

RATIONALE  
AIM

OBJECTIVES

HYPOTHESIS

METHODOLOGY

CASE STUDIES

## INTRODUCTION

In this thesis I've explored the idea of permeable boundary (discussed by Prof. Richard Sennette) and searched for the elements which constitute it in traditional neighborhoods of India. These elements can be used for designing of new neighborhoods in today's cities, instead of using physical barriers like wall which makes gated communities and which divides the cities into enclaves.



A House in Fontainhas, Panaji

Built form is an expression of a culture of a man and when people from two different cultural and socio economical background stay together they tend express their own identity through their built form. This tendency gives rise to boundary marking between the communities and neighborhoods.

The aim of this thesis is to study the sense of community expressed in the built form and the way these communities define their boundaries in the process of their accumulation and segregation.

- the concept of community.
- the tangible and intangible factors which makes and/or binds a community
- the concepts of center, nodes, antinodes, periphery/edge etc and how these attribute to a community
- the hierarchy of boundaries, starting from city, community to dwelling unit
- changing notions of settlement in different communities

And in the process to understand:

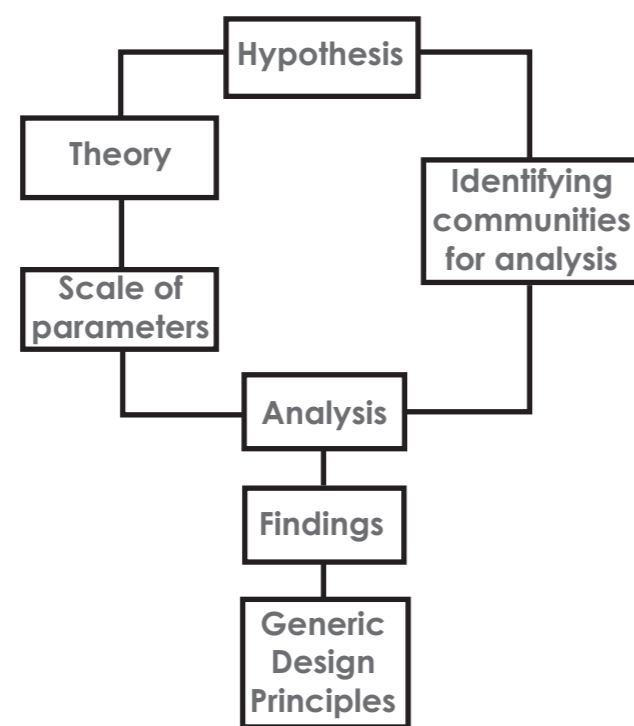
- The relationship between the people and their dwellings and the settlements,
- The sense of community expressed in the physical form

**Built form is a reflection of the culture to which it belongs. City is a place where the accumulation of the people from different socio cultural background takes place. Although the city seems to have a homogeneous built at the macro level it is different at precinct and unit levels.**



A French house in Pondicherry

- Understanding the theoretical concepts of boundary, community, sense of community etc.
  - Understanding the ways in which these boundaries and sense of community find their expression in built form.
  - Understanding the ways in which communities organize spatially.
  - Identifying the scale of parameters to analyse the nature of boundary of a given community.
  - Identification of the few traditional communities in Indian cities who display homogeneous community structure which is reflected in the built.
  - Analysis of built form and the nature of boundaries expressed by these communities with the help of parameters identified in theory.
  - Drawing findings
- Framing generic design principles to apply to any community



SCOPE & LIMITATIONS

The thesis includes only three cases studies, chosen in such a way as to represent the traditional Indian communities. However, a more number of case studies could have earned minor variations in findings. The parameters of analysis, findings and design principles derived from research could be applied to similar neighborhoods to inquire about the nature of notional and physical boundaries.



Street in Agrahara of Mysore

1. Fontainhas, Panaji, Goa Latin quarters
2. Old town of Pondicherry Franco Tamil Settlement
3. Old city of Mysore

## THEORETICAL FRAMEWORK

CITY

City is a place where certain energized crowding of people happen. There is always a hierarchy of size, function and services of town. (Spiro Kostoff)

Kevin Lynch has defined the city as 'a large, relatively dense settlements and permanent settlement of heterogeneous individuals constitute city'

**Culture can be defined as the sum total of ways of living created by a group of human beings and transmitted from one generation to another or the behaviors and beliefs characteristic of a particular social, ethnic group.**

**Identity (N):** the condition of being oneself or itself, and not another. Identity is a vital concept in our life. It is the way we see and project ourselves in the world. It helps us relate with the world outside. Identity depends upon the context in which it is being seen or scale on which is being talked about.

**Community (noun)** is a group of people living together at one place or a group of people sharing a religion, race, ethnicity or some common interest. Kevin Lynch in his book Good City Form describes a neighborhood as a local unit in the city within which people know each other by the reason of residential proximity and where the size (of neighborhood) and social homogeneity, street pattern, identity of boundaries, and common services may play a definitive role in promoting the control, present fit, and sensibility.

Why do we need boundary:

- Ability to control the space, interaction, to have options.
  - To have solitude, intimacy, ananimity, and reserve.
  - It also gives presonal autonomy, helps to release emotions, self evaluation etc.
- Act of making a boundary involves psychological identification with the place and symbolises possissiveness.

Boundary as an expression of an identity and control  
 Man is a territorial animal. He uses the space to manage personal interchange and asserts rights over the territory to resources.  
 Different types of boundaries:Natural, Man made, Legislative, Notional

Hierarchy of boundaries

TEMPORAL

Temporal nature of boundary:

**Memories, expectations, and present consciousness are not just personal possessions. These temporal organizations, and thus the sense of self, are socially supported.** There are larger and more enduring groups whose common past are symbolic. Group memories are supported by stable features of environment, which becomes emblem of time. The consciousness of group is further reinforced by the ceremonies that vivify the sense of common present. (Kevin Lynch, What Time Is This Place, page no. 125)

**Center (noun)** - a point from which something spreads or to which something is directed.

**Periphery (noun)** - the outer limits or edge of an area or object.

**Edge (noun)** - a line or border at which a surface terminates, the outside limit of an object.

**Boundary (noun)** - the line marking the limits of an area.

**Node (noun):** in physics. a point, line, or region in a standing wave at which there is relatively little or no vibration. A point in a network at which lines cross or branch.

**Anti node:** the region of maximum amplitude between two adjacent nodes in a standing wave. Anti node is an opposite of the node i.e. the place which lacks any significant activity due to presence of a node nearby.

**Enclose (V)** - surround or close off on all sides. as an act of enveloping the space with continuous structure and also symbolic form resulting from the act of defining conventional space within which elements, structures, system produce the mechanism of centrality, peripherality, nodality, antinodality in a relatively autonomous and thus legible way.

**Icon (noun)** - a person or a thing seen as a symbol of something.

**Marker (noun)** - an object used to indicate a position, place, or route.

**Symbol (noun)** - a thing or a person that represents something else, a sign, letter, or mark that has a fixed meaning (especially in music, science, mathematics).

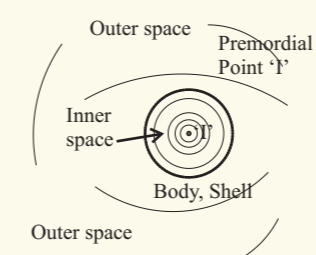
**Pole (noun)** - either end of an axis.

A point of concentration of interest, attention, etc. one of two opposite or contrasted principles or tendencies.

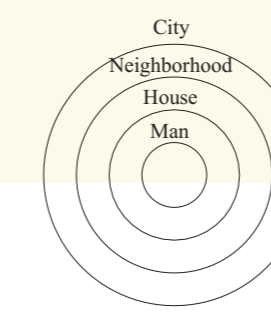
**Polarity (verb)** - the presence or manifestation of two opposite or contrasting principles or tendencies.



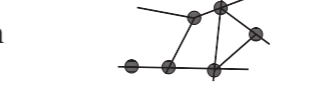
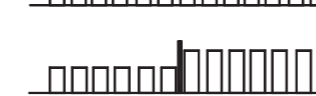
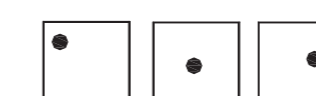
Diagrams for city from Spiro Kostoff's City Assembled



Paul Klee's diagram of Identity

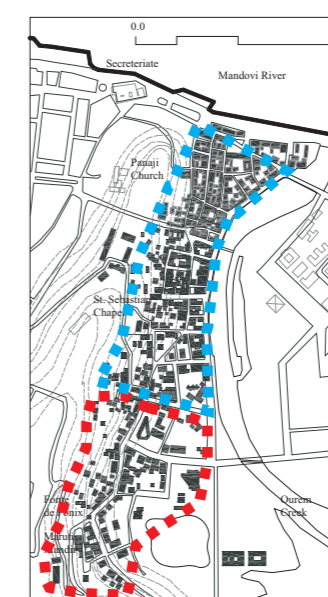


Hierarchy of boundaries



## ANALYSIS, FINDINGS & CONCLUSIONS

FONTAINHAS

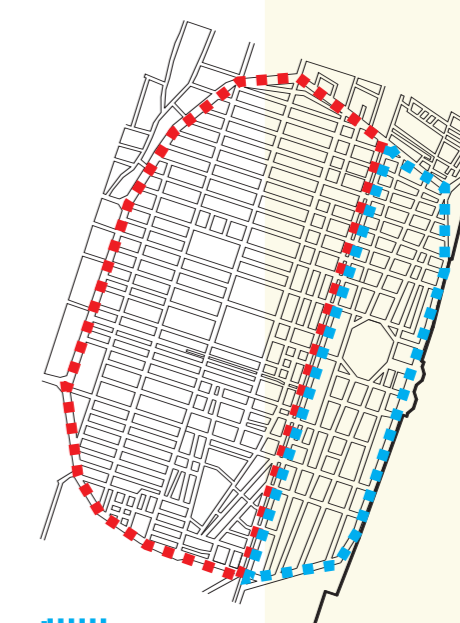


- Fontainhas
- Mala

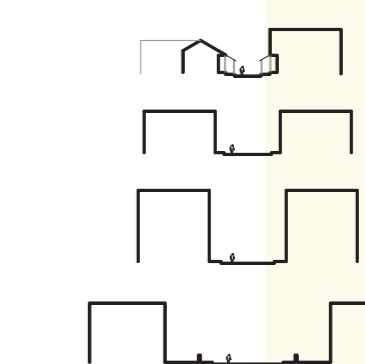
Notional Divisions



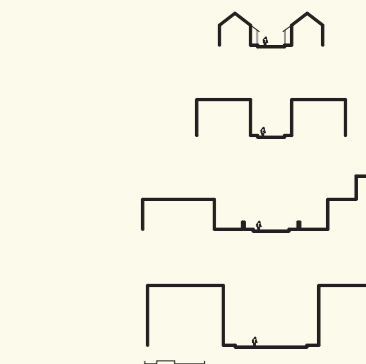
PONDICHERRY



- French part
- Tamil part



MYSORE



Hierarchy of road enclosures making boundaries

**Stronger the cultural difference stronger the sense of boundary**

One of the important conclusions drawn here is that when people encounter difference i.e. when the people from entirely different cultural background come close spatially; like in case of colonial settlements, they tend to express their identity very strongly. The notional boundaries become strong and vivid.

As Richard Sennett says, "character in urban space, like character in a novel, develops through displacement which encounters resistance."

**Notional boundaries as permeable borders**

**Street pattern and enclosure:** Similar pattern and enclosure of streets in a neighborhood creates a boundary notional boundary for it.

**Edge condition of the streets:** Similar thresholds give a coherent character to the street and a neighborhood

**Activities/use/ realm:** Change in activity or use of the buildings on the edge of the neighborhood can mark a boundary effectively

**Intensity of activity:** Change in an intensity of the activities on the edge also helps making a notional boundary stronger

**Strong center claims a notional periphery around it:** A strong center binds the neighborhood and at the same time creates a notional boundary of its own

**Series of activity nodes:** A series of different activity nodes create a thread that runs through a neighborhood which binds it together

**Use of architectural elements:** In these traditional neighborhoods people have used a broad architectural framework comprised of elements like roofs, windows, grills, gates, colors etc. to give certain homogeneity to the character place. These elements vary on unit level but they operate within the large agreed framework

**Use of Symbols, coding, icons etc:** Symbols play a very important role in our perception of the space. They tell us about the activity, affiliation, belonging, access, control of the space. Use of appropriate symbols will help to mark boundaries of the neighborhoods.

**Role of Time:** Time plays an important role in making the boundaries. The type and nature of boundaries we have seen in traditional communities are out come of prolonged occupation of the land i.e. these communities exist there for more than 200 years. This prolonged occupation of the same piece of land by the same people creates a framework for the entire community to operate within; i.e. for creating, changing, altering the physical fabric and symbols associated with the community.

**All these elements can be used for making of new neighborhoods in today's cities without dividing it in parts**