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A Place For Informality. Matthew Riches Global Housing Studio: Mixing Mumbai 2019 Tutors: Dick Van Gameren, Gilbert Koskamp, Harald Mooij, Nelson Mota, Rohan Varma

PROJECT INSPIRATION. *viewing India as a 'Brit'*

Walking the streets of India, and in particular Mumbai, I found myself constantly reminded of home. This was enhanced by the fact I currently reside in the Netherlands. Some of the things I didn't realise I missed from the UK I would constantly find around India: Cricket being played on the parks, 'Cadburys' chocolate in every corner shop, and red, double-decker buses driving on the left side of the street!



Dairy Milk,

This concious view of the city led to my investivation between the conflicts between the formal and informal sectors of the city, which were also something that challenged my british perspective of the world.

the right questions about what is acctually happening and the systems at play in this chaotic

city.



INTRODUCTION.

One of the most striking things bout the city of Mumbai, and more specifically Nalasopara, is the conflict visible between the formal and informal natures of the city.

In a city where informal work and precarious lifestyles, are becoming ever more common, with currently 81% of india's ecmonmy in the informal sector, the systems used to house this rapidly growing population is varied and complex but predominantly led by neoliberal and market driven economic tendencies. These systems demand a formal, top down and

individual pproach towards the production of hosuing.

This project aims to investigate these conflicts in the context of Mumbai and propose an architecture that can cater for needs and ambitions of the informal and precarious opulation of Nalasopara, in a way that suits the private developer and find a balance between these two mismatched systems.



02 RESEARCH.

A GLOBAL CONDITION.

Finding the route of the problem

For decades we have observed a shift to a more marketdriven economy. Driven by the narratives of neoliberalism that have been acted out across the globe, we see a more privatised world, where everything is becoming commodified. With intelectual property rights being one of these it has ensured that a smal majority of people gain the profit. This has resulted in a widening gap between the rich and poor.

Prolerariat

noun

working-class people regarded collectively (often used with reference to Marxism). "the growth of the industrial proletariat" These effects, as the economic theorist Guy Standing puts it, create a new economic class; 'the precarist'. A fusion of Marx's definition proletariat and the english word precariat.

Educational inflation means that people are over educated (Ken Robbinson), making it harder to break in to a formalised market.

He defines three main 'types' of precariat. The first is what he defines as the 'Atavvists', these people are looking backwards. These people tend to listen, and relate, to the fascists and neopopulistst. The second is the 'Progressives', who generally go on to college or university, but finish university with no future and only debt. The final type according to standing is the 'Migrant' or the 'Roamer'. These are nostalgics, with no sense of home.

Further than the 3 definitions of 'Precariat', Standing goes on to define 3 fundamental types of migrant.

The first is the 'Nomads' whose path meanders; from one place to another with no direction. One of the most common is the 'Circulant' who have the intention of returning to their point of origin. They have a more determined route and an economic reason for their migration.

Finally the 'Settler' is the type of migrant who is moving with the ambition of staying there. Seeking stability they often flee from more dramatic circumstances, but not always.

The issues of this growing, precarious percentage of the population is, in my opinion, a problem not solvable by architecture alone as it deals with issues of politics, policy and philosophy on many levels. I chose to focus my research on t

PRECARIOUS. new dynamics to a historic condition



Historically in the 'global south' precarious work has made up a large proportion the labour market. of Since industrialization and in colonisation Mumbai. informal work has been common practise (Scully. B, 2016). This has more recently become a growing problem around the world as the gap between the rich and the poor widens and labour markets are shifting.

In his book 'The Precariat - A New Dangerous class', the economic theorist Guv Standing (2011) discusses the issues of an 'new economic class' which he describes as an unsettled group who are the result of neo-liberal narratives being acted out on a global scale. Whilst in countries such as India, neoliberalism might not be the origins of precarious/ informal work, it would seem that it is contributing to it and dramatizing its nature. This distinction between the narrative of the 'precariat' in the global south and the global west/north is of importance when approaching the design.

Another key point about defining this term is diversity. It is currently being discussed in ways which try to homogenise



an otherwise heterogeneous group of people by the fact that the live precariously, it is, in my opinion, one of Standing's main issues. Things like basic income and political things can certainly be applied to all, not everything can. This theme becomes a large part of defining an architecture for this group of inhabitants.

For this research I focus on a kind of precarity more specific to Nalasopara; the precarious urban migrant. Typical urban migrants are defined by standing in three predominant types: the settler, defined by their desire to stay on one place, the nomad, who oppertunistically wanders from place to place, and the circulant, who moves from home with the intention of moving back. This immediatley highlights the vastly different nature of these people and therefore the difficulty/ innappropriatness of trying to coalese them in to one 'class' or group of people.

Settler

The settler requires stability. Gen-

noun

erally

If we can create a city which caters for these predinomant types of people we can create a good city for all. As richard sennet said in his book 'Building and Dwelling'; ''Migrant knowledge is what all urbanites need''.

Precariousness is often thought about in economic terms; "where will my money come from? What will be my next job? How can I have a stable job?" Whilst precarity Nomad

noun The settler requires stability. Generally

Circulants

noun This type of migrant are the type who need the design of the city to perform well, as they want to feel

included during a shorter visit.

is often seen through political and economic lenses, it also has an effect on the built environment in how people spatially deal with issues and situations of flux.

For the Urban migrant these uncertainties also have inherent social and spatial consequences; "Where will I live? Who will I live with? What type of culture am I moving too? Will people accept me? Will O have an identity there?"

These topics are common in architectural, urbanistic and philosophical discourse, and have been for decades. Themes on; arrival cities, foreigners and openness are very common in these disciplines.

Literature by the likes of Doug Sangers (Arrival Cities, 2013), Jacques Derrida (Of Hospitality, 1997) and Richard Sennett (Building and Dwelling (2018) all make apparent, in their observation and theory, the link between precarity and built form around the globe.

As well as looking at the concerns and problems of the precarious people, it is also worth considering their ambitions. What do they want? How do they view the problems? I think it is a difficult question to answer due to the previously mentioned diversity.

The main, and perhaps most



Pucca adjective

Pucca housing (or pukka or pacca) refers to dwellings that are designed to be solid and permanent. This term is applied to housing in South Asia built of substantial material such as stone, brick, cement, concrete, or timber.

obvious is simple; stability. They main thing people in these positions desire is security and consistency in terms of economic and social lifestyle. It seems common for the precarious lifestyle to be romanticised as being flexible. and free. In actual fact the reality of this is not romantic at all for a lot of people. Whilst Standing defines the precariat as a 'dangerous class'. I think in India, despite some of the recent issues in Ahmedabad following the closing of the textile mills. this is less-so as precarious lifestyles are, generally, more accepted. Whilst there are examples of resistance to formalised work in India it is still a common desire for Indians to move from 'kutcha' (temporary) to 'pucca' (permanent) housing, with lots of people in Mumbai having ambitions of one day living in one of the high-rise developments.

Other needs/desires could include access to communal facilities and democratic, public space. Infrastructures and the stabilities they offer. Other, more speculative questions could also include ideas surrounding identity and community through spatial qualities.

This is all very linked to both housing and dwelling space; the way we interact with cities is, as walter benjamin describes it in his book 'One Way Street', reciprocal. We make our buildings and they



Kutcha

adjective being in a crude or raw state : makeshift, unfinished. Often involves the use of mud-bricks or metal sheet roofing.

PROJECT LOCATION.



Mumbai is Located in the region of Maraharastra, in the west coast of India. National Scale.



Due to its location on the West coast, the city see's a generally hot, humid climate, but with a rainy, monsoon seasons for three months between June and September: **Regional Scale.**



My Project is located in the northern peripheries of Mumbai in the Vasai Virar Region. Named after it's location between the rivers Virar and Vasai, the area has become a hotbed for development of affordable housing. **City Scale.**

A HISTORY OF MUMBAI



MUMBAI. regional context



Born from an archipelago, the city of Mumbai developed in to one of the worlds biggest cities, spurred dramatically by the industrial revolution and the British seeking a supplier of cotton during the american civil war. These rapid changes were the start of a long history of dramatically turbulent times for a city that became more and more globalised and further drawn in to the narratives of the free-market.

During the period of industrialization there was a division of the city in to two fundamental parts. In the south was the aristocratic centre, which was filled with grand, municipal buildings for the British colonists and other wealthy inhabitants of the city. The as the city expanded to the north, the periphery was used more for worker-housing, consisting mainly of a northern *Indian housing type named the* 'chawl'.

Following the country's independence in the 1920's the urban form started to sprawl more to the North under a development plan which followed the railway. Following this schemes were developed by Charles Correa, Pravina Mehta, and Shirish



Patel for Navi Mumbai (New Mumbai), to the east of Mumbai, Acting as a second city. This period saw must more housing produced by the Bombay Development Department, a state run organization.

Since the 1980's we have seen a more global shift towards market based economies. This privatisation and commodification of almost everything has a huge impact on the city. In general terms, the commodification of assets such as intellectual property rights, the gap between the rich and the poor in terms of income has widened and this trend repeats in the housing sector. From looking at Mumbai's housing distribution in terms of how economic and spatial situations relate (the 'economically weaker section' (EWS) having an average area of 28m2 and the higher income having 121m2, almost 5 times the area) it is clear to see a huge mismatch and

gap is visible. (Maybe include example of 50 storey house?)

Throughout this journey one of the big shifts has been from a localised, site specific architecture to a anonvmous. rubber more stamp architecture. This has been consistent throughout the world of architecture as globalisation has seen styles become common throughout *However* the the world. housing produced in Mumbai now uses the same typologies, urban forms, and expression for housing in central Mumbai and in the peripheries.

As Rahul Mehrotra states in his short writing 'The Poetics of FSI' that there is a commodification of permitted density. In the form of TDR (Transfer development rights) and DRC's (development right certificates). This means that permited densities can be taken from slums and moven to the north of the city where land is cheaper.

We no longer see the types of architecture relating to the place, the space and the needs of the users, merely the market. The architecture becomes void of any locality. Plastered concrete towers are rising in similar style and fashion all over the city.







Archipelagoes

The city started life as a series of seven fishing villages in an archipelago. The proximity to the water, naturally played a crucial role.



Industrialization.

Throughout the late 1800's and early 1900's the city went through one of its most rapid and defining transpormations. Due to the arrival of the British colonization which aimed to capitalise on the cotton industry during the civil war.

A Global City.

These days the city has sprawled to the east, due to a failed masterplan by Charles Correa. Designed as a 'new' or 'Navi Mumbai' the eastern part of the city was intended to be an autonomous city, but instead acts as a suburb to the existing city, with lots of slums now taking over this area.

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ARCHITEC-TURE major shifts in models for housing in Mumbai

North-South Divide



Traditionally architecture in Mumbai, and Maharastra in general developed around the 'Wada' typology for housing.

This would go on to influence chawl typoligies in the future and even to the modern day.

The term Wada translates roughly to courtyard. Which was the central element of these designs. It provided air, light, ventilation, security and privacy.

The designs of the Wada's also responded to the violent climate of these areas. Utilising sloping roofs, to deal with water run-off, iverhangs, to provide shade, and baffle walls, to maximise ventilation.

Other sources of inspiration from this period was the informal fishing villages. Kolliwada was one of these. The urban form provided a dense network of courtyards, squares and narow streets.







The Chawl

During Mumbai's industrial period there was the coining of the term 'Chawl', a type of worker-housing which companies were producing for their workers. Designed to be efficient, affordable and to minimise the commute of the worker. The chawls often utilised efficient courtyards and corridor housing, and were situated extremely close to the mills/work place of its inhabitants, sometimes even on the adjacent piece of land. This type of housing still has negative connotations today in India and even the idea of corridor housing seems undesirable Indians. to (Importance of means of access?)

Some of the most famous examples of the Chawl typology can be seen in Sameep Padora's book 'In the Name of Housing'. Early examples included the Mota Mandir and the Atmaram chawls which were small in scale and were based on corridor access.

Mota Mandir:

The Mota mandir chawl was in some senses a simple corridor slab housing complex. It did have complexity, however, in that its unit types only need a single access corridor for two levels.

Bhatia Chawl: Own photographs

Swadeshi Chawl: A more complex example of this

















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is the Swadeshi market-chawl. This building takes the typical chawl and combines it with a market. By utilising a system of overlapping grids running in different directions to allow for maximum ventilation.

BDD Chawls:

In later years, as companies would grow in scale, so did the need for housing. The Bombay Development Department (BDD) was set-up in 1920 and was responsible for the production of a lot of worker housing during this time. Their schemes would use repetitive, affordable and easy to construct techniques.








Suburbanization

After india's independence, the congestion in the island city of Mumbai led to the shift of population and industries towards the suburbs.

There was an urgent need for managed development beyond the island in 1948, and the development spread northwards along rail and road corridors. Mumbai city limits were extended during the period of 1950 and 1957, bringing the area of Greater Bombay to 430 km2.

In March 1964, the Municipal Corporation of Greater Bom*bay submitted its development* plan for Greater Bombay, entailing a restructuring of *Greater Bombay on a large* scale with the help of zoning. population dispersal to the suburbs, decentralization of industry and commerce through the building of six business districts and many industrial estates. a massive housing programme with sites for social services and public utilities. Though there were obvious weaknesses in the plan about land use control and finance, it was approved in 1967 (Shaw, 1999: 960).

By that time, another plan had been developed by three of Bombay's leading architects Charles Correa, Pravina Mehta, and Shirish Patel. They suggested that only a "twin city" of Greater Bombay would be able to solve the city's congestion problems.



Piecemeal restructuring of the old city could only provide a stop-gap measure. Thus, the idea of the creation of New Bombay was born, thrust upon the public and state government by the city's business class (Shaw, 1999:960).



State Housing

CIDCO (The City and Industrial Development Corporation). The state run housing corporation is one of the wealthiest in india. Formed in the 1970's the corporation started by developing schemes by renowned architects such as charles correa and Raj Rewhal.



In the current day CIDCO only produce repetetive mass housing, similar to their contempraries; MHADA.

MHADA.

The 'Maharashtra Housing and Area Development Authority' (MHADA), like its other state counterpart was also former, slightly later in the 1970's. Since their formation, MHADA has housed over quarter of a million families in Mumbai. In recent years this number has dwindled as SRA schemes take over.

Architecturally these schemes typically had basic 'L', 'I' and 'H', 'T' typologies for their EWS and MIG users respectively.







Neo-Liberal Models *Housing with*

SRD -

SRS - Slum Rehabilitation Schemes Scheme launched in 1995

(SRA - Slum Rehabilitation Authority) Sangharsh Nagar - PK Das & Associates Based in the suburb of Chandi-Vali, the SRS scheme of Sangharsh Nagar proposes to take a new approach to the development of SRS Projects. The scheme focuses on creating a series of spaces upon entering the dwelling; from the Maiden which runs through the centre of the project, to the s Baithak which acts as a social entrance space to the dwelling.

In terms of the dwellng the units are also each giver cross ventilation for their toilets and the ability to gain cross ventilation in the living spaces.(DASH, 2015) (Rohit H. Jagdale, 2014)







impact back on us. I think that creating a city with this ideology in mind is important when dealing with precarity.

"As porous as this stone is the architecture. Building and action interpenetrate in the courtyards, arcades and stairways. In everything they preserve the scope to become a theatre of new, unforseen constellations. The stamp of the definitive is avoided. No situation appears intended forever." - Walter Benjamin 1926





The issue of migration, the nature of land-value and miss-management of FSI in Mumbai has led to the creation of satellite towns, or as Doug Sanders labels them; 'Arrival Cities', in the peripherys of the city. One of the most rapidly developing of these is Nalasopara.

Located in the northern periphery of Mumbai between Vasai and Virar Nalasopara has relatively low land value. This made it ripe for lowcost/affordable housing development and its connection to the rail infrastructure has made it desirable for lowincome workers from central Mumbai.

These attributes have also seen Nalasopara's population rise by 500% since 2011, from 200,000 to 1,200,000. This new population consists mainly of rural and national migrants but also people being displaced from central Mumbai due to shifts in land value or infrastructural projects forcing them out.

This swift increase in population has led to dramatic and problematic built urban forms.













FORMAL VS INFORMAL.



Legal

On the peripheries is more formal architecture, developing on the vacant surroundings.



Ilegal

In the heart of nalasopara is the problematic, illegal and informal chawl developments.

BAITHI CHAWL.

problematic informal developments



The first is the Bhati Chawl and it's redeveloped counterpart. Bhati chawls were developed by local co-operatives of settlers in Nalasopara. They typically comprise of single level units in a back-to-back terrace typology.

They are problematic in many hygienic respects; the backsides of these buildings are typically blind and become a place for waste and sewage. This, naturally breeds disease and

The Baithi Chawls to have some good aspects; good light, ventilation and all units have a connection with the street, creating at least an impression of community.

Women gather in the shade of the houses to work together on making textiles/jewlery or preparing food. Observing children as they play in the streets. There are intimate situations in these houses which seems to characterise the nature of Nalasopara.





Without trying to romantacise this informality there are still vast problems in these areas in terms of infrastructure and sanitary conditions. Even socially; the situation of women staying at home highlights the inherent gender inequality that is a part of nalasopara and even India's culture.

The Bhaiti chawl is one of the original housing types in Nalasopara, but in recent years, with the vast incease in density of the area, developers have taken the plots of land and illegaly redeveloped them in an even more unhealthy fashion in order to reach high densities.

By taking the existing floor plan of the Bhaiti chawl and extruding it to 4/5 floors developers are able to make 4/5 times money from their land.

Naturally this developement leads to exteremely unhealthy living conditions; no light, ventilation and poor infrastructure. This is currently breeding disesases like tuburculoses as well as, you can imagine, causing a lot of mental health issues (Guardian).

People are given no connection to light, let alone any form of communities or social life.







Urban Space

In the dense neighbourhoods of Nalasopara east there are a multiplicity of public spaces. This is best explained through the hierarchy of spaces; from public to private. Defined by space and activity.

running from north too south are the main, primary routes leading from the train station. These are charaterised by a *wider street and generally* taller buildings. These buildings, relative to the area, and probably most corners of the planet, has a high number of commercial activities. Shops, pharmacies, bakerys, food stalls all spillout in the the hustle and bustle of the street. Rapid exchanges happen here. Picking up the news paper from a Hawker

Leading off of these streets are secondary streets. As expected, a little narrower, a little less busy, but still a vast amount of work goes on here. The work also changes and diversifies in nature, still here are the shops and pharmacies of the main street but also other things; textile workers, shoe-makers.

The next threshold is the tertiary streets. These act almost as small courtyards, with galleries facing each other as the buildings follow the back-to-back patterns of the Bhaiti Chawls.







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In Nalasopara the urban form in terms of public space epitomises the precarious nature of the area.

One of the biggest examples of this is the 'Hawkers' who fill the streets with activity and colour.

They use moveable stalls which roll on wheels, or pack up in to small boxes. This allows for the dynamics of Nalasopara. By day they line the sides of the streets; selling food, papers and seasonal goods.

In the evening the congregate on individual streets to form markets.

In other instances people place out mats, selling their products. These people inhabit the leftover spaces; in front of closed down shops, underneath street signs. These are the spaces nobody else thought about.





ARTEFACTS OF PRECARITY problematic informal developments

Hawker Stand

Moving around the streets to optimise their maximum their publicity and to respond to changes in the market.

Bowl

The bowl, like the bucket is a versatile tool of the informal, for transporting, storing and selling.





Rickshaw

The rickshaws dominate the streets providing a source of income and an affordable way to get around.

Stoops

Spatially the stoop is a space which prodies literally and metaphorically a platform for informal sales.







Pappat

Stool

Pappat and food making in geeral makes up a large part of the income generation in Nalasopara.

Bucket

Very versatile; carry things, store things, use as a table to work at, as a place to put your good and many other uses. Jewlery makers often use these for their work.





PRIVATE HOUSING anonymous towers

In a completely opposite means of housing production, the highly-regulated housing schemes in Nalasopara. These developments usually consist of schemes similar to the SRA schemes. But generally higher-quality.



The schemes here are designed to be as economically efficient as possible. Simple typologies are repeated up to heights of 20 floors. Constructed from concrete and finished in plaster, the buildings lack a lot of the qualities that the users of Nalasopara gave themselves.



The space between the buildings become undefined in any real sense. Whilst gardens and street furniture fill the renderings the real use of these spaces are generally not so glamourous.

Whilst these approaches are comon for private developers they are also common pracsise for the state; MHADA also utlises these standard, repetetive tower bloakcs, in even more dramatic forms.





Stimulus.

"Migration causes population shifts, this results in extreme densities and often poor living conditions, due largely to the unsuitable or simply lack of policy."

Symptom.

Through the lens of this project the architecture is a result of other events

Problem.

The problem, as this porject frames it, lies significantly at a political







A conflict between private developers and the free market's demands, with the needs and aspirations of the inormal sector and people who live in precarious circumstances.

This has resulted in two problematic forms of redevelopment in Nalasopara; the illegal and the legal.

Legal, Led by the contemporary neo-liberal model, the legal housing makret capitalies on land-value and TDR to maximise profits. These developments, which are designed to re-house slum dwellers, dont cater to their basic social needs and often their economic needs in terms of income generation. In these projects either the sanitary conditions or the social and safetly conditions are not considered.

The other option; the slum, doesnt align with the ambitions of the people of Mumbai inhabitants.

This results in a imbalance in meeting the needs of a precarious population and the needs of the people developing housing.

Illegal

synonym: Load-Bearing From Bhati Chawls to developed 'Handshake' chawls; these developments tend to have poor light, ventilaiton, and sanitary conditions in addition to a loack of services.





RESEARCH QUESTION

How can we redevelop the existing chawl developments of Nalasopara, utilising the current systems of private development, in a way that caters for the precarious and informal nature of its inhabitants in a way which meets their social, sanitary, economic needs and ambitions ?


DESIGN HYPOTHESIS.

My project aims to break up or intervene in the currently problematic urban forms of nalasoara in a way which creates a better environment for the precarious migrant community, whilst still being attractive for private developers.

By introducing new housing, stability in terms of shelter can be provided for the people of Nalasopara but the new urban form should also allow for flux and newcomers. It should, in my view, encourage porosity, interiority as well as the provision of public, communal facilities and democratic public spaces.

These spaces will pick-up, in a sense, where the existing context leaves us. Whilst I propose vast improvements to the area in terms of physical urban form, I think there are patterns of land-use and inhabitation which should, in some sense, be maintained. This includes. but is not limited to, methods of income generation, social activities, as well as the production of the materials; using local materials and labour to produce the buildings.

In my opinion it is unrealistic

to stray from the private production of housing at this current moment in india, and the power of NGO's and philanthropic developments, are unable to deal with the scale of Nalasopara's issues.



PROPOSAL.

THE DEVELOPER.

ROADS & CONNECTIONS.







DEVELOPMENT STRATEGY.





DEVELOPMENT STRATEGY.

















Demolition.

Existing.



Insertion.



Rotation.



Courtyard.



Circulation.



Reciprocal.



Flexibility.

DEVELOPMENT STRATEGY.





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SITE MASSING.







Existing Conditions. FSI: 4.2

Proposed Conditions. FSI: 2.6

Ground Floor.

COURTYARD.



CLUSTERING.



CLUSTERING.











Gallery Detail. 1-20

1. Cast in-situ concrete concrete frame and floor slab. Claypot filler.

2. Wooden door frame with Wooden louvres bolted in expressed fashion.

3. Smashed, recycled tiles from demolished buildings placed to create clean, curved finish w floor at 2 degree slope to allow water run-off.

- 4. Balustrade Attached to cantilevered beams on extruded concrete pad.
- 5. Wooden Door Frame with Lovred upper cut to fit the concrete frame.



Wet-Zone Detail. 1-20

1. Longer brick overhang to allow for maximum shading and water run off.

2. Bricks Attached and ssupported to concrete using L-Section beam bolted to floor slab.

Roof:

-Concrete columns support 200x400mm Insitu Concrete beams.

-Steel Frame using hybrid of I-Section beams and U-Section colums bolted together using m hex bolts.

-Light weight U-secton metal strips bolted to frame columns to provide structural brace.

Units:

-Insitu concrete flood slab using claypot filler.

-Rat Trap Bond Fly Ash Brick unfill.

-Circilar hollow section balustrade with Folded steel U handrail.

Ground Level:

-Insitu concrete floor and stairs slab.

-Deep overhang beam at front

-Standard detail Rollers Shutters.

-Insitu Concrete foundations with sloped footing.

CONNECTIONG TO EXISTING.







Process:

1. Existing Situation. Insitu concrete structure with precast elements in between.

2. Demolition. Demolishing a gap in the existing railing

3. Neaten & Re-bars.

By leveling out the damage by the demolition a gap can be made to add a new re-bar plate which is attached form both the top and side.

4. Cast New Column.

The whole situation is the structurally supported by the steel column, cut to size in-situ.

5. Cast New Beam.

The next step is to cast the new beam to the re-bar plate, connecting the new and existing

6. Finishes and Railings.

Finally, due to the utilisation of demolition and insertiong, a leveled finish can eaily be acheived creating continuity between old and new.
TOWER/VILLA TYPOLOGY.



CONNECTIONG TO EXISTING.







SECTIONS.





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Type C-2

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THE INHABITANT.











- A Place for







-F -a) **121** - A Place for



Main Road.

Along the main road the impact of the building is quite simple and modest; a platn textured brick façade with vertical articulation breaking up the form and with odd bits of appropriation on the façade. On the main street the ground floor is used for shops and the road cuts back, providing a space for people to park their vehicle and run to grab something. This anonymous space could also be used for hawkers to set out and also provide a quick interaction of sales for these people.





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Side Street.

Now we move deeper in to the scheme; to the side streets. Here we see the combination of housing and commerce combine on the ground floor. And the more intimate nature of these spaces really brings out more of the indivudiality of the dwelling. Small railings offer a place for people to store things or present themselves as an individual in the mass of housing. Here, due to the facade design there are still eyes on the street, maintaining a sense of safety within the density.







The Public Square.

In the smaller, enclosed, public squares, a democratic and open set of activities can take place, offereing a space for ambiguity and non-prescriptive design allows for the nature of the space to chaneg over time. Here we can see a scene where the market is closing up, making the space become more open and able to host other activities.









Threshold of the Block.

Now we enter the block. Here we see the intimate relationship between the old and the new. The columns acting as a light touch, allowing a low-tech connection. The intimate space formed by the slight raise in the floor and the enclosure of the circulation tower creates a more private atmosphere to the couryards, giving a sense of community.







Communal Courtyard.

The commual courtyard sits between the old and the new. Creating an enclosed space from the public space. Here people can appropriate space, use the court as a space for cooking, sports, and local comunal facilities such as kindergartens can use the space at different times of the day. In the centre a raised platform and open plinth maximise ventilation and create no possibilities of use, connectiong the upper levels to the courtyard space.






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Rooftop Terrace.

The top of the building becomes a cricial point as it is the end of the buildings. Rather than wasting this space it makes more sense to open this up as a more private communal space. Hee informal appropriations can determine new constelations of possible programmes for the rooftop.







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Communal Gallery.

The entrance to the units all have a set-back, creating an intermediate space between the communal and private space, allowing for the option for the internal activity to flow out in to the communal courtyard. Minimal Differences in height, and set backs of facades allow for negotiations between the different spaces.







Wet-Zone Detail. 1-20

- 1. Longer brick overhang to allow for maximum shading and water run off.
- 2. Bricks Attached and ssupported to concrete using L-Section beam bolted to floor slab.



Gallery Detail. 1-20

1. Cast in-situ concrete concrete frame and floor slab. Claypot filler.

2. Wooden door frame with Wooden louvres bolted in expressed fashion.

3. Smashed, recycled tiles from demolished buildings placed to create clean, curved finish with floor at 2 degree slope to allow water run-off.

4. Balustrade Attached to cantilevered beams on extruded concrete pad.

5. Wooden Door Frame with Lovred upper cut to fit the concrete frame.



Dwelling.

From inside the dwelling the connection to the communal space is visible, and the ability to expand the house in to this space can be seen. The upstairs or the use of a curtain prvides a sense of recluse and privides nooks in the house to allow for a more private existence.







Type C Info: Ground Floor - Commercial Unit (Wet Space) Area: 23m²







Type E Info: Corner Commercial Unit Area: 41m²





Type F Info: Third Floor Corner Unit - 2B + K Area: 39m²

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Type K Info: Third Floor Corner Unit 2 - 2B + K Area: 39m²



Showing different ways of using the same shell.



The Family have dinner with some privacy,



The couple take a break after drinking chair in the sun for too long

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Drying pappat on the plinth behind the store, overlooking the game of cricket in the courtyard.



Preparing the food for the bakery.



The local pharmacy utilises a large store at the back of the property.


Work and living collide where the curtain opens, creating an imediate relation between the house and the work.



The plinth is used as a dinning space the front porch is appropriated useing plants and belongngs, creating a sense of identity.



Units are combinded to create a kindergarten with doors opening on to the courtyard for activities.



Taking a coffe break on the gallery, loking over the courtyary.



The parents can watch over the childern from the kitchen.



The bedroom becomes closed off during the evening when guests come around,



Diner time sprawls out on to the galler



An individual tenent uses the space as a home office.



A standard unit shows how the bare shell looks with no activity.

























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Showing different ways of using the same shell.

ROLE OF ARCHITECTS.

What difference does it all make?

Architecturally, I don't think the issues of precocity and *informality will be solved by* architecture alone. I think new governmental acts and new systems need to be implemented for these changes. *I* don't think architecture and design can have a causal effect on the city, I think it can aid and lessen the impact in a reciprocal way which also involves the interaction and use f the of the space to make a place which caters for a mix of people and creates a sense of identity, community and possibilities for the informal activities to accommodated.

I think it is important to have this discussion to make sure that these parts of the community are considered during redevelopment projects.



Transition to stability - Pucca Housing.

Matthew Riches TU Delft Global Housing Studio Mixing Mumbai 2019