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# RESEARCH THESIS

## related to SIX CROSS CUTTING THEMES UNDER URGENT PROJECT

### Assessing the Identity of Chennai through the Lens of its Shoreline Development

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*Batch: 2018-2022*

**B Arch Program**

**P 12**

**NIRMA UNIVERSITY**

**AHMEDABAD**

**GUJARAT**

**INDIA**



In the final semester of a Bachelor of Architecture (B. Arch) program, students engage in academic research by selecting an area of interest within the field of architecture. This process typically involves several steps to ensure that the research is rigorous, structured, and valuable. The process starts with a course on Research Methodology in VIII Semester followed by Research Proposal in IX semester. Here's an overview of the process:

## 1. Choosing an Area of Interest

- **Exploration:** Students begin by exploring various topics within architecture, such as sustainable design, urban planning, architectural history, construction technology, or digital architecture.
- **Narrowing Down:** After exploring, students narrow down their interests to a specific research question or problem. This could be based on current trends, gaps in existing literature, or personal interest.

## 2. Defining the Research Question

- **Problem Statement:** Students formulate a clear problem statement or research question that their work will address. This defines the scope of the research and sets the direction for the study.
- **Objectives:** Setting clear objectives helps in focusing the research. These could include understanding certain architectural phenomena, proposing new design solutions, or evaluating existing practices.

## 3. Literature Review

- **Existing Research:** A thorough review of existing literature helps students understand what has already been done in their area of interest. This involves reading academic papers, books, case studies, and other scholarly articles.
- **Gap Identification:** Through the literature review, students identify gaps or areas where further research is needed, which helps in refining their research question.

## 4. Research Methodology

- **Qualitative vs. Quantitative:** Depending on the nature of the research, students choose between qualitative methods (such as case studies, interviews, or observations) and quantitative methods (such as surveys or statistical analysis).
- **Data Collection:** Students plan how they will collect data. This might involve fieldwork, archival research, simulations, or experiments.
- **Data Analysis:** Once data is collected, students analyze it using appropriate tools and methods. This could involve software for statistical analysis, 3D modeling, or comparative analysis techniques.

## 5. Design and Proposal Development

- **Conceptual Framework:** Students often develop a conceptual framework that guides the design or theoretical aspects of their research.
- **Prototyping:** In some cases, students create physical or digital models to test their ideas. This is particularly common in research that leads to a design proposal.



## 6. Documentation and Presentation

- **Writing the Thesis:** The research findings are documented in a thesis, which includes the introduction, literature review, methodology, findings, discussion, and conclusion.
- **Visual Presentation:** Architecture students often need to prepare visual presentations of their research, including drawings, models, or digital renderings.
- **Defense:** Students may be required to present and defend their research in front of a panel of faculty members and peers.

## 7. Conclusion and Future Research

- **Summary of Findings:** The thesis concludes with a summary of the findings and their implications for the field of architecture.
- **Suggestions for Future Research:** Students may also suggest areas for further study based on their findings, contributing to ongoing academic discourse.

## 8. Submission and Review

- **Final Submission:** The completed thesis is submitted for review. This may include peer review, faculty evaluation, and sometimes publication in academic journals.
- **Feedback:** Based on the review, students may be asked to make revisions before the final acceptance of their research work.

This process not only helps students gain a deep understanding of a particular area within architecture but also equips them with the skills to conduct independent research, a valuable asset in their professional careers. Some of the research works undertaken by students are listed, examples of the some are also elaborated further.



# Assessing the Identity of Chennai through the Lens of its Shoreline Development

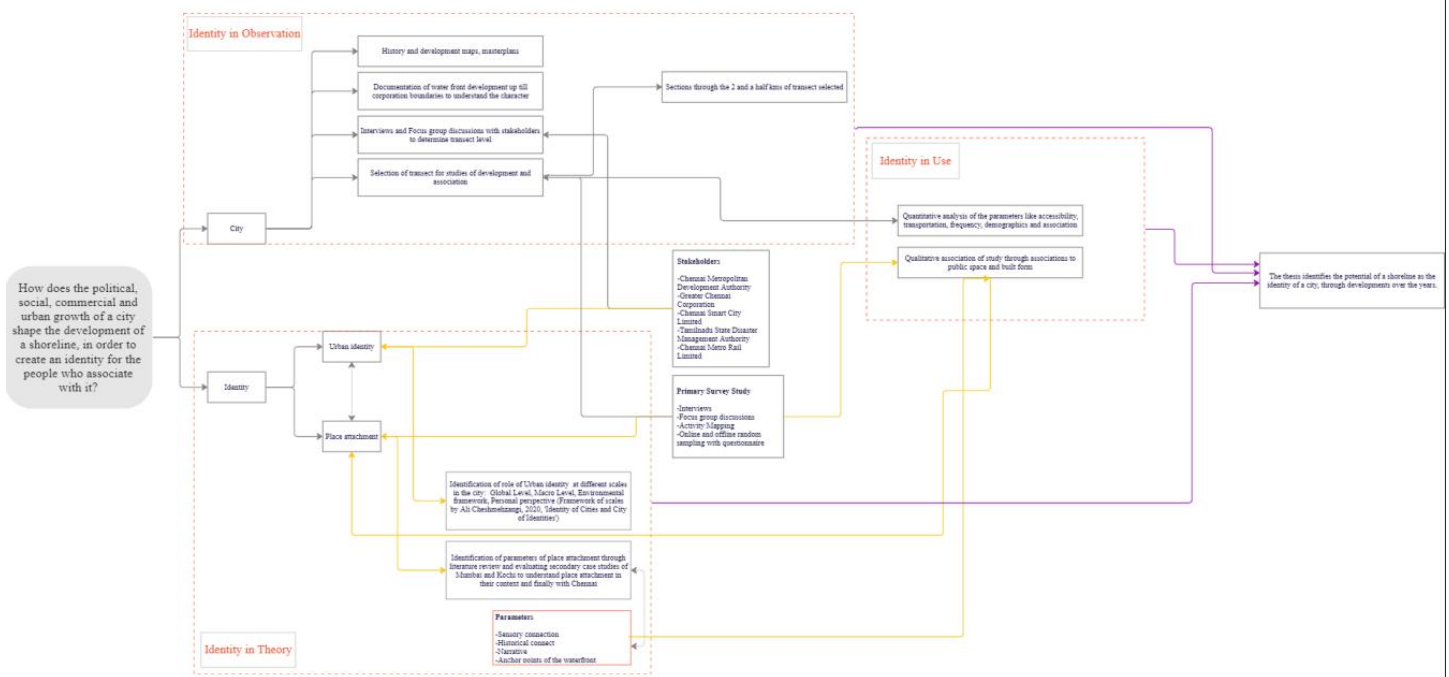
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**Aim:** To study the relationship between development along a shoreline and the identity it creates for Chennai city. **Objectives-**

- To reflect on the development of the city through history along the shoreline.
- To study the development of the shoreline conditions under different state and local authorities.
- To study people's attachment with the shoreline at an individual level.
- To analyse its reflection in the micro to macro identity of a city.



## Identity in Theory-

### Urban Identity (Framework by Cheshtehzangi, 2020)

- The Global Outlook or 'global level'
- The Urban setting or 'Macro level'
- The Environmental framework or 'Medium Level'
- The Personal perspective or 'Micro level'

This global level is often seen as overlapping with urban identity and the relationship between the city and environment is on the basis of what is being portrayed as an image. **Image** is what is construed by an external being, what a third person reflects on when they see a city; **Identity** is a development of self/ community in terms of what the city itself, and the people want to reflect about themselves. There are several parameters under this, like Singularity, Functional, Economical, Perceptual, Geographical, Historical.



Figure 1: Mylapore tank area

The Urban Setting or the Macro level is where the urban identity of an area is distinguished by a specific characteristic for the city. For example, the city of Chennai has varied urban centers that have individual distinctive features, like the Broadway markets, the temple tank areas, a commercial hub at parrys, all are individual urban centers.

The socio-spatial relations of a specific place is the most important aspect at this level where providing activities and new opportunities becomes the key point of interest. Through this understanding, important public squares or spaces become the important identities to the city at the medium level. **Marina Beach** is the identified urban public space being studied through this thesis and by the factors determined, it is an urban public space, designed such at the beginning and treated the same way as it is an important social node.

The Micro level of impact is extremely personalised. The urban identity at this level differs through different cultures of communities and through each varied experience of people. During the survey conducted, the experience of individual people at the beach varied from calm to stressful, depending on their livelihood, experience of the space, and attachment with the same. About 50% felt that **marina created a calm environment** for them to feel relaxed and the water and beach provided them with peace, as their association with the beach is in that aspect.

## Introduction of Primary Case Study-

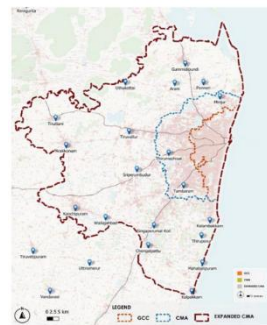


Figure 2: Chennai Metropolitan Area (CMA); Chennai city corporation (GCC) boundaries; expansion as of 2022



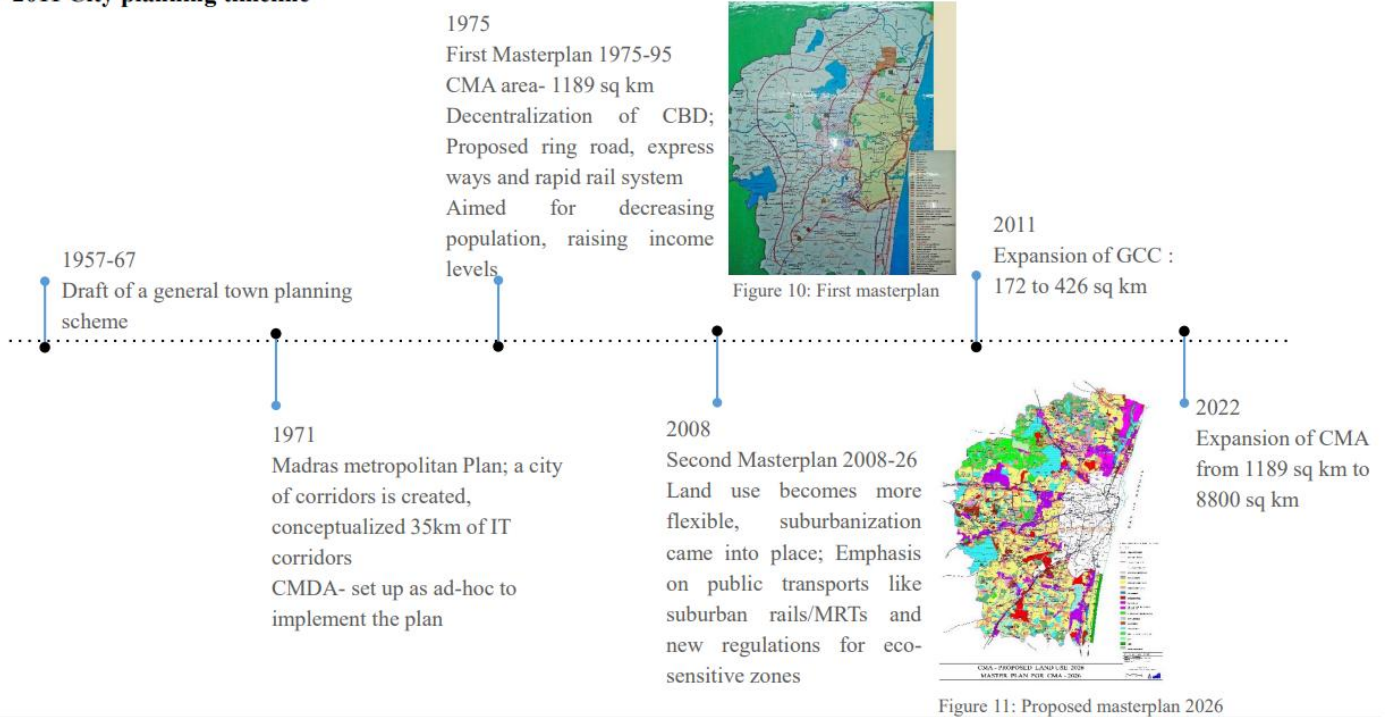
Figure 3: Chennai city interaction with waterbodies:



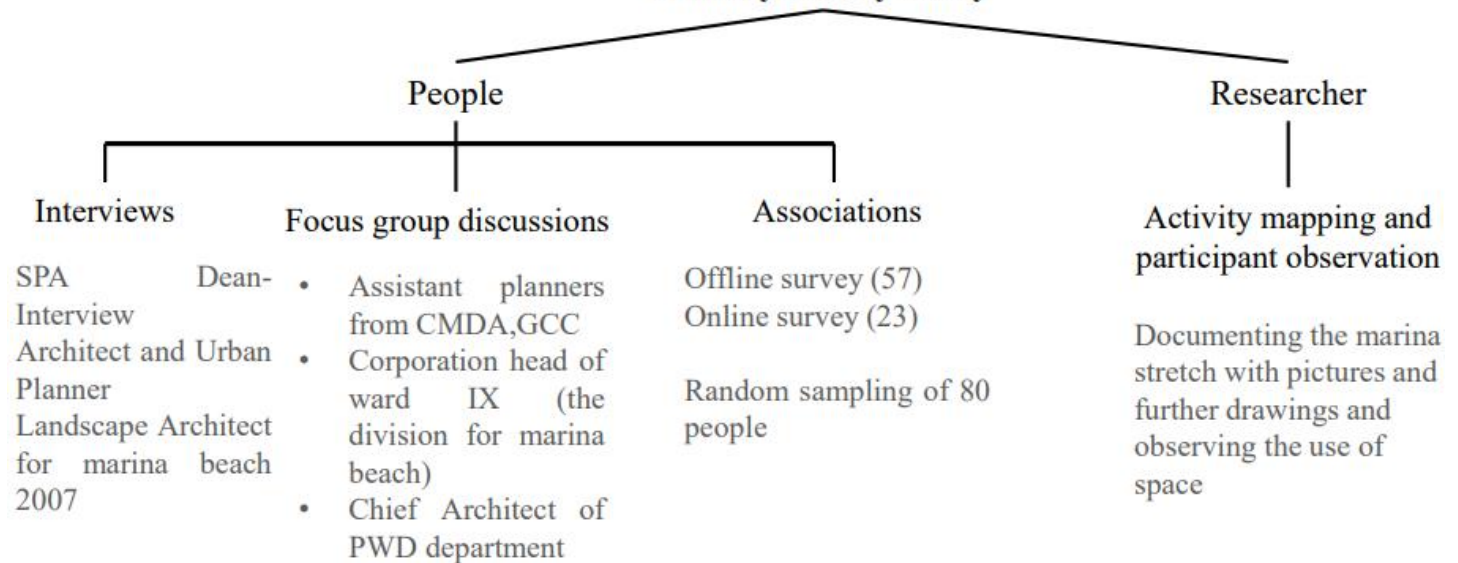
**Identity in observation is conducted from a macro to micro scale.**

- Stakeholders at a city level: Urban development authorities and state level authorities
- Local level: Interviews with academicians and focus group discussions with authorities
- Personal level : With documenting the transect and individual surveys In terms of identity of the city, historically the British had a different vision for the city, then the state (after independence), then the local elected bodies and so on. This changing identity is also observed.

**1947-2011 City planning timeline-**



**Primary Survey Study**





Site: 2 and a half kms of Gandhi Beach in Chennai-



Figure 42 : Gandhi beach present-day



Figure 43 : Labour statue, community and development

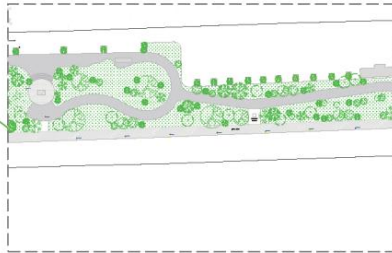


Figure 44 : Detail of walkways

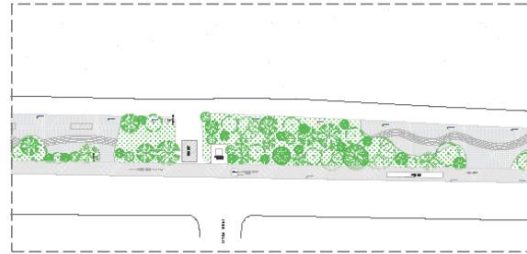


Figure 45 : Pause and rest stops



Figure 46 : Gandhi statue and urban square



Figure 47 : Gandhi steps

Identity in Observation: Concept of development and Movement



Figure 48 : Concept sketch based on interview

The development of Marina, designed by Ar. Raghuraman was designed to create a **buffer** between the road and the sea and to **provide pause points** and create a public square to facilitate social interaction and create an edge for identity of the city.



Figure 49 : Movement



Figure 50 : Stops for mobility

There are **3 layers** to this beach development, the **primary road**, Kamarajar salai that has the beach on one end and historic buildings on the other side; the **gardens** that separate the beach from the road while giving visual access at regular intervals that gives a landscaped edge; the secondary internal roads at regular intervals that leads to an internal movement network that eases traffic and is the **internal beach road** which is used for parking and movement from one end of the beach to the other.



Figure 51: Key Plan

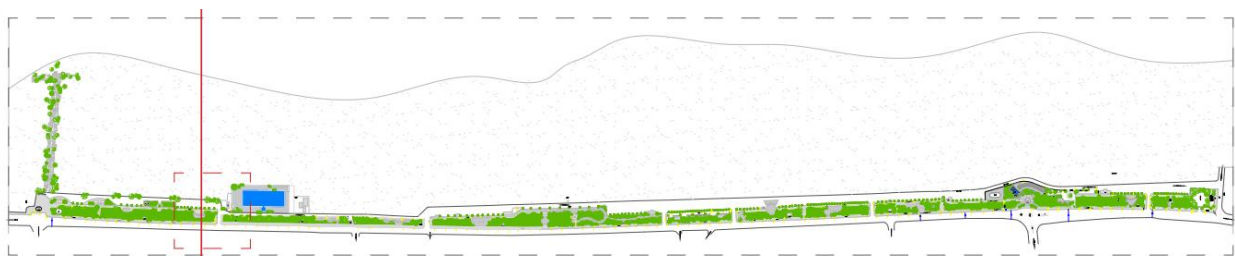
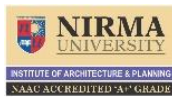


Figure 52: Plan of Gandhi Beach



### Identity in Observation: Sections



Figure 51: Key Plan

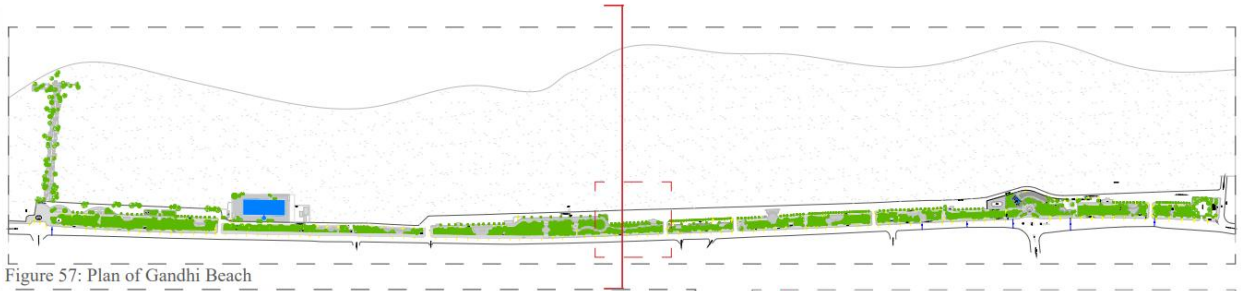


Figure 57: Plan of Gandhi Beach



Figure 58: Section B



Figure 59: Walkway



Figure 60: Walkway

Section B, at 1 km distance from the last cut through the present walkways with gardens on either side. This provides a different character to the marina waterfront and is indicative of the different layers of roads accessed by people. An outer Beach Road, an internal walkway and the internal beach road for movement of vehicles.

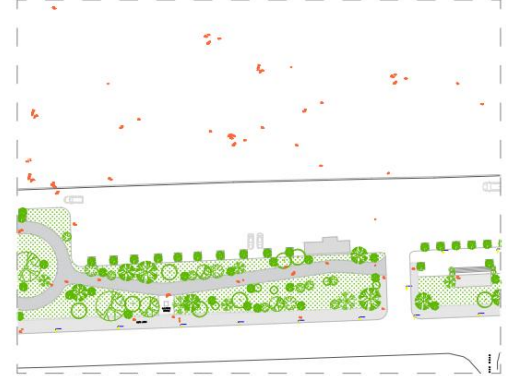


Figure 61: Detailed plan for movement

### Identity in Observation: Sections



Figure 51: Key Plan

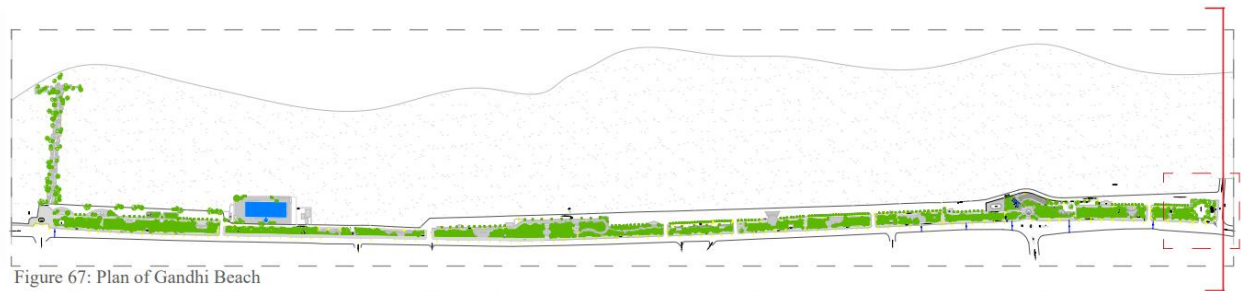


Figure 67: Plan of Gandhi Beach

Section D cut from the road that lends a divide between the public beach and the fishing village (also public, slightly less occupied, more by the fishing community, as seen in the pictures)



Figure 68: Section D



Figure 69: Detailed plan for movement



### Identity in Observation: Sections



Figure 70 : Metro



Figure 71 :View from lighthouse

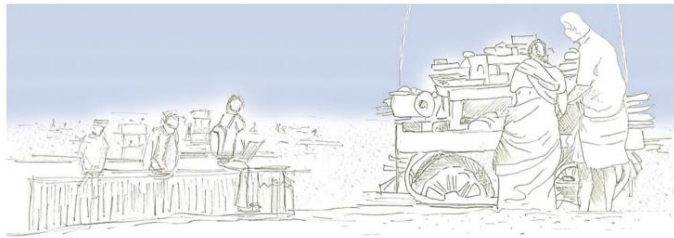


Figure 74 : Activities



Figure 75 : Lighthouse



Figure 72 : entry to the beach



Figure 73 : View from lighthouse



Figure 76 : Sectional iso showing garden, road and internal road interaction

### Conclusions:

Place identity is a temporal narrative, and is a changing continuum.

People associate and have an attachment with the city for its history and architecture, for its long promenades that give a view of the unending sea, for the small interactions like running around the beaches, making one feel like a child again; Chennai is a city, but Madras is an emotion.

Historically, the shoreline has always had an emotional connect to the place because of the lifestyle of fisher folk.

The shoreline has developed over the years under different local authorities and communities that have been associated with it at different levels, the **urban identity** at a **macro level** like the community of fisherman villages and at a **personal level** as they take their boats out everyday into the sea.

People's attachment at the sensory, narrative, historical and dependence level is analysed and like the celebrated shorelines, **Chennai's shoreline forms all these attachments** which generates an identity for the city.

All the **stakeholders** involved have contributions and a **vision** for a unified shoreline development that is achieved through increase in **accessibility and transportation systems**, maintaining the **identity of heritage** structures and creating an important **sense of place** at urban public squares and plazas through beautification and political and culture oriented development. The developmental laws, improvement in connectivity, accessibility are all being planned to get that emotion in the city back.

The city's identity on a 'global level' (Cheshmehzangi, 2020) is the shoreline and this is maintained through all the levels of analysis.

**Marina Beach has an important part to play in the city by forming place attachments and creating an urban identity for the city.**