich impressions and is highly illustrative.
- Once a trace is observed, we ask questions about what caused it, and what the intent was and the sequence of the trace.
- Example:

An unused ashtray may signal that people do not smoke in this place; however, the researcher needs to avoid falsely inferring the intent of the observation since people may use e-cigarettes which would not leave a trace or leftovers may have been left on the ground.







JOHN ZEISEL (2006: 162)

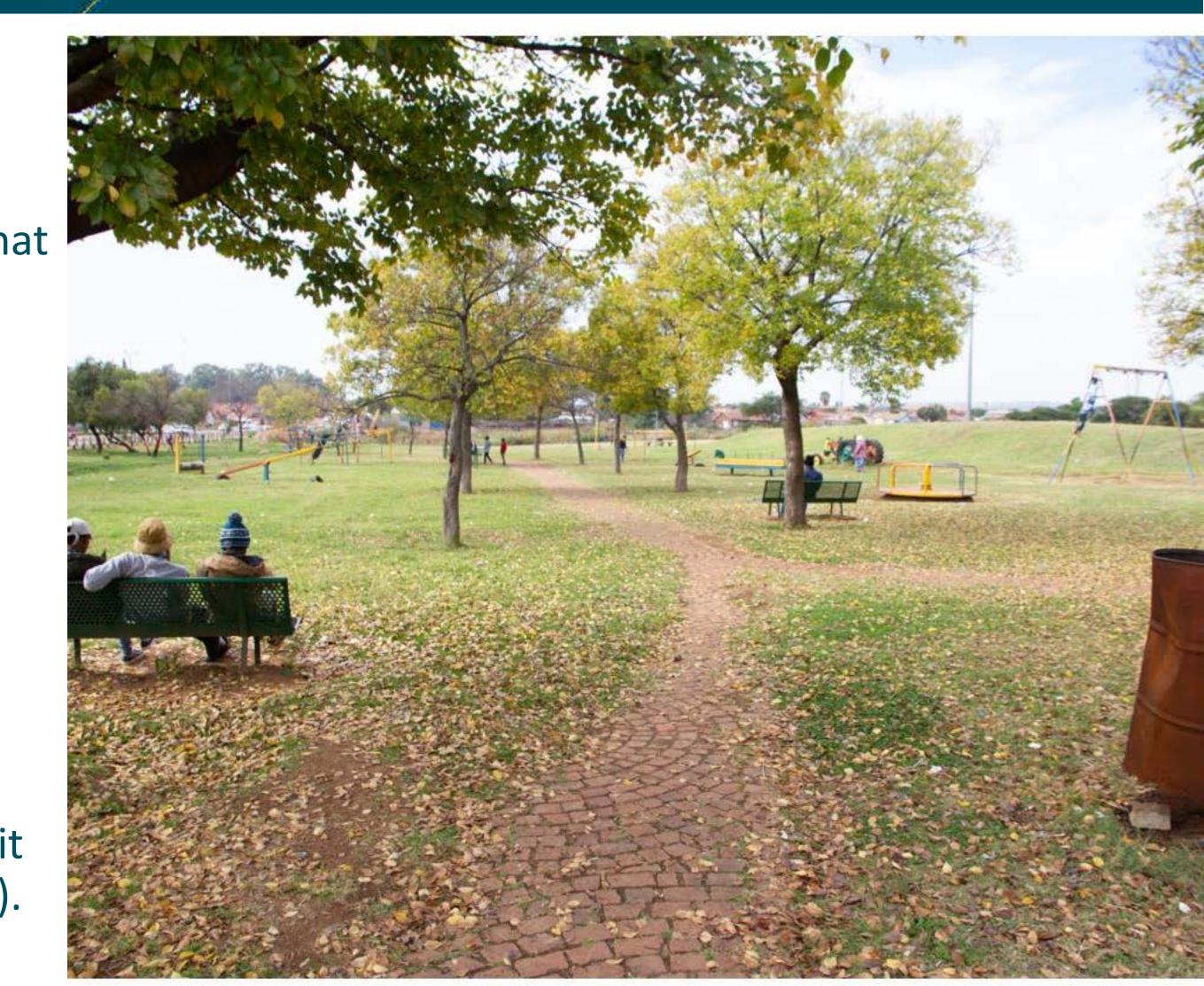
### **UNOBSTRUSIVE**

- Observation does not influence the behaviour that caused the trace.
- Valuable when gathering data about situations that people find sensitive or when respondents have a stake in a certain answer.
- Observing or measuring traces does not require being present when the traces are created.
- Example:

How people organically use a space versus how it was intended (e.g. benches and play equipment).





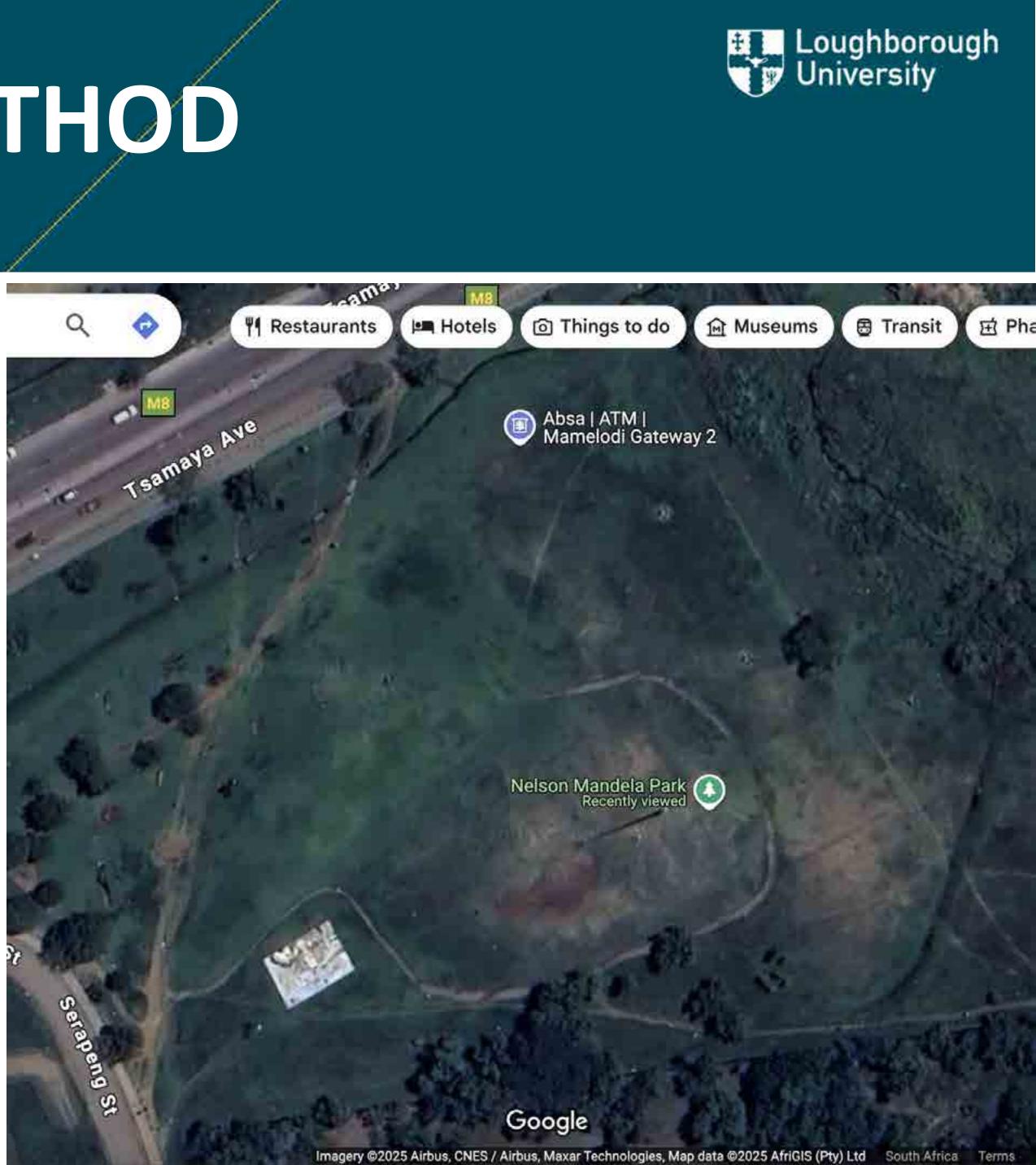


**JOHN ZEISEL (2006: 163)** 

#### **DURABLE**

- Many traces do not quickly disappear, allowing for more than one visit to a research site for more observations, counting or documenting traces (I always visit the place more than once).
- A consequence of the durability of traces is their cumulative quality; earlier traces can encourage later ones.
- Example:
  - We can even see informal footpaths in a park or around play equipment on satellite data sometimes.





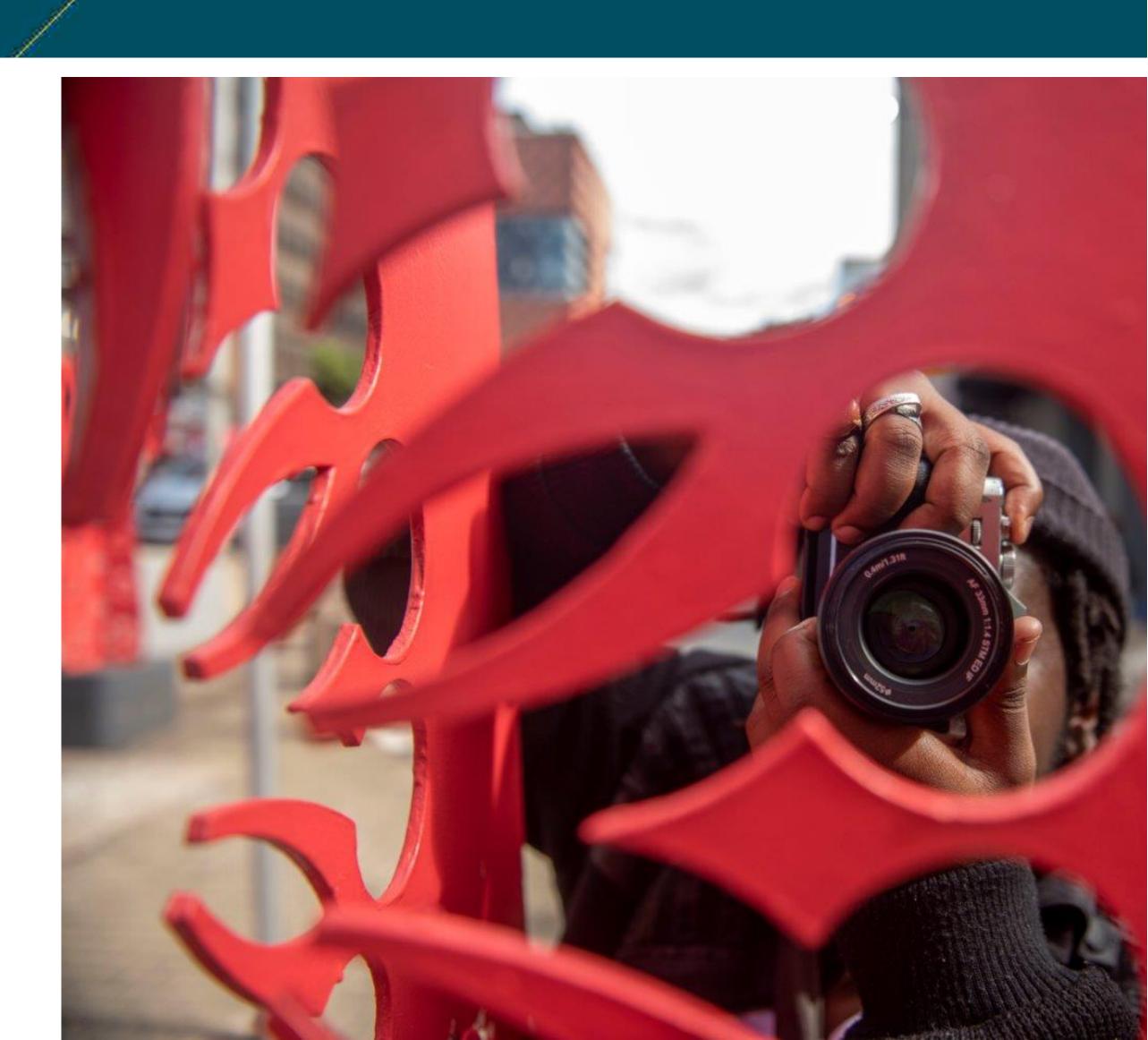
JOHN ZEISEL (2006: 164)

#### EASY

- Physical-trace observation is generally inexpensive and quick to yield interesting information, allowing investigators to explore several initial hypotheses.
- Speed and ease of recording devices such as photographs, sketches and notations.
- Avoid: "We already have so much information. Why do we need more?"



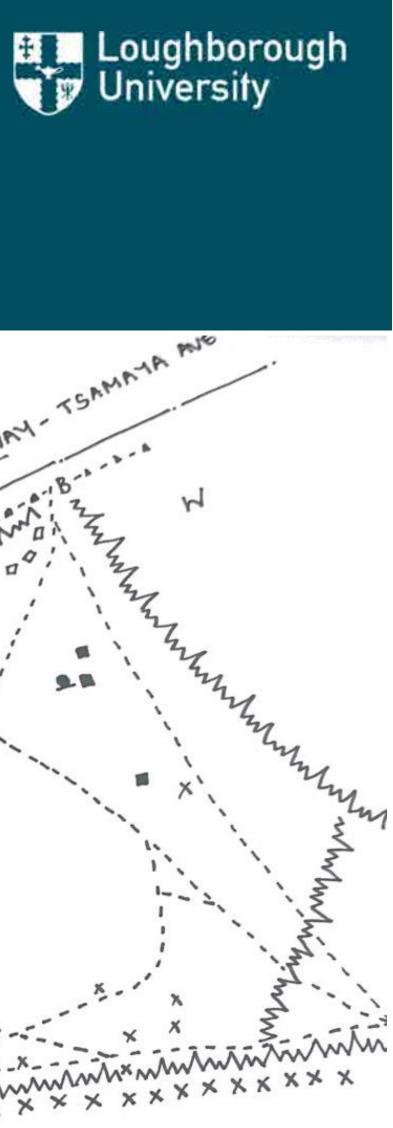


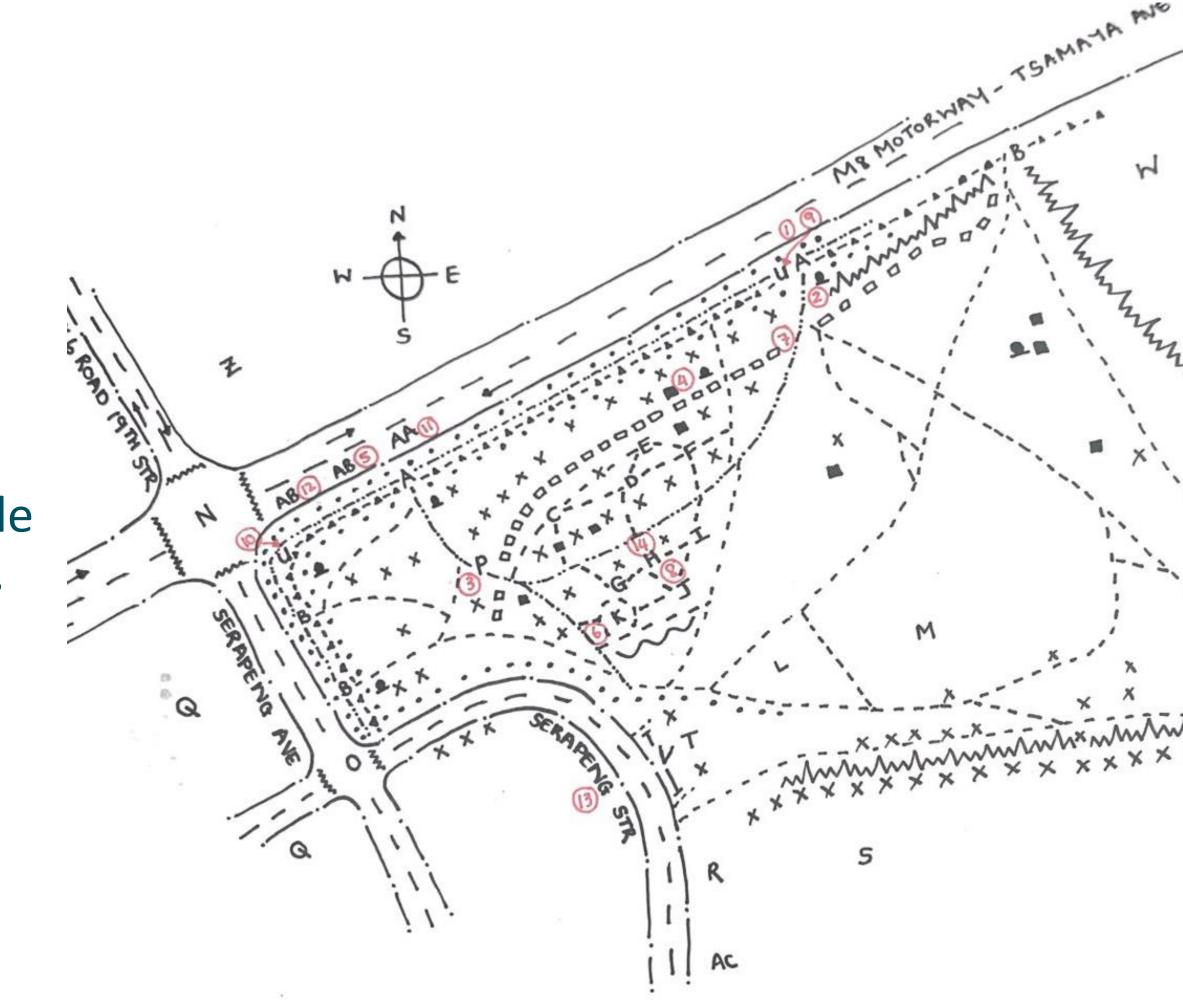


JOHN ZEISEL (2006: 168)

#### DRAWINGS

- Drawings are imageable and inexpensive to produce.
- Great for reports or initial observations.
- **STEP 1:** Desktop research with satellite images from Google Maps before visiting a site to provide a sense of what can be observed and the setting.





JOHN ZEISEL (2006: 168)

### PHOTOGRAPHS

- **STEP 2:** Provides an initial overview of the research site with the first visit.
- May inform categories for counting and what is absent and/or present for the second visit.
- **STEP 3:** Revisit the research site to capture another set of photographs.
- Visual resources for oral presentations and papers to show instances of what traces were observed.

NOTE: Any camera works well but we prefer to take high-quality photographs which can be used for different outputs such as the exhibition.







JOHN ZEISEL (2006: 169)

### **COUNTING**

- Use when the quantity of a trace needs to be considered.
- Example: How many signboards are at a research site that proclaims the placemaking in the name of Mandela.
- **STEP 4:** Count traces on photographs, drawings, and at the physical site.



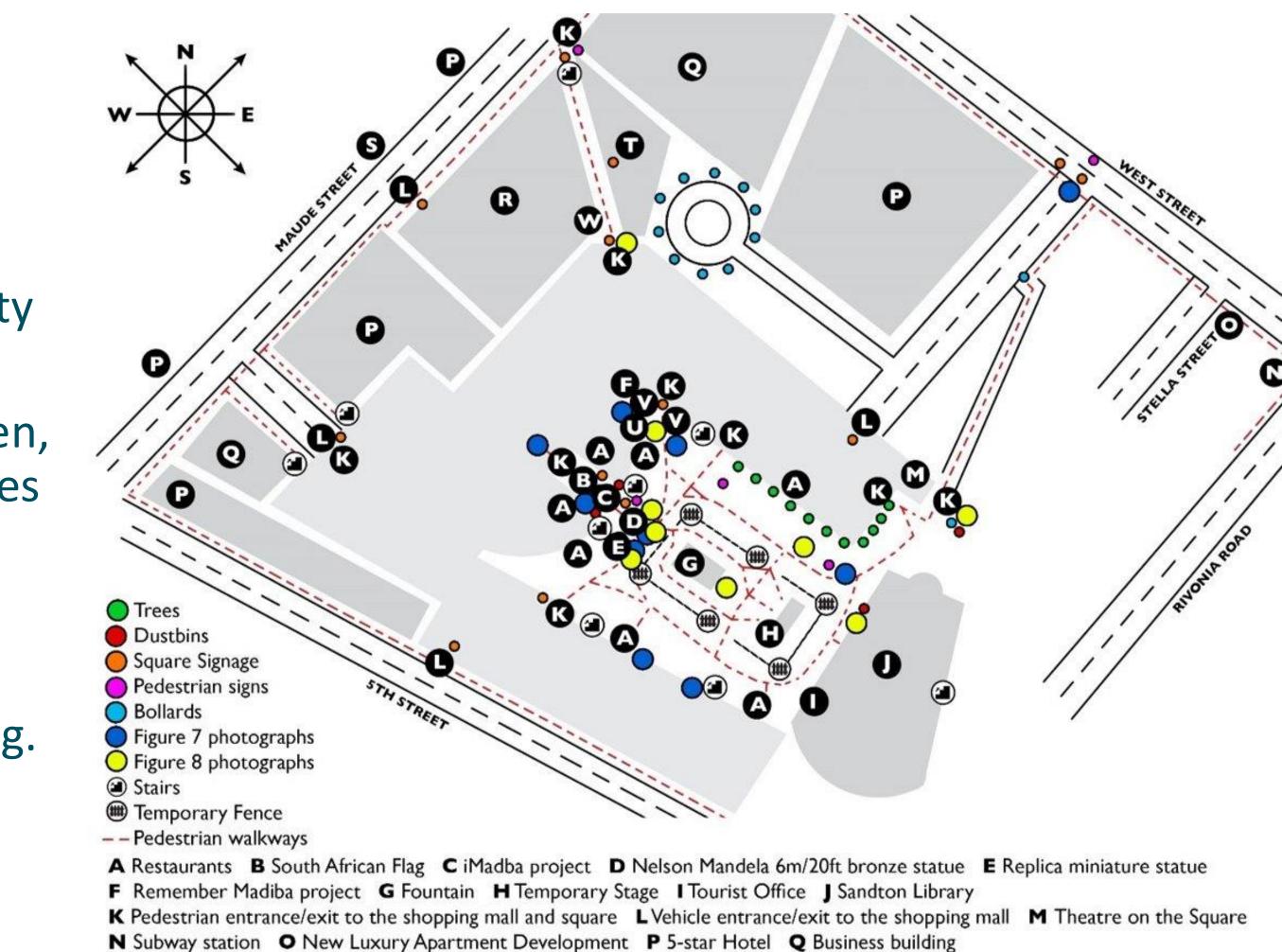


JOHN ZEISEL (2006: 164)

**ANNOTATED DIAGRAMS** 

- Unobtrusive recording method.
- Set of standard symbols to increase comparability of data across different research sites.
- Visually represent where photographs were taken, instances of counting and different types of traces left behind.
- Provides an image of the research site for the reader.
- **STEP 5:** Draw an annotated diagram for reporting.





R Michaelangelo Towers with exclusive mall and 5-star hotel S Sandton Convention Center T Shared open plaza

U Remembering Madiba audio point V Remembering Madiba interactive screens W Gallery

JOHN ZEISEL (2006: 171)

**BY-PRODUCTS OF USE** 

- Reflect what people do in settings such as traces of litter, worn spots, misused or failed to use space.
- Erosions: Wear away parts of the environment such as scars, paths across lawns.
- Leftovers: Physical objects left behind such as cigarettes, dishtowels, empty cans, trash.
- Missing traces: What is not there and why?



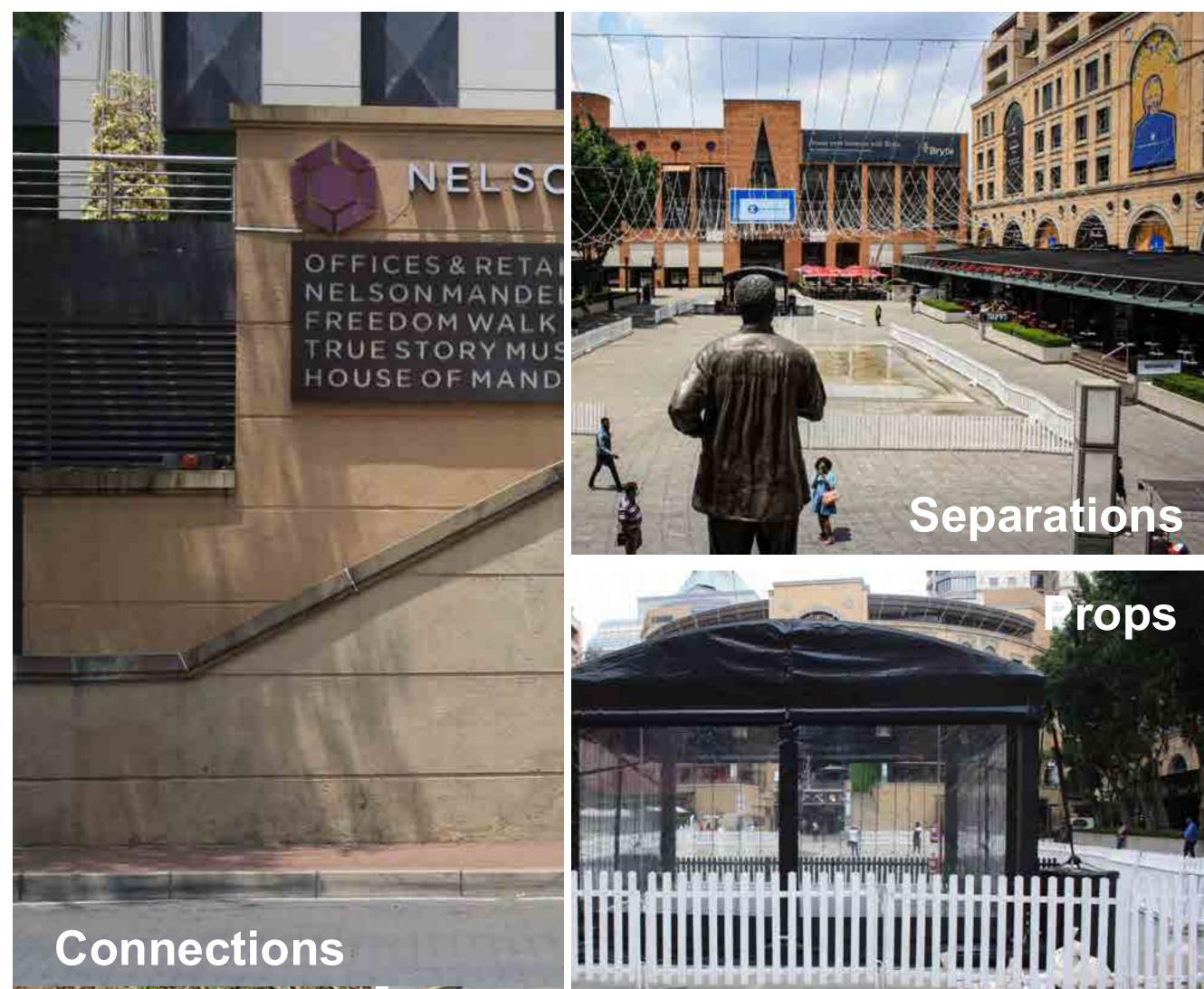


JOHN ZEISEL (2006: 173)

**ADAPTATIONS FOR USE** 

- Changes that users make to an environment so it is better suited to something they want to do.
- Props: Add objects to or remove objects to create new opportunities for activity such as a stage for music.
- Separations: Separate spaces for privacy, control, safety or redirection, such as barriers, fences, and bollards.
- Connections: Connect two places to interact in new ways such as ramps, stairs, passthroughs between to spaces.





JOHN ZEISEL (2006: 175)

### **DISPLAYS OF SELF**

- Changes people make to establish some place as their own, express who they are personally.
- **Personalisation:** Use environments to express their uniqueness and individuality such as furniture, desk clutter, display of collections.
- **Identification:** Environment are used to enable others to identify them more easily, such as street numbers, names.
- Group Membership: Display membership in formal religious, academic, fraternal, pollical, ethnic, cultural and professional groups.





### Identification





JOHN ZEISEL (2006: 177)

### **PUBLIC MESSAGES**

- Changes such as posters and graffiti to communicate messages to a public audience.
- Official: Most common erected by institutions such as advertising signs, street signs.
- **Unofficial:** People communicating publicly about events, services or community letters.
- Illegitimate: Unplanned messages to the general public, seldom approved of such as graffiti.







# S

SOURCE: ROBERT HARLAND

#### welcome signs, maps, brands



#### information panels, vistas, architectural structures, graphic details



#### play equipment, information graphics, warning signs, bollards, bins



#### sports markings and structures





#### benches, decoration, commemorative plates



#### railings, colour, shapes

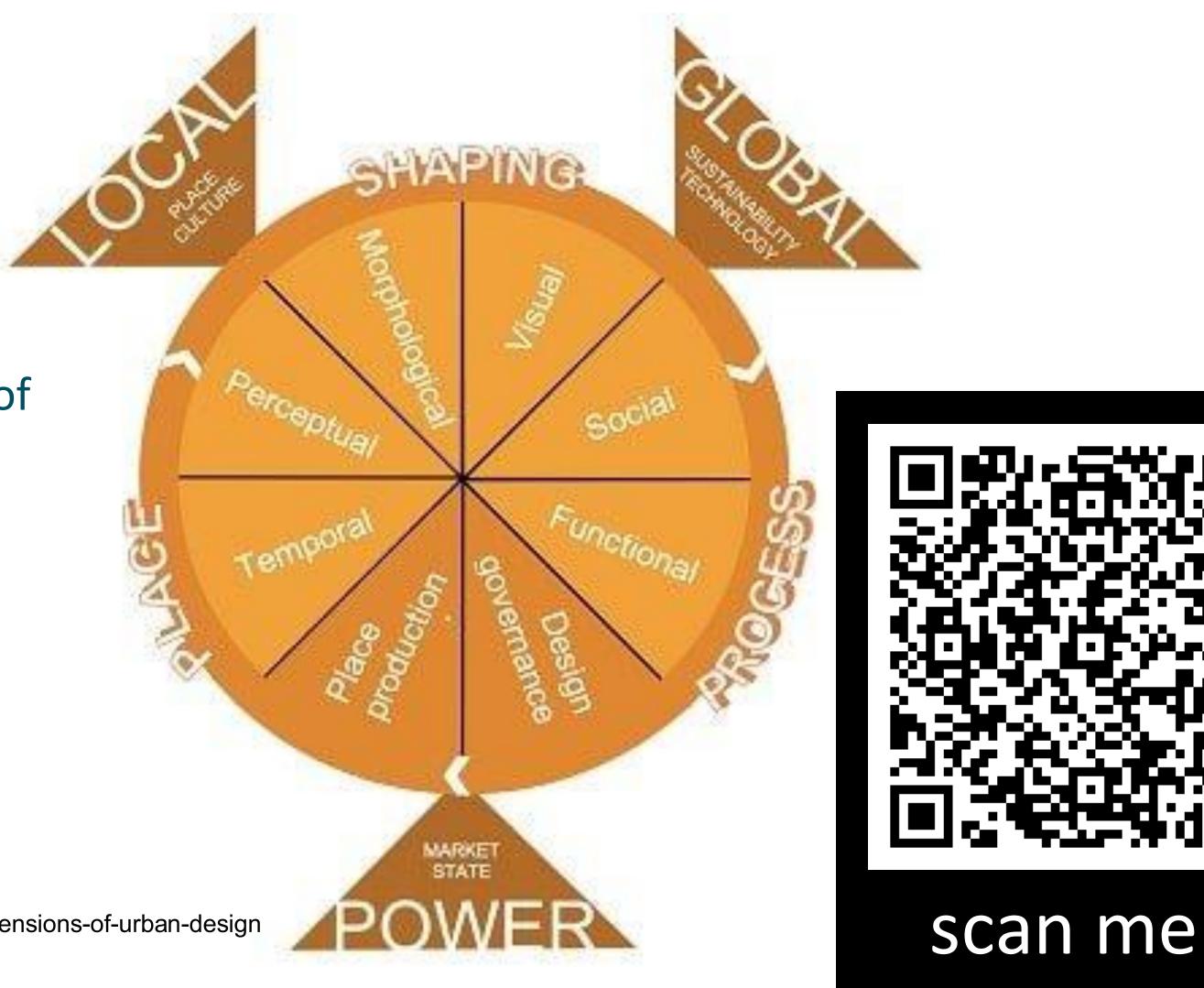


#### temporary signs



# **OPPORTUNITIES**

#### THIS METHOD CAN BE USED IN THE **FOLLOWING DISCIPLINES**



- Figure of Dimensions of Urban Design (Carmona, 2021)
- Physical traces can be explored from most of the dimensions in the urban environment.

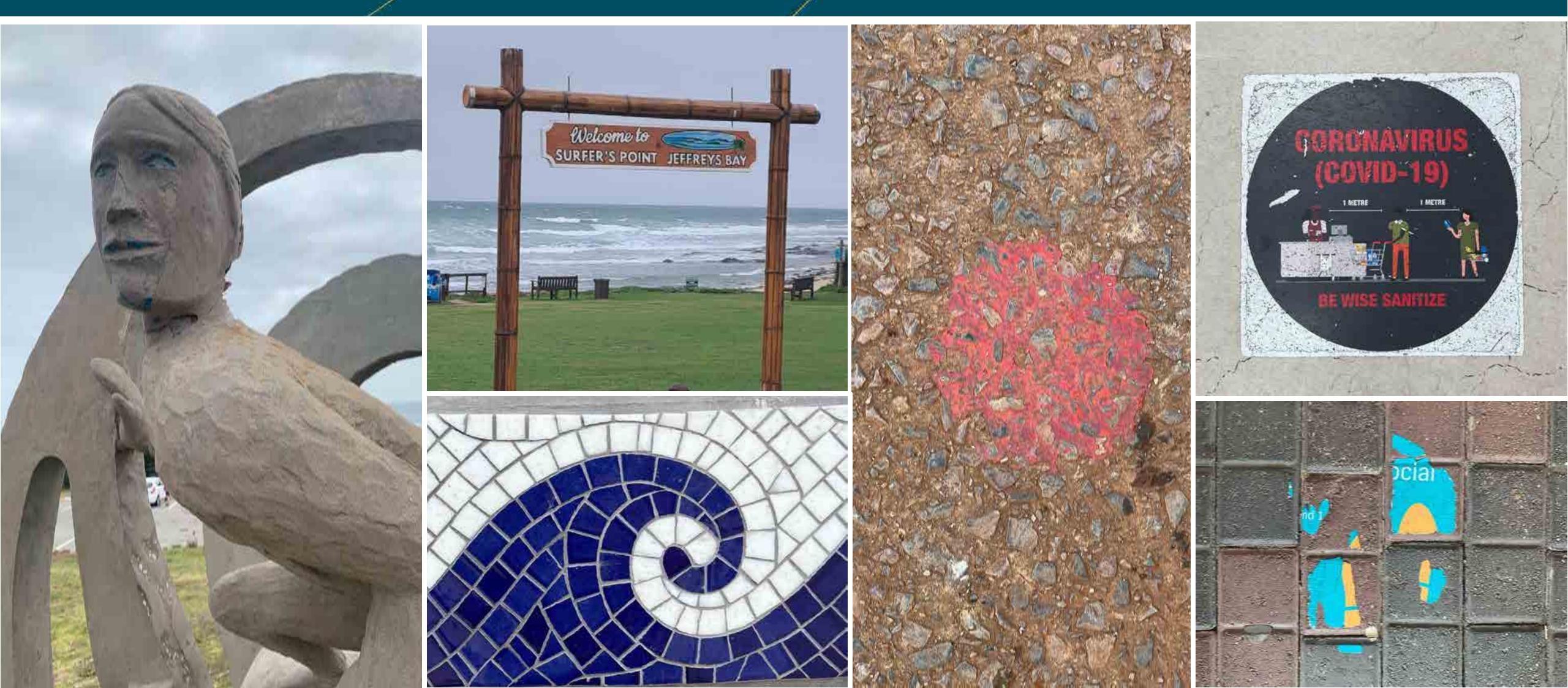
Image Credit: Carmona (2021). Dimensions of urban design. [Image]. Available from: https://www.routledge.com/blog/article/exploring-the-evolving-dimensions-of-urban-design





# OTHER CURIOUS TRACES FOR ME

### SURFING HERITAGE







# LAST THOUGHTS

### **ETHICAL CONSIDERATIONS**

- No human participants for observing physical traces. We work mostly in public places and avoid photographing people which limits the risk. Remember POPIA!
- Semi-public and private places needs gatekeeper permission.
- Human participants in observing environmental behaviour have more risk but provides complementary data.



#### TRUSTWORTHINESS

Use the qualitative trustworthiness aspects to support the academic rigour of the interpretations of the data from this method:

- Credibility
- Reliability
- Objectivity
- Confirmability

# THANK YOU

#### References

Carmona, M. 2021. Public Places Urban Spaces (3rd Ed). Routledge: London. Zeisel, J 2006, Inquiry by design. W.W. Norton & Company Inc., New York.



Questions in session Email your questions to y.burger@lboro.ac.uk

