

The background is an abstract architectural drawing. It features a network of blue lines and shapes, some filled with a halftone dot pattern. A prominent, thick, light blue curved line runs diagonally across the upper half of the image. The overall style is technical and graphic, suggesting a site plan or a conceptual architectural layout.

# **‘Structuralism, Housing + The Commons’**

Architectural Speculations 1:  
Individual Report

# Contents.

|  |    |
|--|----|
| <b>‘Introduction’</b>  | 5  |
| • Defining The Brief.  | 6  |
| • The Site: Chelmsley Wood.  | 8  |
| • Site Location.   | 10 |
| • Demographics.  | 12 |
| • Site Photography.  | 14 |
| <b>‘Structuralism’</b>   | 19 |
| • Defining Structuralism.  | 20 |
| • Structuralism Reloaded.  | 22 |
| - From Deep Structure to Spatial Practice.   | 24 |
| - Structuralist Trajectories.  | 26 |
| • Team 10: In Search of a Utopia of the Present.   | 28 |
| - Mat Building, Team 10’s reinvention of the critical capacity of the urban tissue.        | 32 |
| • Team 10, Member Precedent Study, Giancarlo De Carlo (1919-2005).                         | 34 |
| • Precedent Study, Free University of Berlin, Candilis, Josic, Woods and Schiedhelm, 1963. | 37 |
| • Netherlands Field Trip:  | 38 |
| - Structuralism Archive at Het Nieuwe Instituut, Rotterdam.                                | 40 |
| <b>‘Housing’</b>   | 48 |
| • Chelmsley Wood:  | 50 |
| - Historic Housing   | 52 |
| - Housing Study  | 58 |
| • Estates, An Intimate History   | 60 |
| - Introduction.  | 63 |
| - Chapter 1, This Must Be the Place (I Waited Years to Leave).                             | 64 |
| • Precedent Study, Diagoon House, Herman Hertzberger, Delft, 1968-1970.                    | 66 |
| • Netherlands Field Trip:  | 70 |
| - Piet Blom, Kasbah Housing, Hengelo.  | 74 |
| - Luchtsingel Pedestrian Bridge, Rotterdam.  | 76 |
| <b>‘Commons’</b>   | 80 |
| • Defining ‘The Commons’, Tom Avermaete Lecture.   | 83 |
| • B37 Project + Community Participation.   | 84 |
| • Taxonomy Of The Commons.   | 88 |
| • The Image Of The City  | 90 |
| - Chapter 1, The Image Of The Environment.   | 92 |
| • The Folly for the ‘Green Estate’.  |    |
| • The New Materialism.   |    |
| - How our relationship with the material world can change for the better.                  |    |
| <b>‘Thesis’</b>  |    |
| • Thesis Proposal.   |    |
| • Supporting Research:   |    |
| - Álvaro Siza, Quinta Da Malagueira.   |    |
| - The Strategies of Mat-Building.  |    |
| - Unsentimental Brickwork.   |    |

“In Structuralism, one differentiates between a structure with a long life cycle and infills with shorter life cycles.” **Hertzberger**



Diagoon Housing, Delft, 1967-70, Herman Hertzberger

**“To architects, the phrase ‘common ground’ suggests the ground in which their plans are drawn. However, the phrase ‘common ground’ is an ethical concept that invokes the one thing a city ought to grant – a depth that accommodates with dignity the diversity of its peoples and their histories. The term ‘ground in this phrase is a metaphor for the conditions by which freedom is meaningful”.** Praxis: Horizons of Involvement, Peter Carl (Common Ground, A Critical Reader, D. Chipperfield, 2012).

# The Brief.

## The Brief:

The Studio is concerned with **housing** and ideas surrounding **‘the commons’**. These topics have been explored through the architectural manifestations of **structuralism**, testing our understanding through interventions and projects at Chelmsley Wood, supported by research into sites and resources in the Netherlands.

The critical questions surrounding **housing** – access, affordability, adaptability have framed our studies. There is a growing movement for the provision of new homes through self and custom build often through the identification and disposal of suitable Council owned sites, to help meet the needs of a growing population, to promote skills, employment and the local economy, and the health and well-being of citizens.

Working with the B37 Project at Chelmsley Wood, we have developed a working taxonomy of ‘the commons’ in relation to the resources, conventions and rituals involved in their creation and operation with a particular concern for the ‘green estate’. This will be described through participatory mapping processes in an attempt to interpret the conditions and lived experiences of the city, and to inform future propositions.

## ‘Commons’ Questions:

How do we define ‘The Commons’ with reference to Structuralism and explore an alternative reading of Chelmsley Wood as the ‘Green Estate’?

What is Structuralism in architecture, and what can we learn from it that might be relevant in contemporary issues with particular reference to housing?

**Resources, conventions + rituals** involved in their creation and operation with a particular concern for the ‘green estate’. Considering **communality** in architecture and landscape architecture, with specific reference to **structuralism**.

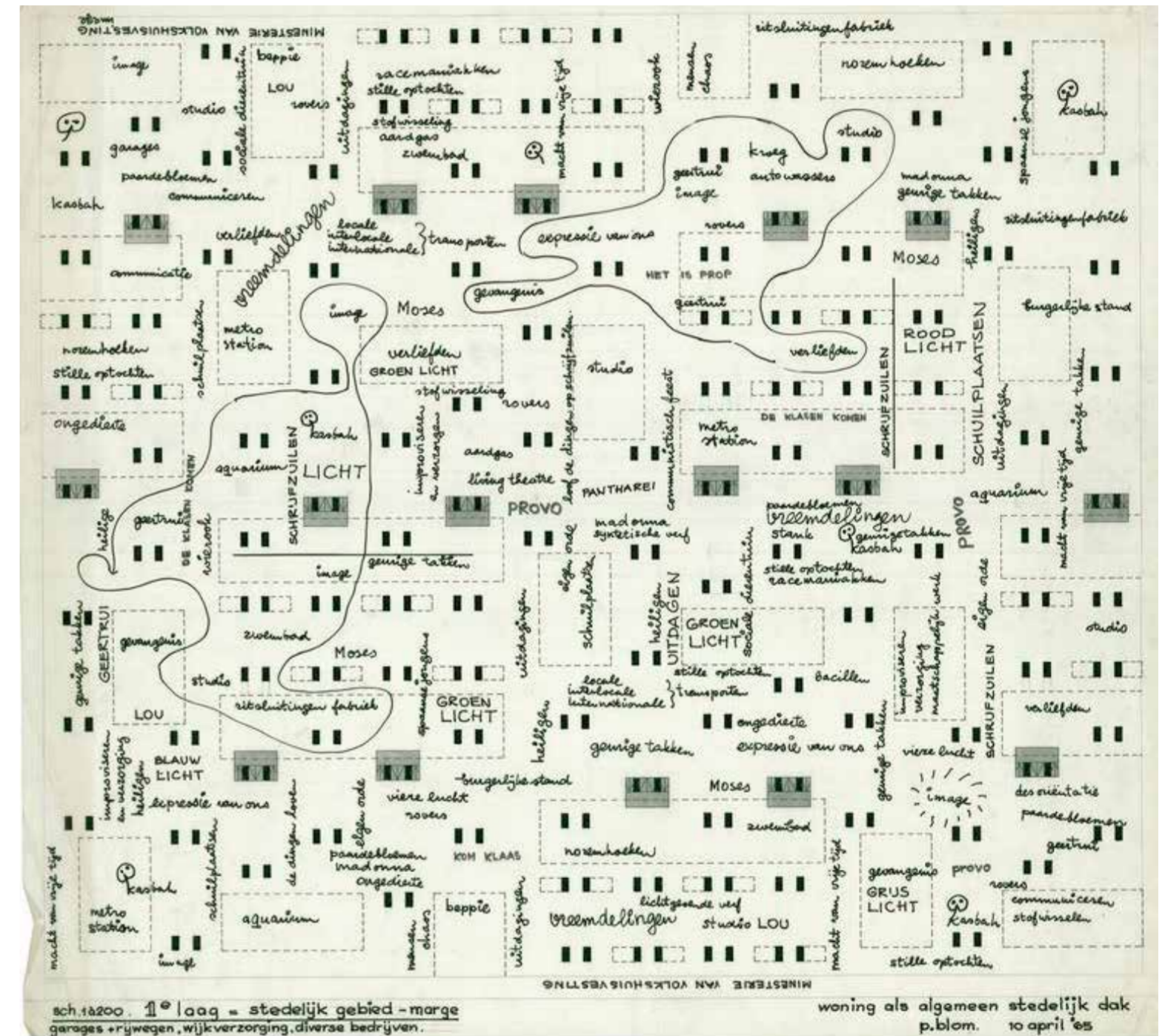
“A willful shift from objects and towards relationships between them, a shift from function to structure”. (Create) **The opportunity for human encounter.**

According to Avermaete’s reading of Habraken and SAR, there are opportunities to explore three vectors of structuralism in relation to ideas of the commons;

1. **Structure/Support** - concern for balance between action of the community and that of the individual inhabitant.
2. **User Participation** - call for democratic processes, “creative participation” and three-dimensional framework for circulation and amenity.
3. **Context + Texture** - contradicting the ‘object’ character of the works of modern architecture (the object in the field, Chelmsley Wood as case study), and the ‘texture’ character of the pre-nineteenth-century traditional city.

How do the inhabitants of Chelmsley Wood understand their environment when considering the ‘Green Estate’ - what is the taxonomy of ‘Green’ in this context, and what is its ‘Value’ locally and globally?

Through a deeper understanding of Structuralism, how can architecture (Space, Material, Structure, Process) provide a framework for The Commons?

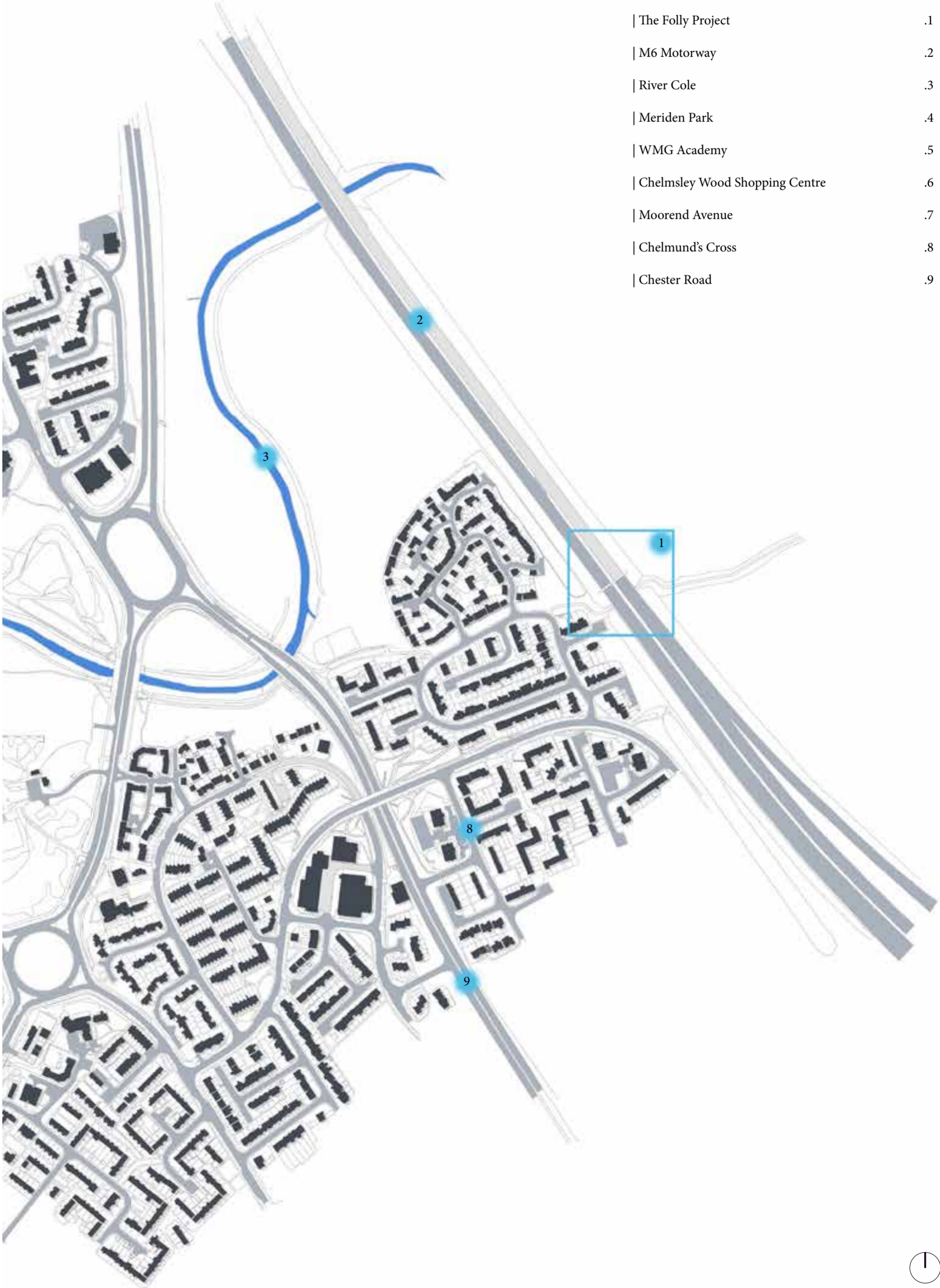


Piet Blom, ‘Kasbah’ Housing, Hengelo, NL. Courtesy Het Nieuw Instituut.

# The Site.

**Chelmsley Wood:** In the late 1960's land was compulsorily purchased by Birmingham City Council from within the ancient Forest of Arden for the construction of 15,590 dwellings, which would create one of the countries largest housing estates. The estate would include schools, a library, and shopping facilities and was formally opened by H.M. The Queen 7th April 1972. The goal of the City Council was to rehouse a large number of people from Birmingham who were on the housing waiting list. With the rise in unemployment in the 1970s parts of the estate suffered from deprivation and the resulting anti-social behaviour.

The "Wood" was to be 80% public housing and 18% privately developed homes, houses were reserved for 100 policemen and rows of terraced homes were let out or sold at a reduced rate to key workers: nurses, social workers and teachers working on the estate. The "Wood" had considerable thought put into its planning and won architectural awards for its landscaping. However the 'unity and harmony' of the design made it appear monotonous rather than modern to its residents. It was laid out in a Radburn style with houses opening out onto pedestrian pathways and open green space, and backing onto the vehicular access.[5] To enhance the openness, there were no fences between gardens and public space.



Scale 1:5000 @ A2  
 0 50 100 200 400

- | The Folly Project .1
- | M6 Motorway .2
- | River Cole .3
- | Meriden Park .4
- | WMG Academy .5
- | Chelmsley Wood Shopping Centre .6
- | Moorend Avenue .7
- | Chelmund's Cross .8
- | Chester Road .9



# Site Location.



Brown Field Site Car Park    Royal Mail Sorting Office    Chelmsley Wood Library    Asda Supermarket

Royal Mail Sorting Office



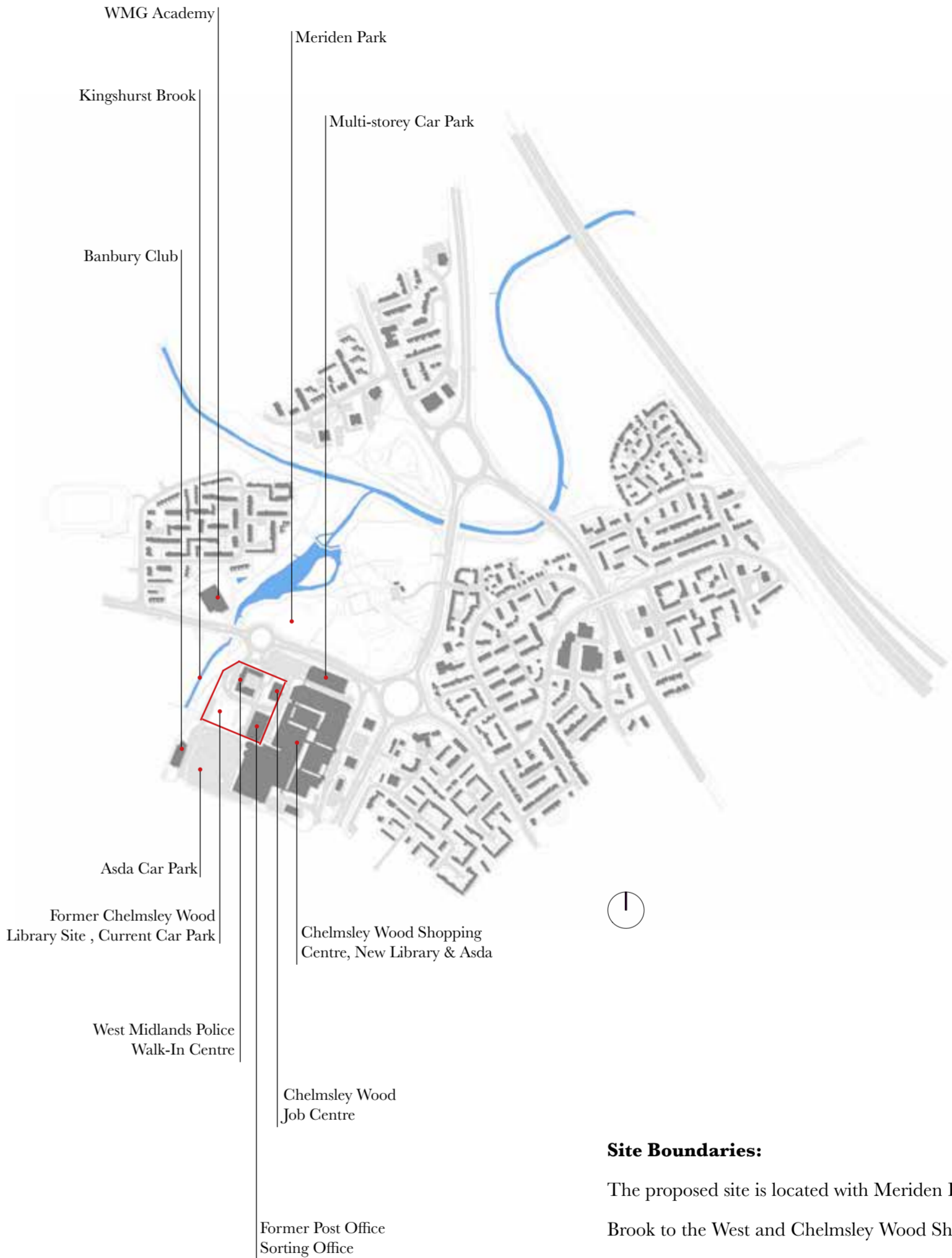
Brown Field Site Car Park



Chelmsley Wood Job Centre



West Midlands Police Station



**Site Boundaries:**

The proposed site is located with Meriden Park to the North, Kingshurst Brook to the West and Chelmsley Wood Shopping Centre & Car Park to the South & East. The site is predominantly flat although along the Western boundary the site slopes away, down towards the brook and established tree line. The proposed 1.85ha site is formed for x4 key zones; The brown field site former Chelmsley Wood Library now demolished and currently used as a council car park, the former Royal Mail sorting office building built in 1970 and sitting empty, Chelmsley Wood Job Centre and West Midlands Police Station both of which are currently due to relocate within the near future.

# Demographics.



| HOUSING                        | UK AVERAGE |
|--------------------------------|------------|
| Socially rented: 2,739 = 49.1% | 17.7%      |
| Privately rented: 414 = 7.4%   | 16.8%      |
| Home owner: 2,389 =            | 64.1%      |

The pattern of housing tenure in the North Solihull regeneration area is significantly different to that of the rest of borough. 49% of all households in Chelmsley Wood are socially rented compared to the Solihull average of just 15%.

*Chelmsley Wood:  
268 hectares*



| HOUSEHOLD COMPOSITION     | UK AVERAGE |
|---------------------------|------------|
| One person house = 37.0%  | 30.2%      |
| One family = 58.3%        | 61.8%      |
| Other households = 4.7%   | 8%         |
| 65+ single people = 17.6% | 20.7%      |

Chelmsley Wood has the highest proportion of single person households in Solihull, which at 37% of the total is substantially higher than the national average of 30%. Single person households are becoming increasingly common in both Chelmsley Wood and the rest of the borough.

*1,134 lone parent households in CW.  
875 have dependent children*



| AGE POPULATION                 | UK AVERAGE |
|--------------------------------|------------|
| Pre-school children 0-4 = 8.6% | 6.3%       |
| School children 5-15 = 14%     | 12.6%      |
| Young adults 16-24 = 13.7%     | 11.9%      |
| Working age 25-64 = 48.8%      | 52.9%      |
| Retirement 65+ = 14.9%         | 16.3%      |

Population change in Chelmsley Wood was similar in pattern to that of Solihull as a whole, with falling numbers aged 0-14 years and 25-44 years, largely offset by increases in the 15-24 and 45+ populations. Although Chelmsley Wood still has a relatively small population aged 65+ the increase in the number in the group was, at 31%, substantially higher than across Solihull as a whole

*Average 268 hectares*



| ECONOMY                       | UK AVERAGE |
|-------------------------------|------------|
| Economically active = 64.4%   | 69.9%      |
| Economically inactive = 35.6% | 30.1%      |
| Sickness = 7.7%               | 4%         |

At 64% Chelmsley Wood has the smallest proportion of economically active 16-74 year olds in Solihull, with, at 53%, a much smaller employment rate than either the borough (64%) or England (62%) averages as well.

*39.7% of Adults don't have any qualifications. Almost double the national*



| ETHNIC DIVERSITY                | UK AVERAGE |
|---------------------------------|------------|
| White population = 91.5%        | 85.4%      |
| Black / Asian = 8.5%            | 14.6%      |
| Born in UK 95.0%                | 86.2%      |
| English as first language 98.7% | 92.0%      |

From the census information that was collated in 2011 it is clear that the majority of people in Chelmsley Wood are White British, but in recent years the Asian and Black community are increasing.

*Black or Asian Minority Ethnic background increasing by +108% between 2001-11*

In May 2015 there were 1,520 people in Chelmsley Wood claiming one of these out of work benefits, equating to 20.3% of the working age population, compared with the Solihull average of 8.1% and the rates of 9.1% for England and 10.4% for the West Midlands.

*“Only 30% of people feel safe after dark”*



# Site Photography.

## Chelmsley Wood



Chelmsley Wood High Rise Housing Blocks + Kingshurst Brook.

Reference: Ben Clifton Photography



## Proposed Site



Chelmsley Wood Centre + Proposed Thesis Site Location.

Reference: Ben Clifton Photography



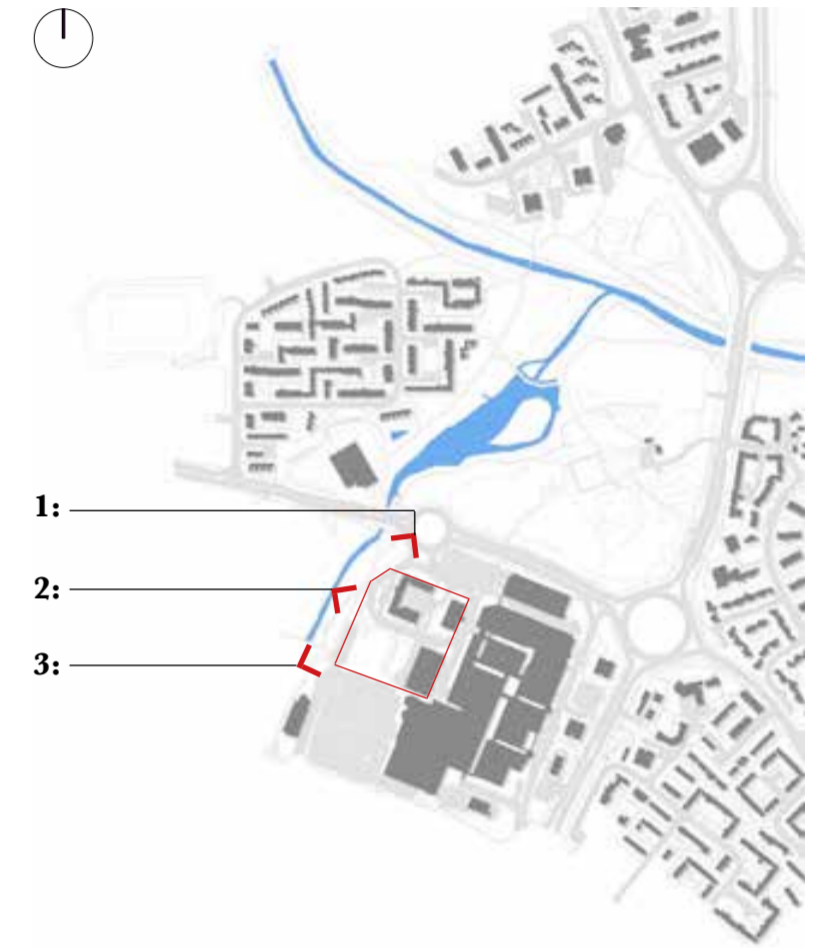
# Site Photography.

1: Southern View, West Midlands Police Station & Kingshurst Brook.



## Topography:

The proposed 1.85ha site is principally level. The Western boundary edge falls away to Kingshurst Brook, whilst the Eastern edge bordering Chelmsley Wood Shopping Centre and the former Sorting Office increases in overall height.



2: Eastern View, Former Library Car Park, Towards Chelmsley Wood Shopping Centre.



## Site Connections & Circulation Routes:

The site currently has a series of connections both vehicular and pedestrian running through the site. The opportunity exists to strengthen these through the proposed development. Key routes include a route North, South leading to Meriden Park and a route East, West connecting Kingshurst Brook to the Shopping Centre.

2: Eastern View, Former Library Car Park, Towards Chelmsley Wood Shopping Centre.



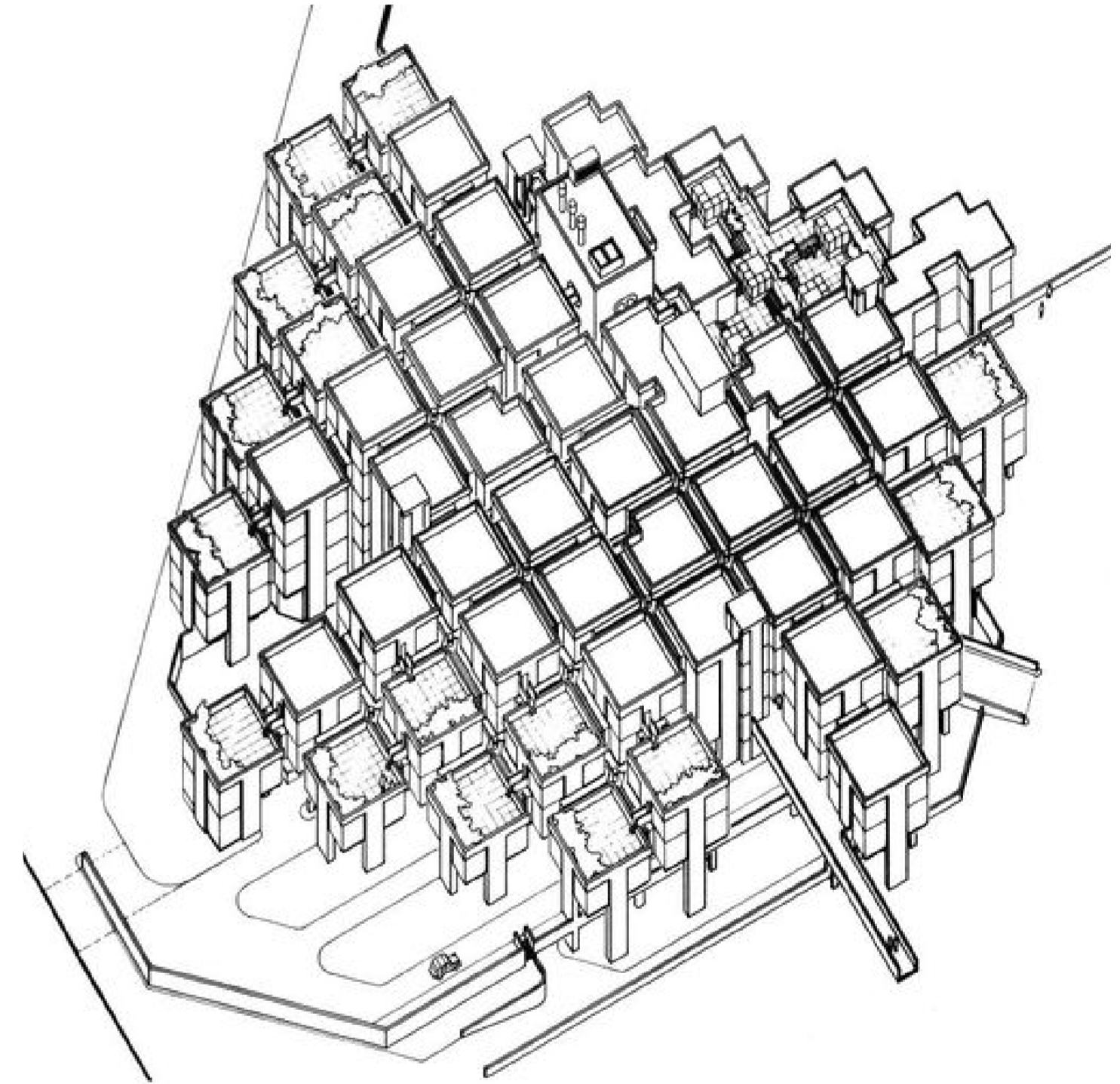


# Defining Structuralism.

Structuralism primarily refers to the an array of theories across the humanities, social sciences and economics many of which believe that structural relationships between differnt cultures and languages and that these particular relationships can be usefully explored and investigated. Structuralism in its architectural form was a movement that evolved around the 20th century which was a reaction for the CIAM functionalism. Functionalism in its later years led to a lifeless expression of urban planning that severly ignored the identity of the inhabitants. Structuralism princibly is a mode of thought of the 20th century and it can be found in anthropology, philosophy and art. After the second world war, structuralism was a profound movement that was brought to the surface by members of the team 10. They lay the foundations of this movement but in times to come various other braches would develop such as the new brutalist with english members such as Alison and Peter Smithson and the structuralism of the Dutch members, Aldo Van Eyck and Jacob Bakema.

A very prominant presence in structuralism was Aldo Van Eyck and his strong contribution in Amsterdam such as his multiple childrens homes. One of the most important factors to his approach was this continuity from the outside to the inside. Many of the interiors were untreated and exposed structural materials, he did this with the intention to create inside streets and squares.

The social patterns “life on the street” focused primarily on the meaningful structure of the collective memory. This was heavily expressed in Kevin Lynch in his book titled ‘The image of the City’.



## “Life on the street”

*“In Structuralism, one differentiates between a structure with a long life cycle and infills with shorter life cycles.” Hertzberger*

## From Deep Structure to Spatial Practice, Tom Avermaete, P124-133.

### Relations “between things and within things”

Team 10 was formed by a young group of architects in the 1950's & 60's as a fundamental reaction against the Congrès Internationaux d'Architecture Moderne (CIAM) and the modern movement. Avermaete “Structuralism can be defined in a variety of ways, especially in the field of architecture, where it can refer to constructional, compositional, and methodological aspects, as well as other elements.” (P.124) The idea of regarding architecture as a matter of relations ‘between things and within things’ became a guiding principal for Team 10.

[Definition: **Anthropological**, The study of human societies and cultures and their development. Also called cultural anthropology, social anthropology. Oxford English Dictionary]

De Carlo (Team 10 Precedent Study) was inspired by a series of anthropological publications, specifically Marcel Griaule’s *Conversations with Ogotemmèli* (1948) “the determining force of myths and symbols was the basis for all social organisation, including the built environment.” (P.125) and Claude Lévi-Strauss, who “analysed elements of the built environment as vehicles for conscious symbolic communication.”

Team 10 also conducted a large degree of on-site empirical fieldwork, similar, in a loose form to our own data gathering within Chelmsley Wood. Avermaete describes how this perspective of anthropological fieldwork gradually pervaded architectural periodicals e.g. *Architectural Design*.

### Mat -Building

In 1974 Alison Smithson published “*How to recognise and read mat-building. Mainstream architecture as it developed towards the mat-building*” Smithson describes the relationship between certain types of vernacular African Architecture and some of the architectural and urban concepts developed by Team 10 in Europe.

“Mat-building can be said to epitomise the anonymous collective; where the functions come to enrich the fabric, and the individual gains new freedoms of action through a new and shuffled order, based on interconnection, close-knit patterns of association, and possibilities for growth, diminution, and change.” (P.129)

Avermaete describes how architecture that has the ability to allow for appropriation, to accommodate for changing building practices is one of the most important characteristics of Mat-building. Smithson uses the example of a traditional Arab town where by a “neutral cube contains a calm cell that can change; from home to workshop; green-grocery to paraffin store”. It is these fundamental principles that will guide the development of the Thesis project and will be integrated into the schemes design.

### Reflections:

The Free University of Berlin will be explored as a detailed precedent study, analysing the structuralist principles in order to create a thesis project that will aim to integrate the same underlying concepts into the proposed scheme. The Thesis project will focus on structuralism in terms of, providing a series of defined intermediary spaces, with clearly articulated relationships. These spaces may form circulation routes or inhabitable spaces, either internal or external but all providing opportunities where people can socialise and interact. These principals could be used to form the projects grid, helping to define the ‘Kitchen Garden’ concept, integrating public and private spaces interconnected by a sophisticated streetscape. Use of past research into providing infrastructures could also provide another level of integration (utilities, water management, food production etc).



Reference: The Free University of Berlin, Candilis, Josic, Woods and Schiedhelm, 1963.



## Structuralist Trajectories, Tom Avermaete, P180-189.

### Structuralist Trajectories

A Modus Operandi and its Engagement with Various Architectural Cultures:

Roland Barthes explores in his 1963 essay that ‘Structuralism’ within architecture cannot be solely limited to Team 10. “Structuralism is far from a school or even a movement” (P.180) Avermaete describes how Barthes believes that “The goal of all structuralist activity, whether reflexive or poetic, is to reconstruct an ‘object’ in such a way as to manifest thereby the rules of functioning (the ‘functions’) of this object.” Barthes, “Structural man takes the real, decomposes it, then recomposes it... between the two objects, or the two tenses, of structuralist activity, there occurs something new.” (P.180)

The Thesis project will hope to develop the proposed scheme in a similar way, to create the brief, to deconstruct it using the principles learnt within this document and to reconstruction the project inside that framework.

### Acculturation with Architectural Themes and Issues

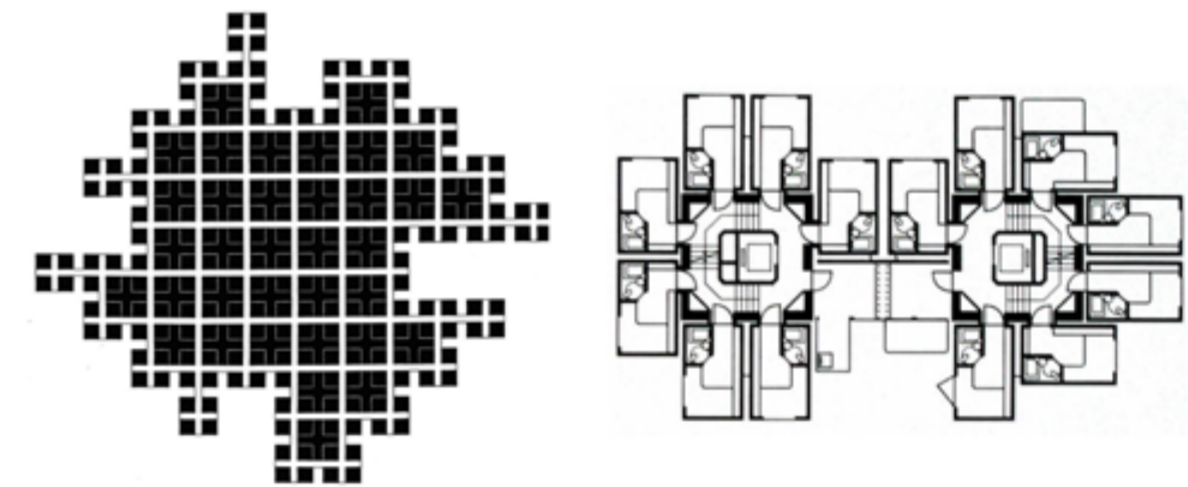
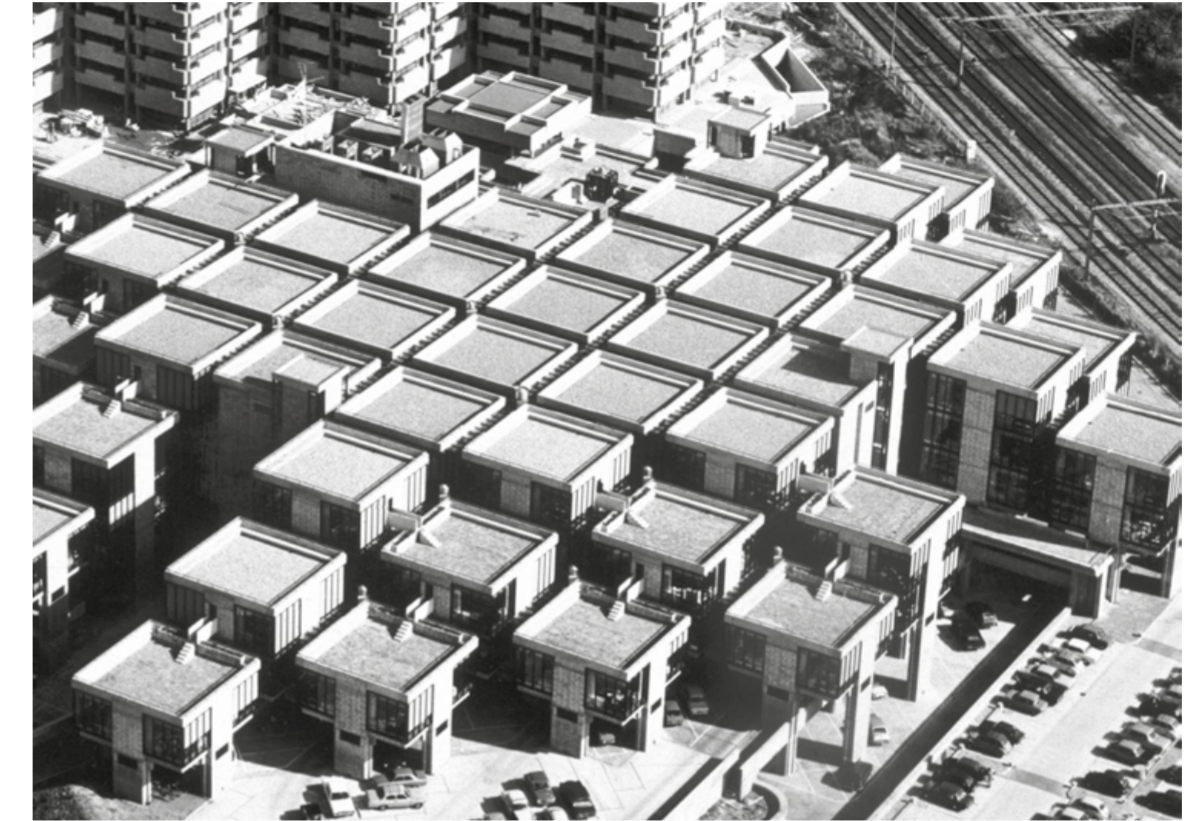
Avermaete describes how structuralism in the field of architecture can be looked on as a poetic activity “opened not only the possibility for its insertion in a variety of cultural, social and political contexts, but also allowed for structuralism’s acculturation with longstanding issues and themes in the field of architecture.” (P.186) Structuralist attitudes have long been intertwined with architectural culture and discourse, Avermaete argues that this discourse may have even functioned as “vectors for the dissemination of a structuralist attitude.” (P.186)

Giancarlo De Carlo (Team 10 Precedent) proposes another vector of structuralism within his 1969 lecture ‘Architecture’s Public’. He advocates for the inclusion of users in the design process, creating user participation, allowing the user to influence the design of circulation structures and the amenities provided within the scheme. The intention is then for this participation to act as a framework for the development of urban neighbourhoods. Participatory workshops have already successfully been undertaken, working alongside the B37 project. The Thesis project could adapt De Carlo’s approach further with additional workshops throughout the design process.

### A Polysemic and Polyvalent Architectural Activity

[Definition: **Polyvalent**, having many different functions, forms, or facets. Oxford E. Dictionary]

Structuralism can take on many meanings and values depending on how it is embedded alongside issues of culture, society and politics; but also depending on its engagement with more architectural debates around rationalisation, participation and contextualisation.



Centraal Beheer Offices, Apeldoorn. 1968-1972, Herman Hertzberger.

# Team 10.

In Search of a Utopia of the Present. D. Heuvel, 2006

## Mat Building, Team 10's reinvention of the critical capacity of the urban tissue. Tom Avermaete, P307-312.

*"Mat Building can be said to epitomise the anonymous collective; where the functions come to enrich the fabric, and the individual gains new freedoms of action through a new a shuffled order, based on interconnections, close-knit patterns of association, and possibilities for growth, diminution, and change."* (P.307)

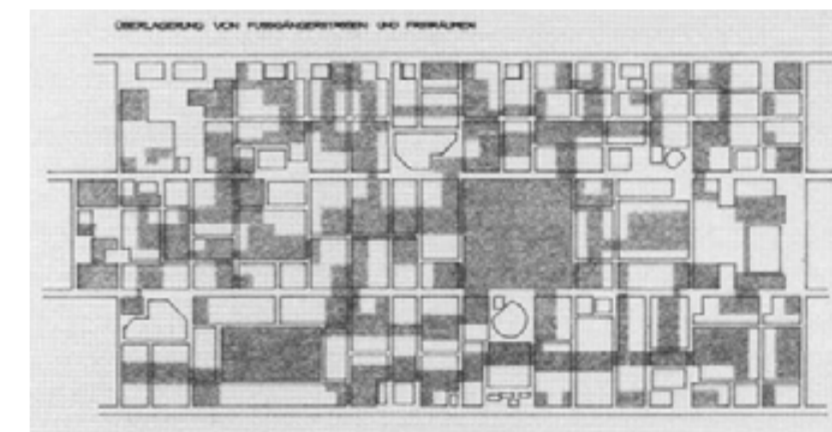
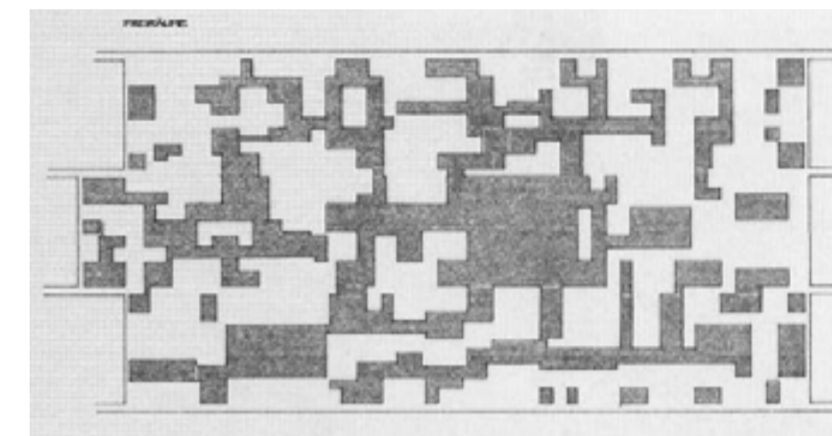
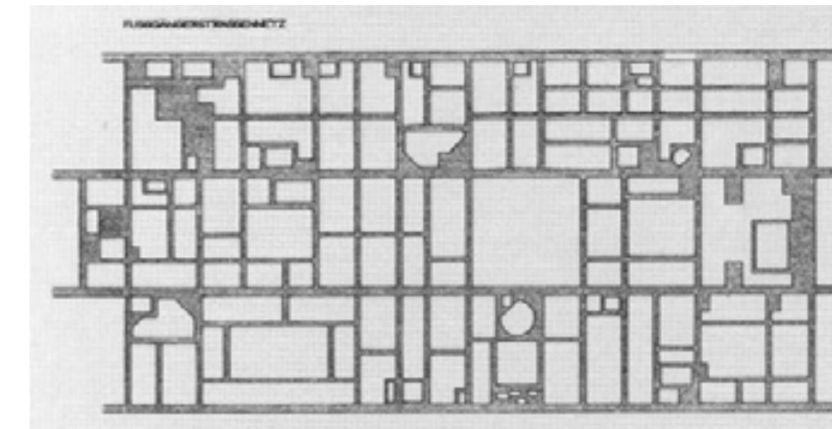
In relation to the Thesis project, the concept of the kitchen garden will form a community with interconnecting layers of collective inhabitation. Through the infrastructure of food and craft production a community can take ownership of their surroundings, and influence its adaption and growth as they see fit. The design of the scheme will seek to integrate some of Team 10's thinking into mat building, designing the urban fabric as a series of overlaid figures. Firstly a series of interconnected pathways linking key parallel circulation routes, secondly a layer of interrelated open spaces will eing to create a structural mesh that defines the project. Axonometric perspective will used to illustrate the different pragmatic elements exploring how they are woven together.

*"Smithson underlines in her article that the characteristics of the mat to introduce a structural mesh that allowed for a weaving of spaces and functions was not a formal nor an isolated gesture. Rather it was a reaction, common to many Team 10 contributors, against the zoning and unravelling of urban functions that were typical of the doctrinarian strains of CIAM and of post-war European reconstruction."* (P.308)

### Density

Alison Smithson explains how that besides the structural mesh of traces and open spaces, the metaphor of the 'mat' refers also to another property of the traditional European urban realm: Density. Simthson points out *"The Free University of Berlin belongs to a tradition of post-war projects that attempted to recapture the spatial and functional density of the traditional European City."* (P.308) Sighting several other examples Smithson introduces a second metaphor of 'mat', as an attempt to conceive the city as more than a collection of individual building blocks. How viewing a city instead of a compilation of singular buildings it becomes as a series of urban mats, not judged but its ultimate length or height but by a two dimensional dense fabric where the public can live.

The proposed thesis project will digest the notion of density and explore how this can be incorporated within the scheme. The sites location within the centre of Chelmsley Wood is within walking distance of many shops and services and allows for increased densities over the traditional suburban fabric of the area.



Candilis, Josic, Woods, Diagrams presented with the competition project submission for the Free University of Berlin.

# Team 10.

## Giancarlo De Carlo. 1919-2005

Giancarlo De Carlo was born in Genoa, Italy on 12 December 1919. In 1930 he moved to Tunis, where he attended junior high and high school. In 1937 he returned to Italy, where he enrolled in engineering at the Polytechnic Institute in Milan, from which he graduated in May 1943. In 1949 he received his architectural degree from the school of Venice. After working a while with Franco Albini at the beginning of the 1950s, De Carlo began his own career and, at almost the same time, his long friendship with Carlo Bo started; Bo was the rector of the university of Urbino, who got De Carlo involved in the restructuring of the university complex and the city of Urbino. From 1958 De Carlo started working on the master plan for the little Italian hill town. This study resulted in various commissions over the years, in and outside of the city centre, such as the student dormitories of the Collegio del Colle (1962-66), and the university building Il Magistero (1968-76). From the mid 1970s onward De Carlo's office remained very productive, with the Mazzorbo housing estate in Venice (1979-85) as one of the best-known projects.

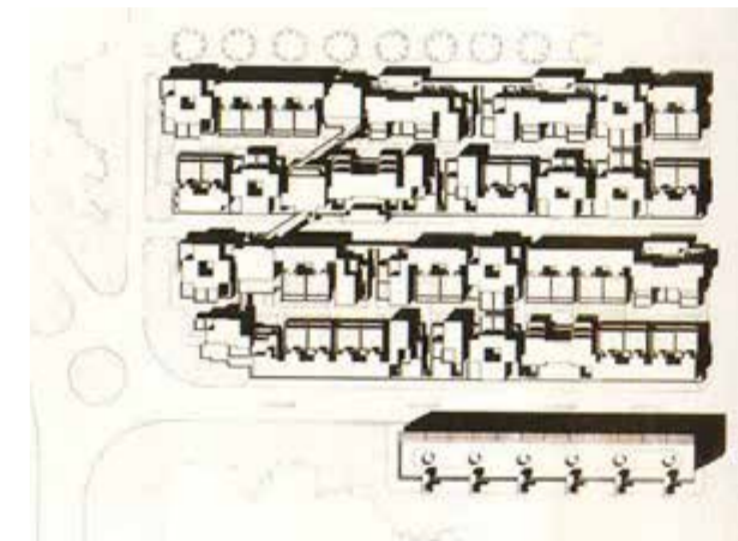
De Carlo was introduced to the circles of CIAM by Ernesto Rogers, who also invited De Carlo to join the editorial staff of Casabella Continuità, to which De Carlo contributed until 1956, when he resigned because of disagreements over the periodical's policy. In 1959, at the CIAM conference in Otterlo, he presented his 1954 Matera project. Despite the severe critique, he would join the ranks of Team 10 shortly hereafter. From the Royaumont meeting in 1962 onward his contribution to the Team 10 discourse would gradually gain profound influence. He organized two meetings, in Urbino (1966) and in Spoleto (1976). In 1968, when he was co-organizing the 14th edition of the Milan Triennale, he also invited some of his Team 10 fellows to present their ideas on the issue of 'Il Grande Numero'. In the mid 1970s De Carlo started two new platforms for architectural discourse, the bi-lingual journal Spazio e Società (1978-2000), and the International Laboratory of Architecture and Urban Design (ILAUD, 1974-2004). The issues dealt with by ILAUD were also those elaborated by De Carlo within Team 10, particularly the reading of context, history and territory as well as social issues such as participation and reuse of historic sites and buildings. The same issues were taken up by Spazio e Società, edited by De Carlo and his wife Gulliana Baracco.

Next to his teachings at ILAUD, De Carlo also taught at the Venice school of architecture, and was a guest lecturer at many international schools, most notably in the USA, among others at Yale University, MIT, UCLA and Cornell University. His writings include early books on Le Corbusier (1945) and William Morris (1947); publications of his work and ideas include: La piramide rovesciata (1968), An Architecture of Participation (1972), Gli spiriti dell'architettura (1992) and Giancarlo De Carlo: Immagini e frammenti (1995).

On 12 December 1989 he was named an honorary citizen of Urbino and in 1994, thirty years after the first one, he drew up its new master plan. In 1993 he received the RIBA Royal Gold Medal, followed by numerous other Italian and international honorary doctorates. Giancarlo De Carlo died on 4 June 2005 at the age of 85. Ref: <http://www.team10online.org> [Accessed Jan 2018]



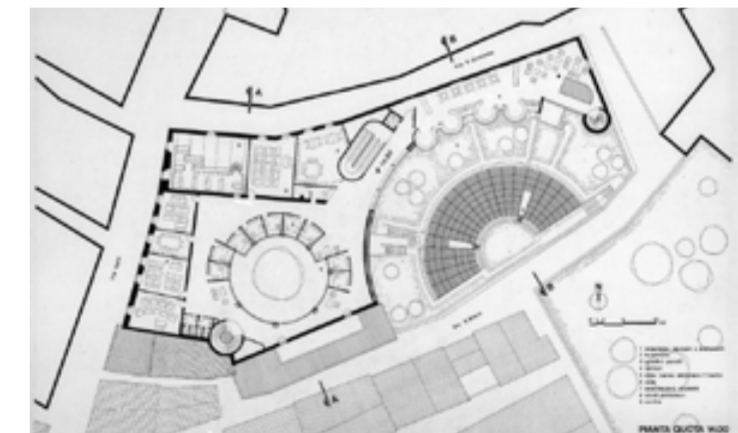
Giancarlo De Carlo. 1919-2005



Matteotti Village, Terni, Italy. 1969-74



Mazzorbo Island Housing, Venezia. 1980-97



Urbino University, Italy. 1955.

# Team 10.

Giancarlo De Carlo. 1919-2005

## The Underlying Reasons: Interview with Giancarlo De Carlo, Ralph Erskine & Aldo van Eyck. Clelia Tuscano, Milan, 1990.

The contributions of Team 10 are often recorded and catalogued through speeches, lectures and interviews, however there is a common belief that there are more interpretations of what Team 10 has stood for than there are members of the group. Nearly all records of Team 10 take the views of single members of the team, defining their beliefs, theories and philosophies in an attempt to understand the groups manifold of ideas as a whole. Van Eyck argues that there were never any members of Team 10, they were only participants. He explains how although they shared many overarching ideals, you would often get very different interpretations of a subject depending on who you spoke to. Speaking to the Smithsons on the issues of mobility would likely garner very different opinions to that of himself. In order to correctly understand the wider scope of Team 10 Van Eyke proposes every article should explore as many of the participants views about the subject, to being to reveal the various levels of understanding and thought.

De Carlo *“Team 10 was based on differences, since often we didn’t share the same opinions. We were just interested in each other. We were aware and respectful of the others’ consistency. We knew their commitment was serious and orientated to principles we shared. This was the base of our agreement. Besides that, each of us was a person, different from the others. We were not a political party, we were not a closed group of believers in a dogmatic truths. Our discussions were lively and sometimes even vehement; however we were able to remain friends after our confrontations, because we were moved by a strong reciprocal appreciation, we had a deep respect for each other. Sometimes it was not like that for everybody, but it was true for the majority of us.”*

Van Eyke *“Team 10 grew out of criticism within CIAM, as an irritating grain in an oyster. My opinion of course was that Team 10 tended to continue CIAM’s concern about urbanism far more than necessary. CIAM hardly allowed discussion about architecture, because urbanism was considered a holy word: the city and the building were something like a private affair.”*

De Carlo explains how there were challenges over discussions of architecture vs urbanism, he states *“I cannot conceive a building without knowing and dealing with its context”*. A very similar approach in which modern day architecture is taught. De Carlo explains how Team 10 believed that imagination, invention and open-mindedness were necessary within the design process which contrasted greatly with the views of the majority within CIAM.

Van Eyke recalls how Team 10 were not always the only opposing faction within CIAM, he discusses how the creation of The Athens Charter written by a group of Swiss and German people forced a direct challenge from Le Corbusier who swiftly wrote his own Athens Charter. Van Eyke remembers how Le Corbusier was whole heartedly supportive of Team 10 with several of the meetings taking place at Corbusier’s home. Corbusier *“I am a member but I do not want to weigh on you, I belong to Team 10.”*

Erskine describes the Kaufman House by a Swedish architect alongside the changing trends between modernism and post modernism, how once if a flat roof leaked and someone put a sloped roof on the building it would be inadmissible. The Kaufman House had such a style and was roundly subjected to the dogmatic aesthetic criticisms of the time. The interview concludes with a discussion on the changing trends within architecture, reflecting the trends within society, and how the consumerist ideals are informing a very commercial culture. Erskine discusses how he believes there is still an undercurrent of the Team 10’s principals that are still relevant today.



Reflections: De Carlo *“I cannot conceive a building without knowing and dealing with its context”*.

This singular quote from De Carlo is evident within the work undertaken within Chelmsley Wood. The depth of understanding and research into ‘knowing and understanding’ the context of the area in which we are working has ultimately informed our design process with the creation of the Folly Project and will provide a foundation upon which to build the Thesis Project.



## The Groundscraper: Candilis, Josic & Woods. The Free University Berlin, 1967-73.

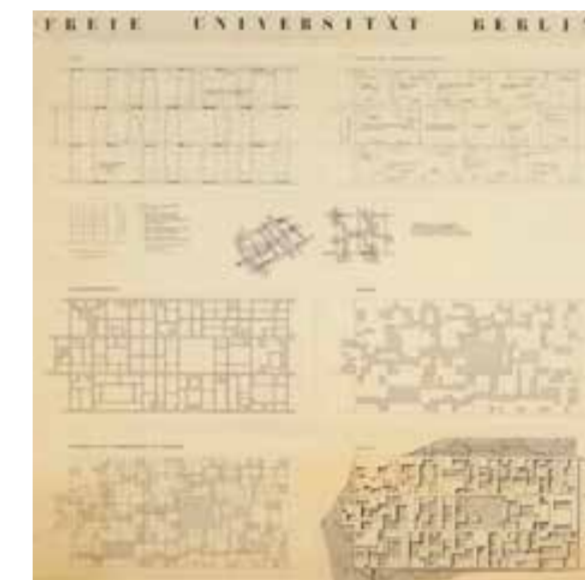
The Free University in Berlin, conceived by the architectural firm Candilis, Josic, Woods raises questions about how social and utopian agendas emerged over a extended design process. The architects conceptually linked the ideas of “*Stem*” and “*Web*” to establish the unified concept of the “*Groundscraper*.”

The construction of the building started in 1967, although until this day the building hasn't reached its intended size of 350,000 sq metres which in original completion asked for. The design proposed formed a carpet-like structure of two- and three-storey high, modular spaces. The organisational structure with its covered streets and corridors, passing around inner courtyards, offices and auditoriums took its inspiration from historic Arabian cities and souks rather than its suburban surroundings of the then walled-in West Berlin. The architects' motto was “instrument, not monument”, creating the idea of an ever-changing machine for learning, aimed at maximising spatial flexibility for the buildings' users: all rooms and spaces within the basic spatial system were designed to be easily rearranged. Like a bookshelf, the entire building should be changeable with a simple screwdriver. If this could have been realised fully, all façade modules should have been demountable and able to be placed anywhere else in the building, turning it into an ever-changing machine for all future (spatial) needs the university might ever have.

At the same time the construction of the façade modules also proved difficult. They were developed by Jean Prouvé, who based them on Le Corbusier's Modulor and fabricated them from Corten steel trying to make them extremely lightweight so that they could easily be demounted with their screwdrivers and carried by two people. The steel was meant to weather slightly over time, creating a nice patina. Yet it rusted far too quickly, and the extremely thin modules let air and water stream inside causing increasingly severe construction damage even before the inauguration of the first phase in 1973 – its most popular aspect among its out-upon users being its quickly earned nickname of Die Rostlaube – “the Rust Bucket”. “With its water spots and the roof panels hanging loose, the interior had a ruin-like appearance”, notes the Architecture Guide Berlin charmingly.

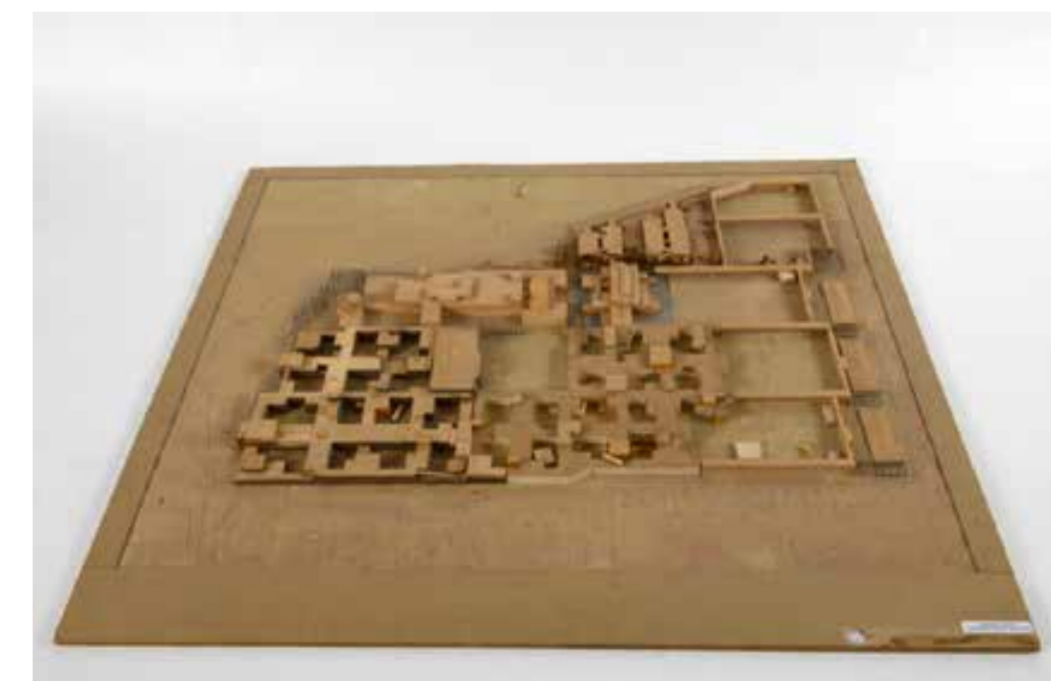


[Internal courtyards, colour coded for each department]



The first part was built from 1967-1973 with a characteristic yet problematic façade of Corten steel, earning the building the nickname the “Rust Bucket”. The organisational structure was based on an orthogonal grid of inner corridors and courtyards, resembling old Arabian cities or souks.

[Competition Entry Model 1962]



# Netherlands Field Trip.

## Structuralism Archive at Het Nieuwe Instituut, Rotterdam.

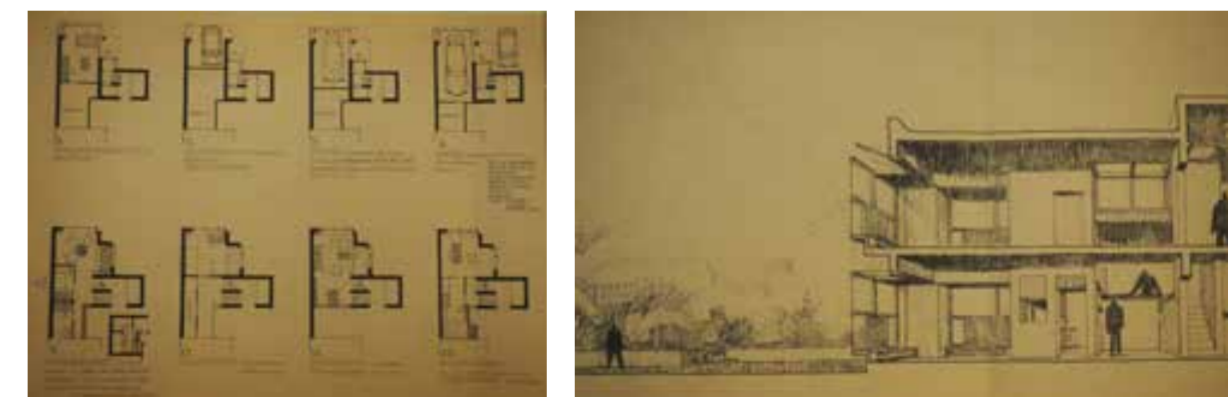
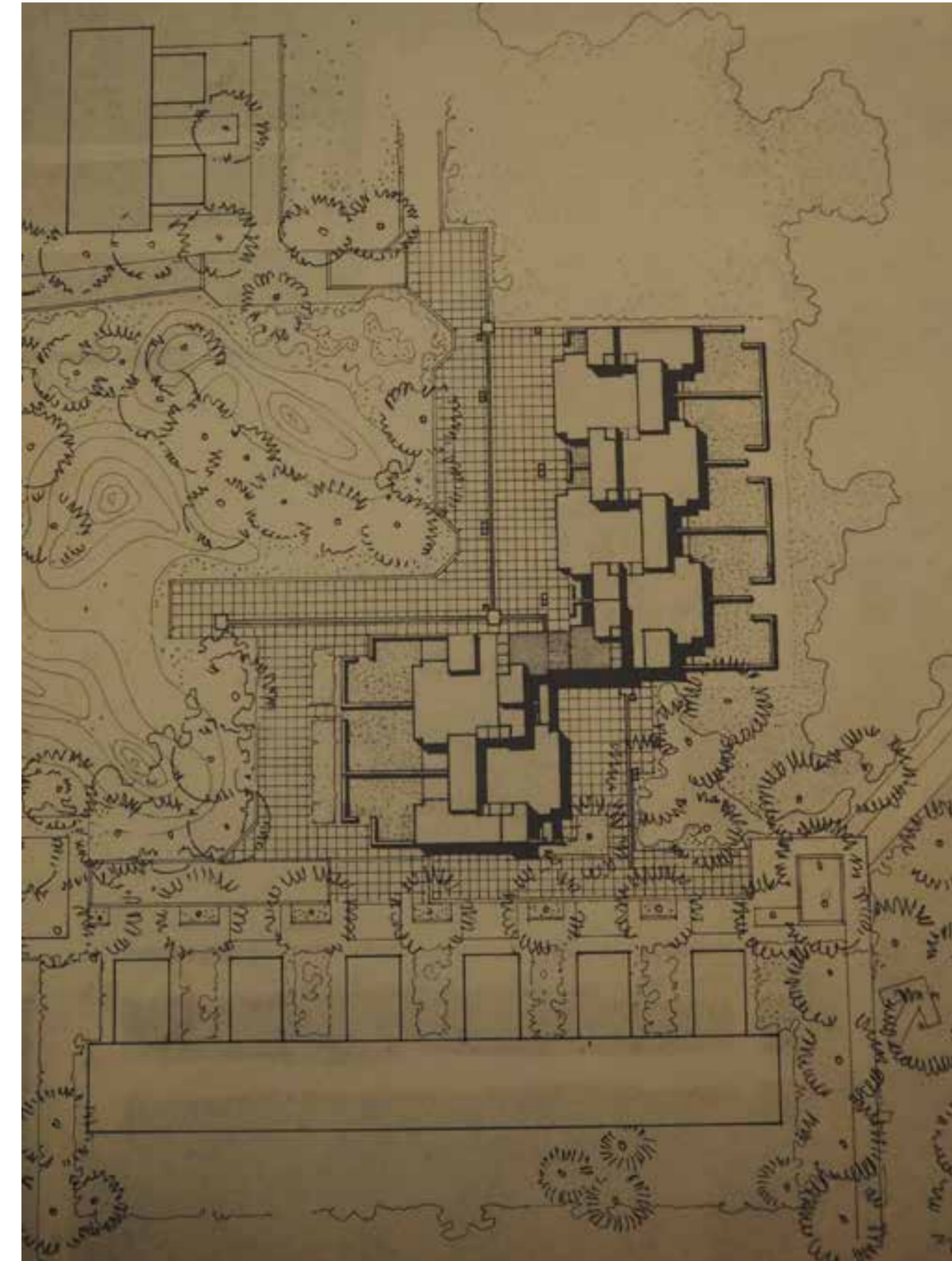
Dutch Structuralism is a movement in architecture in the late '50s and early '60s that renounced the technocratic planning that characterised the post-war reconstruction of the country. Instead, its proponents asked space for the poetic and emotional aspects of architecture, in order to come to a truly dignified living environment.



Herman Hertzberger, Office 'Central Beheer' Insurance Company, Apeldoorn, 1969-1972.



Structuralism Archive at Het Nieuwe Instituut.



Diagoon House, Herman Hertzberger, 1968-70 [Original Hand Drawn Plans & Sections].



# Historic Housing.



**Chelmsley Wood 1966-70**

Construction of Chelmsley Wood began in 1966, comprising of 15,590 dwellings and was completed in 1970. The wider area saw the creation of x39 multi-storey blocks of flats, with x12 located within Chelmsley Wood.

The town shopping was to be accessible from one level and undercover so that shoppers were protected from the elements. There were 70 shop units and 6 major stores, as well as a 4-storey office block and 2 pubs. The 221 dwellings in the town centre included 14 maisonettes over shops - the intention was to prevent the area from becoming lifeless when the shopping centre was closed.

The original concept for Chelmsley Wood would seek to separate vehicles from pedestrians in a 'Radburn Layout'. This resulted in many of the houses being designed with a back to front layout. Houses would back onto streets and parking with the frontages opening on to a semi-private / public green spaces.

- Housing Statistics:
- 45% Flats & Maisonettes
  - 43% Houses & Bungalows
  - 12% Commercial & Recreational



Photographic Reference | Ben Clifton Photography



# Housing Study.

## Ward Boundaries:

- ① Bacon's End
- ② Cole Valley
- ③ Chelmsley Wood Town Centre
- ④ Alcott Wood
- ⑤ Yorkminster
- ⑥ Windy Arbor



## Typology Analysis:

- Bungalows
- x2 Bedroom Housing
- x3 Bedroom Housing
- Maisonette's Above Garages
- Flats/Apartments
- High-Rise Flats
- Educational Facilities
- Retail / Commercial
- Public / Social Facilities
- Industrial / Utilities



## Built Environment Zonal Analysis:

### Cole Valley & Meriden Park

Wild life conservation area and public park.  
Includes Adventure Play Ground.

### WMG Academy & Housing

New engineering academy and traditional residential accommodation outside of Chelmsley Wood.

### Bacon's End Community

Smaller scale residential development consisting of bungalows and 2 bedroom max residential units. x2 High Rise block to the boundary along with a pub and labour club.

### Modern Housing Development

New housing development, consisting of a much denser mix of maisonettes, apartments, 2&3 bedroom houses in a very different plan to the Radburn style.

### 1970's x3 Bedroom Housing

Housing from a similar age to the Radburn model but consisting of a more traditional semi detached layout, each property having its own garage and gardens.



### Chelmsley Wood Shopping Centre

Social & Commercial heart of 'The Wood' Completed in 1971. Includes x2 High-Rise Apartment blocks, social clubs, local police station, job centre & mix of retail units.

### Social & Community Facilities

Area includes a church, youth and social clubs.

### High Rise Apartments

### Later Residential Additions

Housing Mix Built, 1990's & 2000's.

### Radburn Housing Model

Principle residential area completed between 1966-1970. Incorporates a mix of 2/3 bedroomed semi detached & terraced housing, and 1 bedroom maisonettes /flats.

# Housing Study.



**x1 Bedroom Maisonette**  
New development to the North of Chelmsley Wood. Single apartments above garages forming entrances to semi-private residential car parks.

1|



**x2/3 Bedroom Housing**  
New development housing mix of 2 & 3 bedroom semi-detached, detached and terraced housing, including integrated garages.

2|



**x3 Storey 1/2 Bedroom Flats**  
New development housing mix of 1 & 2 bedroom apartments, located to the rear of the site bordering the M6 motorway. Communal parking facilities.

3|



**In-Fill x2 Bedroom Housing**  
1990's in-fill x2 bedroom housing set in-between the existing 1970's housing complex. Private gardens & driveways.

4|



**x1/2 Bedroom Bungalows**  
Constructed between 1966 & 1970, x1 & 2 bedroom bungalows were specifically allocated to elderly residents. Each with their own gardens but often with no driveway, with parking set well away.

5|



**x1 Bedroom Bungalows**  
Unique style of single pitched roof bungalows appear throughout the estate, often in a diagonal terrace. Specifically allocated to elderly residents with communal parking.

6|



7|

**x1 Bedroom Maisonette**  
Unique style Maisonetter apartments located above communal garages serving the near by housing. Many designed with their own private garden and individual access.



8|

**2/3 Bedroom Housing**  
Traditional terrace or semi-detached housing form the magority of the properties on thhe estate. Many with communal front gardens in the Radburn Style which have since been reclaimed by the residents.



9|

**Radburn Style Housing**  
Parts of the estate feasture the Radburn Housing style layouts, where by the parking facilities are located to the rear of the property, and communal front gardens creating an open space to the frontages.



10|

**Radburn Style Housing**  
The magority of housing on the estate is formed of thhe Radburn housing style, however many of the communal gardens have been reclaimed by the residents, building walls and fencing.



11|

**x3 Storey 1/2 Bedroom Flats**  
Traditional x3 storey flats are located throughout the scheme. Once clad in timber these units were either redressed in pebble-dash or tiles in thhe 1980's. Minimal parking provisions.



12|

**x14 Storey High-Rise Flats**  
Many high-rise apartment blocks were originally constructed, and now only a few remain with many being demolished or re-clad. Communal parking and grass lands on the ground floor.



# Housing Study.

## Signage:



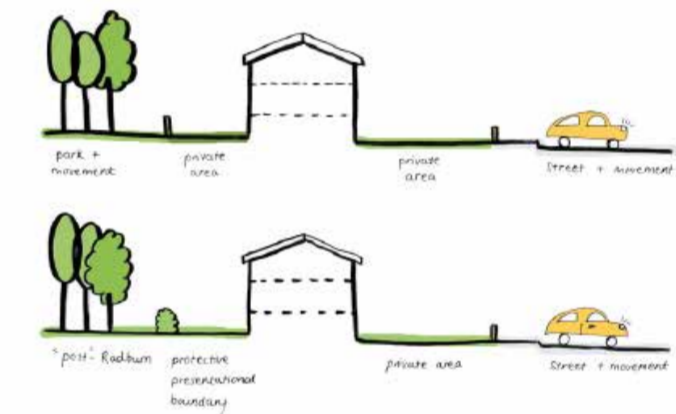
### The Commons:

Signage is used around the area to define the **codes and conventions** in which the local residents adhere to **Lex Communis**. The signage varies from official signs implemented by the **local authority** - metropolitan borough of Solihull - signs placed by **local land owners** or **residents** constructing signs around their own property. Studying the signage identifies how the spaces within **The Wood** are used.

### Unlocking the Commons:

The privatisation of spaces within Chelmsley Wood has caused many of the places within the local area to become un-usable and un-welcoming to the community. The codes + conventions within The Wood do not have to be so disagreeable as they are currently. Encouraging children to play ball games in a safe and respectful manor, or opening up areas that are labelled 'keep out' but currently unusable would give children a safe, happy space to play.

## Radburn Style:



### The Commons:

The Radburn Housing arrangement has been applied in the Yorkminster area of Chelmsley Wood. The idea for this housing typology is that the backgardens would face the street, and the front gardens would face one another over common green space. Unfortunately, this has not been as successful as it was first intended, with people choosing to build fences around their individual parcels of land - due to the nuisance of ball games, dogs and the feeling of having no privacy. The Codes + Conventions **Lex Communis** implemented by the residents (choosing to add fences and boundaries around their properties) has privatised the inherent commons within Chelmsley Wood.

### Unlocking the Commons:

A change in attitude and behaviour by the local residents would be required to take down all of the boundaries and fences and allow the green spaces to be used by everyone. It is clear that privacy **Lex Communis** is important to the residents, as well as having places we can cohabitate.

# Housing Study.

## Site Photography.



Chelmsley Wood, Greenlands Road @ Night.

Reference: Ben Clifton Photography



Chelmsley Wood High Rise Housing Blocks + Kingshurst Brook @ Night.

Reference: Ben Clifton Photography





# Estates, An Intimate History.

## Lynsey Hanley, Introduction P1-21.

Summary |

Lynsey Hanley's text challenges the stereotypes that estates have in Britain, through the prism of her own experiences. Raised 'On The Wood' her book now ask why homes that were built to improve people's lives ended up, in many cases doing the opposite.

The descriptive nature of the introduction provides an overview to life growing up within Chelmsley Wood, and details how important people's own perceptions of their community can define the area in which they live. The first paragraph begins by detailing the design of the estate in a positive light with the focus on the pedestrian. The ability to walk to the school or shopping centre with minimal interactions with roads and traffic describes the 'Raburn Style' of the estate, with the focus of the design forming walkways, avenues and open public spaces, with the car relocated to the rear of the streetscape. The paragraph ends by describing two crimes which are highlighted in such a way as to provide an insight into how such events and create and sustain people's perceptions of a community, and over time can strengthen and define the negative connotations of the estate.

The physical design of the estate, with its tall tower apartment blocks are described in a brief storey about the problems of wind traps caused by the built form channeling the wind, creating impenetrable barriers for school children and their parents. Hanley describes how from her early memories and perspective the quality of community within 'The Wood' was wholly positive. She describes memories of family, with several generations all living with close proximity to one another. It was only upon reflection and in later life that some of the negative connotations surrounding the estate became more apparent.

Hanley comments on the generational changes of how her parents and grandparents viewed the council estate with all the benefits, over their previous experiences of living within Birmingham's Slums during the clearances of the 1960's. Today however the stigma of the estate can lead to people being trapped, with little chance of moving up the social ladder. The restriction on choice is described by Hanley as an intrinsic problem of the poorer classes. How even the right to buy scheme, with the good intentions of providing a route to home ownership did not necessarily lead to equality. Families were still left with a property that was worth considerably less than those on private estates.



Reference: Ben Clifton Photography

When describing the estate American journalist Leonard Downie Jr states "The project is cold and uninviting socially. The words 'Modern' and 'Impressive' rub up against 'Cold' and 'Uninviting' like partners in a forced marriage." (P.4) He describes how the home no longer has a "hearth of beating heart" to the home to the detriment of families and the wider community living on the estate. Hanley describes a sense of alienation that wasn't apparent as she was growing up. She is critical of the design of the estate that the designers were so focused on mathematical precision that they forgot that "real people aren't inanimate yellow shapes with permanent smiles branded on their plastic bodies. That real people may get lost in such a place" (P.5).

*"I wonder if the stigma of coming from a council estate is ever turned to an advantage, and whether that inherent sense of inferiority ever becomes a source of pride. You believe yourself to be proud of having overcome the limitations of your environment." (P.5)*

Reflections:

The challenges of changing a community's own perception of where they live or that of outside opinions of the estate must begin with empowering the residents to take ownership of the places in which they live. To challenge the notion that "Council homes were never intended to be holding cages for the poor and disenfranchised, but somehow that's how they ended up." (P.11) The text challenges notions of class and stigmatisation of the word 'estates'. The thesis project will attempt to draw upon the readers' critical points of community, ownership and empowerment, implementing the concepts into a new form of housing based upon the design of a 'Kitchen Garden'.

# Estates, An Intimate History.

## Chapter 1, This Must Be The Place (I Waited Years to Leave) P23-49.

Summary |

In chapter one Hanley details her return to the estate where she grew up, reminiscing as she walks across ‘The Wood’ regaling stories of her childhood and reflecting on her thoughts and attitudes of how Chelmsley Wood has changed over time. Hanley describes her family home as *“square and solid, and without embellishment.”* Line after line of generic housing stock Hanley struggles to differentiate one cul-de-sac from another and fears getting lost. Hanley discusses her memories of ‘the posh people’, where different larger housing typologies have segregated themselves from the street and opposing terraces by 40foot conifer trees. She talks about how class differentiation still exists within ‘The Wood’ and how with a simple change in the wind the sounds of the motorway, airport and train lines become distinctly more apparent.

The Radburn style of housing is again described, making specific reference to the original design intention of each properties front garden being open, with little or no boundary definition. How issues of privacy, disturbance and ownership quickly overtook the designers intentions, with residents claiming back their plots of green space after suffering broken windows from children’s ball games.

Hanley describes how the need for Chelmsley Wood was an important issue for the then Labour Government, with potential housing shortages in Birmingham and with minimal space to expand. The planned 18,000 dwellings for 60,000 people was the result, taking up a large area of greenbelt land. Hanley describes how Chelmsley Wood was lucky to have been designed with a great deal more care, including far more public facilities than many of the larger estates that were created at the time, crediting Birmingham City Council’s Architect.

Hanley describes in great detail the importance of family within ‘The Wood’ how her journey through the intertwining pathways towards her old school leads to a different Aunt, or Grandparent. Hanley’s family express the importance of community but also highlight issues where by the vast majority of the residents commute out of the estate to work, leaving neighbourhoods empty with little signs of life throughout the day.

The design of the estate made specific choices of grouping nurses, teachers, policemen within the same street with the hope of creating micro communities which would develop and address the likely issues of housing nearly all the people waiting on the council’s housing list within such a small amount of time.

Hanley’s journey through the estate is described as at times feeling squashed, oppressed and alienated. *“It was the anonymity and conformity of the estate as a whole that threatened to consume me. It felt as though*



*“I wonder what the point was of moving so many people ten miles away from the city they knew only to put them in hutches that were barely any bigger than the slums they left” (P36).*

Hanley references ‘The Road To Wigan Pier’ by George Orwell who described his disdain for what he called ‘The Corporation Estate’ (P41) where the desire of the 1930’s working man was to live further from work in generic ‘horizontal’ housing instead of within walking distance of work and the city with a ‘vertical’ model of living.

Hanley explores the estate where it becomes segregated by busy roads and is forced to enter subways igniting feeling of fear and in-trepidation. Parallels are drawn between estates in London with a similar set of circumstances to that of ‘The Wood’. Divided communities due to busy roads or feelings of loneliness and alienation that drove her away from the estate. Hanley’s journey finishes when she reaches the M6 to reveal *“a tunnel that burrows under the motorway, and on the other side of it is open country”.* (P49) This spot forms the location for the Folly project for the Green Estate.

Reflections:

The Thesis project will seek to reflect upon Lynsey Hanley’s Estates text and to understand the context in which she describes her memories of Chelmsley Wood. The importance of community is continually highlighted within her writing. The Thesis project will attempt to address issues surrounding inhabitation of a community, providing opportunities to retain people within space rather than forcing people to commute for work and to access facilities. Designing flexible, adaptable homes that could accommodate different generations of the same family could reduce the feelings of loneliness which were described within Hanley’s text.

# Diagoon House.

Herman Hertzberger, Delft, 1967-1970.

## Diagoon House | A Framework For Polyvalence

The concept of the 'Diagoon House' is to conceive the house as one vertical as well as horizontal articulated space. Encompassing a central living area which is a flexible and interchangeable space, adaptable to everybody's personal needs and preferences. In this way it denies the persistent stereotype of the division in two or three separate floors where separate rooms are accessible from corridors. It also allows easy adaptation to changing family composition over time. Ultimately the house as a whole could be one space or divided into four smaller independent units, sharing a communal centre with kitchen and bathroom, with the roof terrace designed in such a way as it could transform into an additional room for the property. The central living area is lit from above where it opens up to the roof terrace and lets the sun in through the day independent of the orientation of the house.

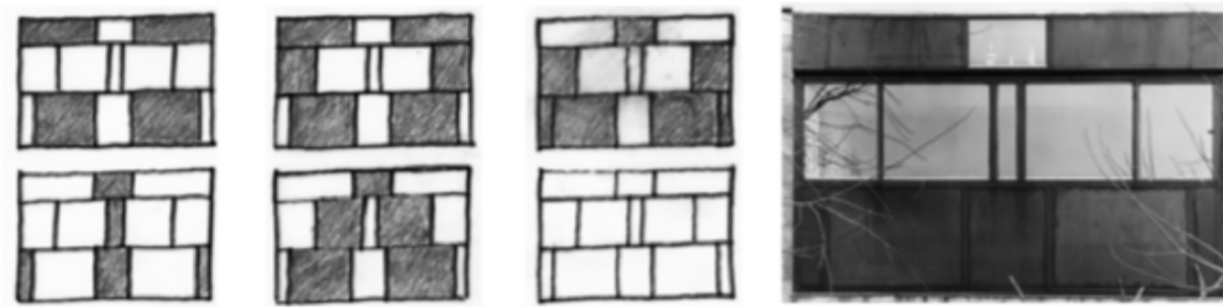
The Diagoon House represents Hertzberger's implementation of his 'Polyvalence' concept. Where by each house has the capacity or inbuilt suitability to generate pertinent solutions of space as each new situation arises. If multi-purpose means designing deliberately for pre-determined ends, polyvalence is the capacity (where nothing has been fixed beforehand about how a form or space will respond to unspecified situations) to not just take up unforeseen applications but to actually incite them. Powered by knowledge about general human behaviour, polyvalence can anticipate the form of objects and spaces, thereby foreseeing the unforeseen.



# Diagoon House.

Herman Hertzberger, Delft, 1967-1970.

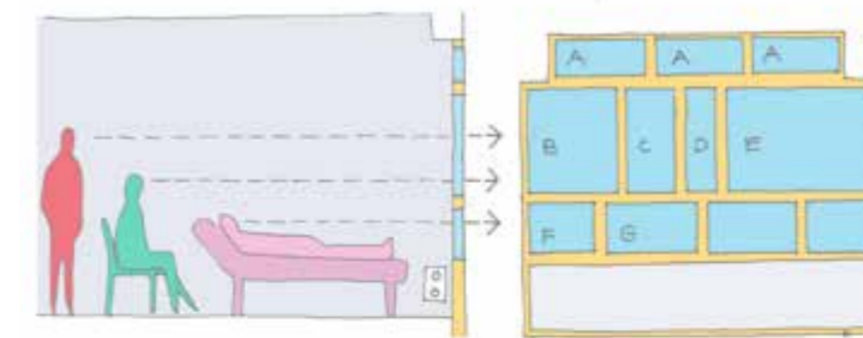
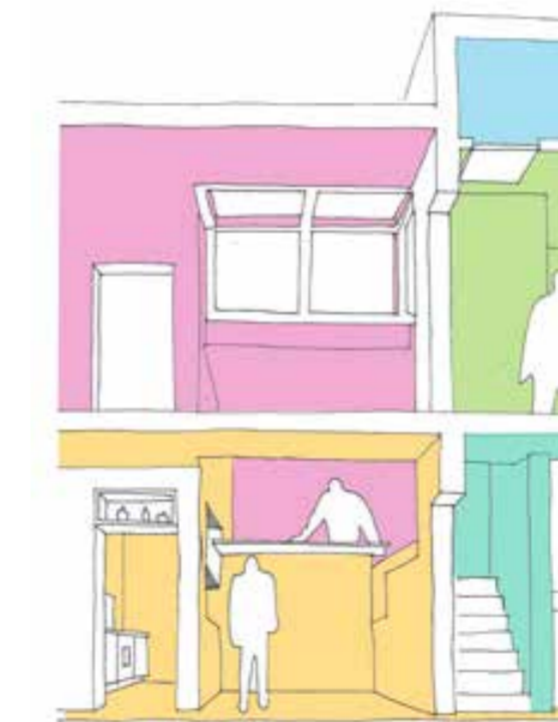
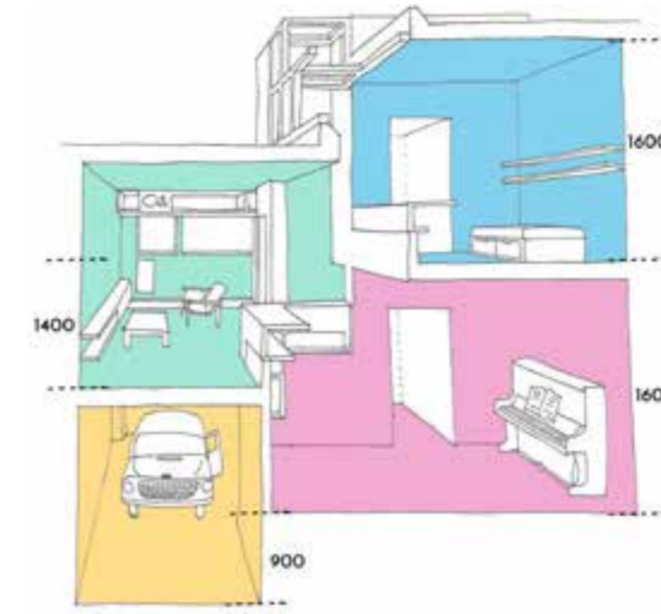
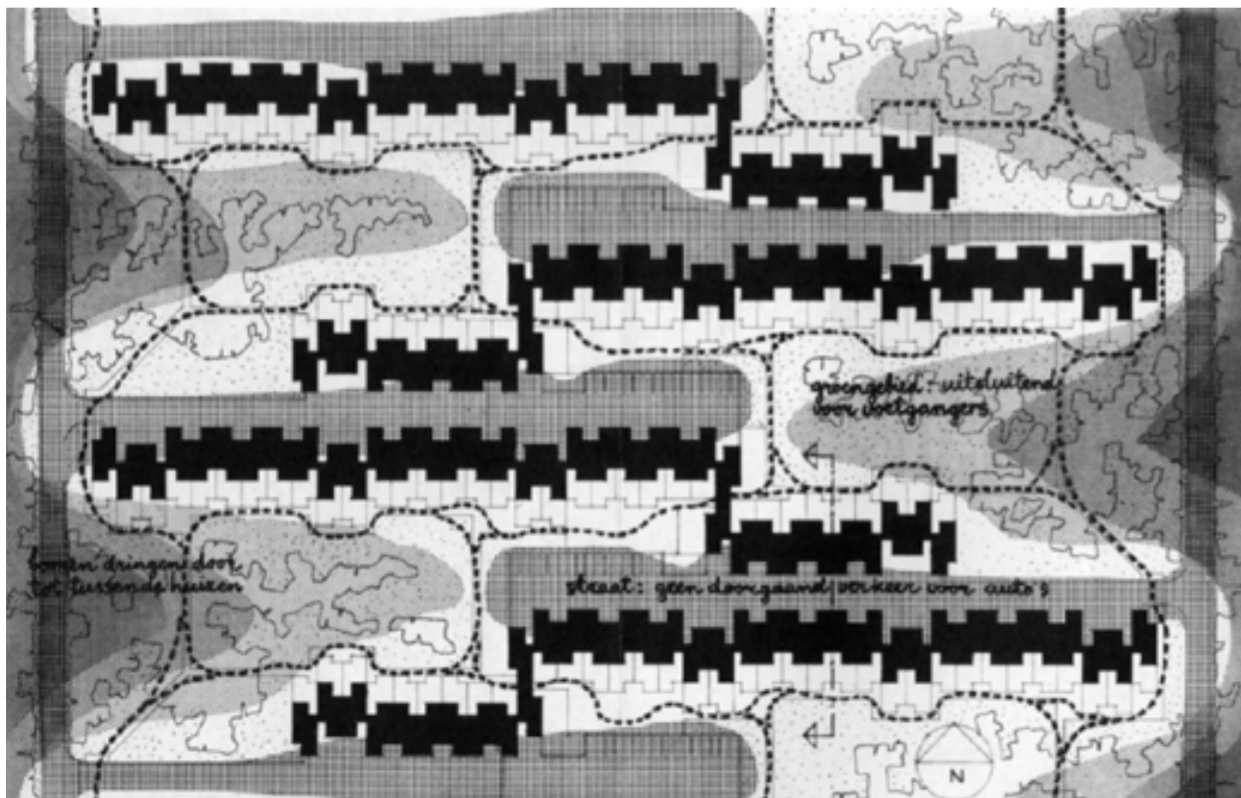
Window frames are designed in such a way as to offer a choice of glass or closed panels. As long as a degree of symmetry is maintained the facade will always show its characteristic appearance. The concept was for an 'architectonic intervention', a process of framework and infill, where by the inhabitants could add or remove panels at their discretion. Hertzberger speaks about how this concept ultimately failed, with the attempt at maintaining symmetry not being kept by the residents and technically the detailing failed to allow the glazed or infill panels to be interchanged as designed leading to heat loss and leaks.



Hand Drawn, Site Section of Diagoon House Estate.



Proposed Masterplan, Diagoon Housing.



The principles used within the Diagoon House have provided to be a source of inspiration when designing our Folly - a key aspect being the floor heights used within the house - a lot less than a traditionally designed house - giving the opportunity for interaction between floors. The measurements depicted above have been directly implemented in to our Folly, in the hope that similar interactions will be able to occur between residents.

The above diagram reveals the relationship between the spaces within Diagoon House, and how the central atrium allows for interaction between floors. The floor levels being lower than traditional houses, allows for the room above (or below) to be close enough to reach up and touch, meaning all of the spaces can interact with one another.

When designing the large window expanse for Diagoon House, Hertzberger thought of every situation someone may wish to admire the view, and with this in mind placed the glazing at levels to be enjoyed whether standing, sitting or resting. The Folly implements a similar strategy with views and vistas created between the floor plates, for people to enjoy in all instances. We have also given thought to the height of the users - from toddlers to pensioners and how their view may vary depending on person to person.

# Diagoon House.

Herman Hertzberger, Delft, 1967-1970.



Precedent Study | Team 10 Housing | 1:1 Modelling.



1:1 Modelling |

The modelling exercise explored our Team 10 precedent housing at a 1:1 scale. Each team choose small but important sections depicting either the combination of internal & external spaces, heights and scales of structural columns or the intricate detail of furniture designed to work over split levels.

# Netherlands Field Trip.

Kasbah Housing, Piet Blom, Hengelo, 1969-1973.



Under the title of 'Living as an Urban Roof', Piet Blom designed a city composed primarily of two levels: a public space on the ground floor and habitats above, forming 'the roof of the city'. Blom did not elaborate the ground floor but he sketched public life with head words and free associations. With this exceptional design Blom attained a living density of 100 houses per ha. In 1965 the 'Living as a common urban roof' study was compiled in book form and edited by the Roof Tile Manufacturers' Association, Nedaco.

Blom's ideas did not stay captured in a folder. A subsidy for experimental house construction, attributed to the district council of Hengelo provided Blom with an opportunity to truly realize his concept of an urban roof. In 1973 the completion of the 'Kasbah', an urban roof of 184 houses took place in Hengelo. Blom designed three different basic types, combined into five different types of housing.

# Netherlands Field Trip.

## Luchtsingel Pedestrian Bridge, Rotterdam, 2015.

Rotterdam studio ZUS has completed what they describe as the “world’s first crowdfunded public infrastructure project” - a 400-metre-long pedestrian bridge in their home city, Rotterdam. Named Luchtsingel, which means “air canal”, the structure runs through a building and across roads and railways to connect three previously disconnected areas of the city. The bright yellow wooden structure is raised above ground by an entire storey, creating an uninterrupted pedestrian pathway that connects the recently renovated Rotterdam Centraal station with the historic Laurenskwartier district. It also links up a series of individual public realm projects, including a rooftop vegetable garden and a new park. Initial fundraising came from a crowdfunding campaign. For every €25 (£17) donated, supporters could have their name inscribed onto one of the wooden boards that line the edges of the bridge. Over 8,000 people signed up to support the campaign financially. The architects were later granted funding to complete the project by the city council. “Based on the idea of Permanent Temporality, the Luchtsingel introduces a new way of making city,” said ZUS co-founder Elma van Boxel. “This means using the city’s evolutionary character and existing forms as a starting point.”

“Therefore, we have developed new instruments for design, financing and planning.” The project was first initiated by the two architects back in 2011 when a proposed office development fell through, leaving several existing buildings unoccupied. The architects saw this as an opportunity to come up with their own strategy for the area. “The Luchtsingel, together with the transformed buildings and new public spaces, forms a new three-dimensional cityscape,” explained Kristian Koreman, the other co-founder of ZUS. Their first step was to take over an existing slab block on Schiekade, just east of the railway station. They moved their studio onto one floor, while the rest of the building became an incubator for young entrepreneurs. The building, known as Schieblock, now houses a design shop and bar on the ground floor, while the roof provides a garden for urban farming – specialising in herbs and vegetables. “It has become a prototype for sustainable development,” said Koreman. The next step was to develop a strategy for the wider area, centred around a new pedestrian-friendly route that cuts right through the centre of the Schieblock – inspired by projects like the High Line in New York. By bridging across both the road and tram lines of the Schiekade, as well as the nearby railway, it reconnects three areas that had previously been impossible for people to move between on foot. At its centre, various pathways converge at a circular viewing platform with built-in seating. “Based on the idea of ‘permanent temporality’, the Luchtsingel introduces a new way of making a city,” explained Van Boxel. “This means using the city’s evolutionary character and existing forms as a starting point.” Yellow paint was used to give the project a clear visual identity. Beyond the bridge, paint has also been applied to pathways to extend the route further.







# Defining 'The Commons'.

Res Communis | Lex Communis | Praxis Communis.

## Tom Avermaete Lecture 04.10.17 |

- There has been a pragmatic shift in the field of Architecture, a shift in Initiating and Commissioning Urban Projects.
- More Co-Productive & Collaborative Venture.
- The City = A Place We Co-Design.
- A new understanding of how architecture engages with 'Common, Urban Resources'.

## Res Communis |

- Common Pool Resources = Resources That We Share.
- Refers to a natural or man-made resource.
- Our City... us as architects, are actors within this City.
- Using the City as a Resource System.
- Resources within our City... Green Areas, Water Supply, Canals, Open Space.
  - Chelmsley Wood, E.g. The open green space acts as a Common Resource.

1 | **Inherent Commons: earth, water, forest - is under attack & becoming a scarce commons.**

2 | **Immaterial Commons: cultural, intellectual, related, skills.**

3 | **Material Commons: which we co-create. (e.g. common stock, common machinery).**

- We can relate to these three commons in all of our architectural projects. For example: A common pool resource is **not yet** a commons. Water is 'owned'/privatised in some cities. It has to be **turned** in to a commons by it's users.

## Lex Communis |

- Codes and Conventions of The Commons.

Without rules to control the entry to the common-pool resource, it becomes open 'access' and can be exploited. For example: Cows become extinct as more and more are eaten, resources are not endless.

- Set of Urban Principles that several Urban Actors can work with.

*“The difference between a **good** place and a **great** place is whether you helped build it”.*

Tom Avermaete

## Praxis Communis |

- **Pleasures, Politics + Rituals.**

- Doing things together... Collaborating.

- Social practices of commoning-acts of mutual support, conflict, negotiation, communication + experimentation.

- Not motivated by monetary rewards, but by affective labour.

- For Example: Luchtsingel Rotterdam. Identified underused spaces in the city and turned it into the commons. Worked with private owners of corporate buildings to open up a private corridor.

Leftover space turned into green spaces and parks. Identifying spaces as a resource for the city.

- Old railroad/station turned into a performance space for the City.

- Roofs turned into Urban acre of agriculture which the communities are in charge of looking after.

**Architects | It's time to re-think what we do. Our role is to act as 'Urban Actors'.**

# B37 Project.

## 'Commons' As Community Participation.



Chelmsley Wood | Consultation Mapping

### The B37 Community:

Debbie has been a resident of Chelmsley Wood since childhood, and continues to live and celebrate the area during her adult life. Debbie is heavily involved with the 'B37 Project', a community group dedicated to organising and supporting local projects in art, the environment and further afield within Chelmsley Wood. Debbie is passionate about the place in which she lives, and is keen to keep strengthening the community and places within the area. She feels like there's a lot going on in Chelmsley Wood, but people aren't well informed. She wishes for the residents to get more involved with what's going on here, and form a real sense of community.



### A Participatory Workshop |

The B37 Community Group is a community organisation set up by local residents of the Wood, to promote their local area. They are passionate about getting people who live within Chelmsley Wood to take an active participation with the things that happen within their community, especially through supporting local projects in art, food and the environment within B37.

On Saturday October 7th 2017 Unit 1 of the BSoAD\_M.Arch programme ran a participatory workshop with the residents of Chelmsley Wood, an overspill estate to the east of Birmingham, now part of North Solihull.

The objectives were to discuss ideas of the Commons and the Green Estate Project. We heard from residents about how they live in Chelmsley Wood, the unwritten histories that make it much more than just a post war estate, and the aspirations of those that live and work there and across the region.

The information gathered formed a large scale map of the 'commons'. This helped to shape and inform our initial design work for the Folly as part of the Green Estate Project.

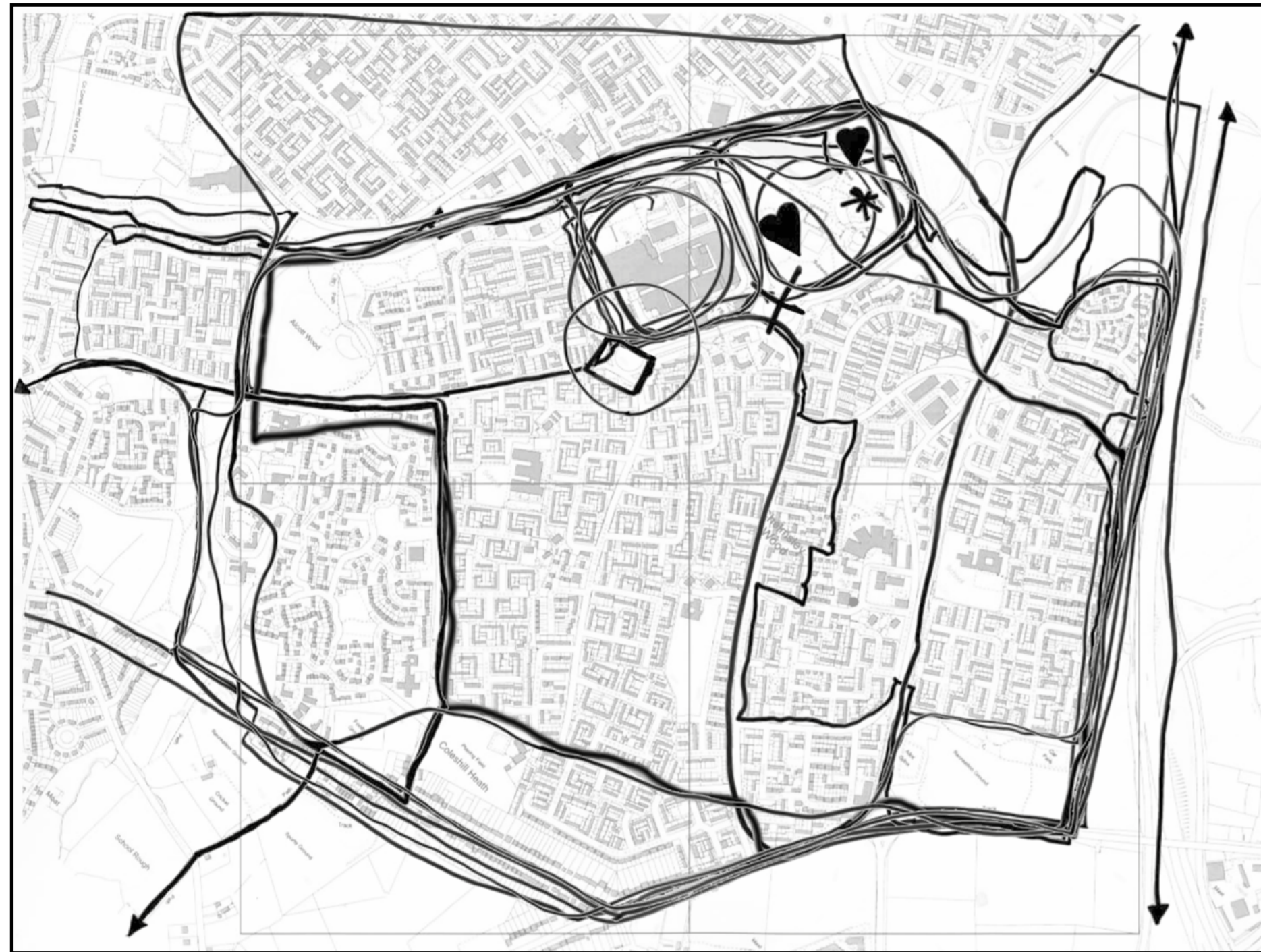
### The B37 Community:

Brendan is also a keen photographer - focusing primarily on landscape and portraiture - as well as being an active member of the B37 Community Group. After spending many years taking photographs digitally, Brendan returned to film. Although he has been taking photographs since the age of 11, Brendan graduated with a BSc in Marine Biology as well as a PhD while working at a fish farm. "Brendan has worked as a marine fish farmer for the last 25 years, often in remote places, across the globe, including the west coast of Scotland, New Zealand and the Falkland Islands".



# B37 Project.

## 'Borders + Boundaries'



### Chelmsley Wood | Borders + Boundaries

The Borders & Boundaries task formed part of the community workshop day and aimed to explore how the residents of Chelmsley Wood define the edges and centre of where they live. Residents were asked to trace over a map of Chelmsley Wood locating where they believed the centre and borders of their community lay. The maps were then collectively scanned and overlaid providing a valuable source of information for our analysis throughout the proceeding project.

### Chelmsley Wood | Urban Flâneur

On several occasions we explored Chelmsley Wood, guided by members of the B37 Project. Each provided a valuable insight into 'The Wood' and how they are working to improve people's perceptions of where they live.

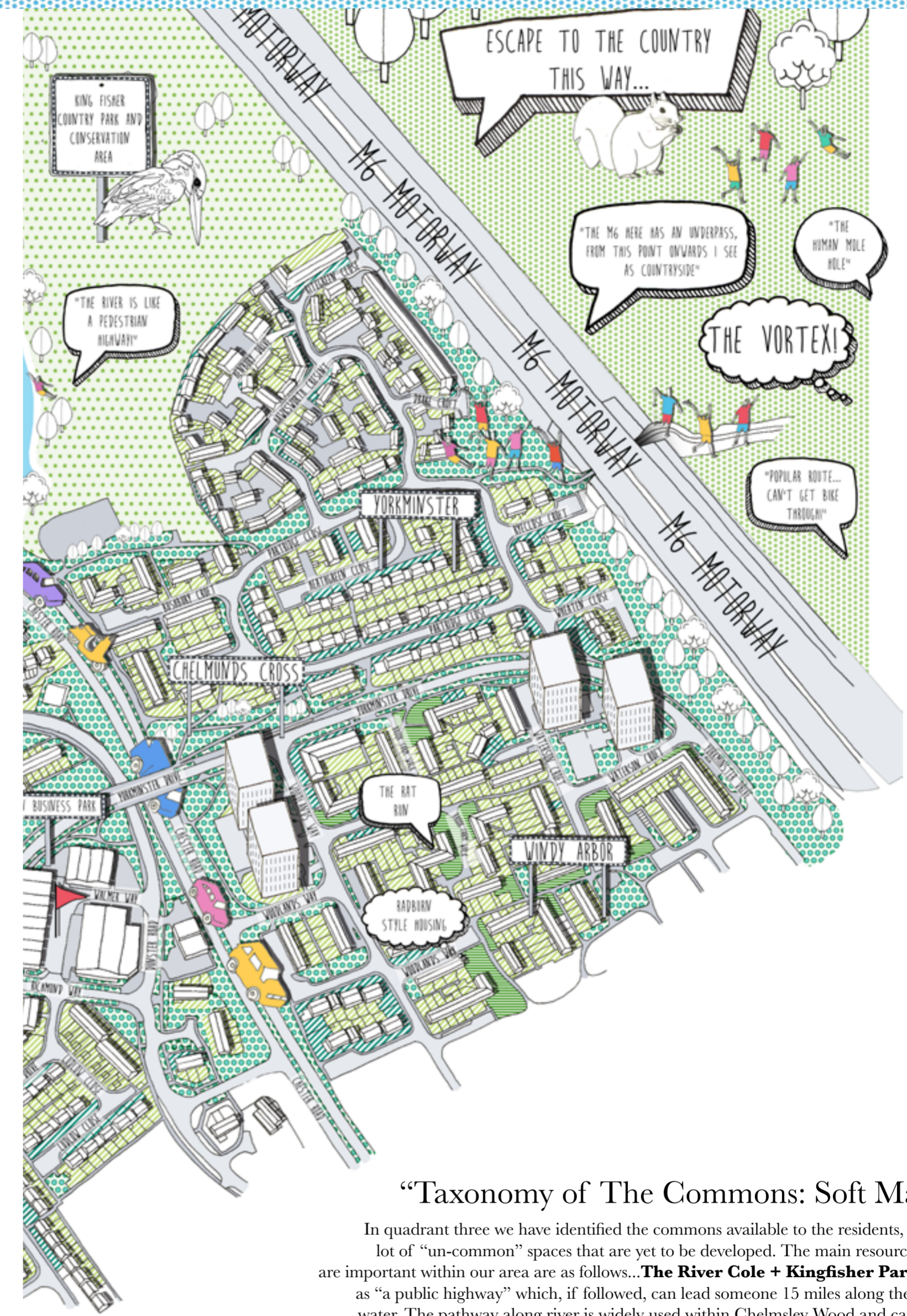
## 'Urban Flâneur + Participation'



### Reflections | Thesis Initial Ideas

The brief provided a framework to explore ideas surrounding housing and 'The Commons' within Chelmsley Wood. In combination with our explorations into structuralism, we began to explore Chelmsley Wood in a great level of detail, creating interventions which culminated in the folly project. Through the research obtained through our explorations and with the help of the B37 Project a level of understanding was forming a context upon which we could begin to base a thesis project. Through the development of participatory mapping processes, analysis of conventions & rituals, borders and boundaries, the importance in addressing themes of communality in architecture became apparent. The Thesis project will develop these findings further, drawing upon the knowledge obtained, to begin to develop an architectural programme to encompass these ideals.

# Taxonomy of 'The Commons'.

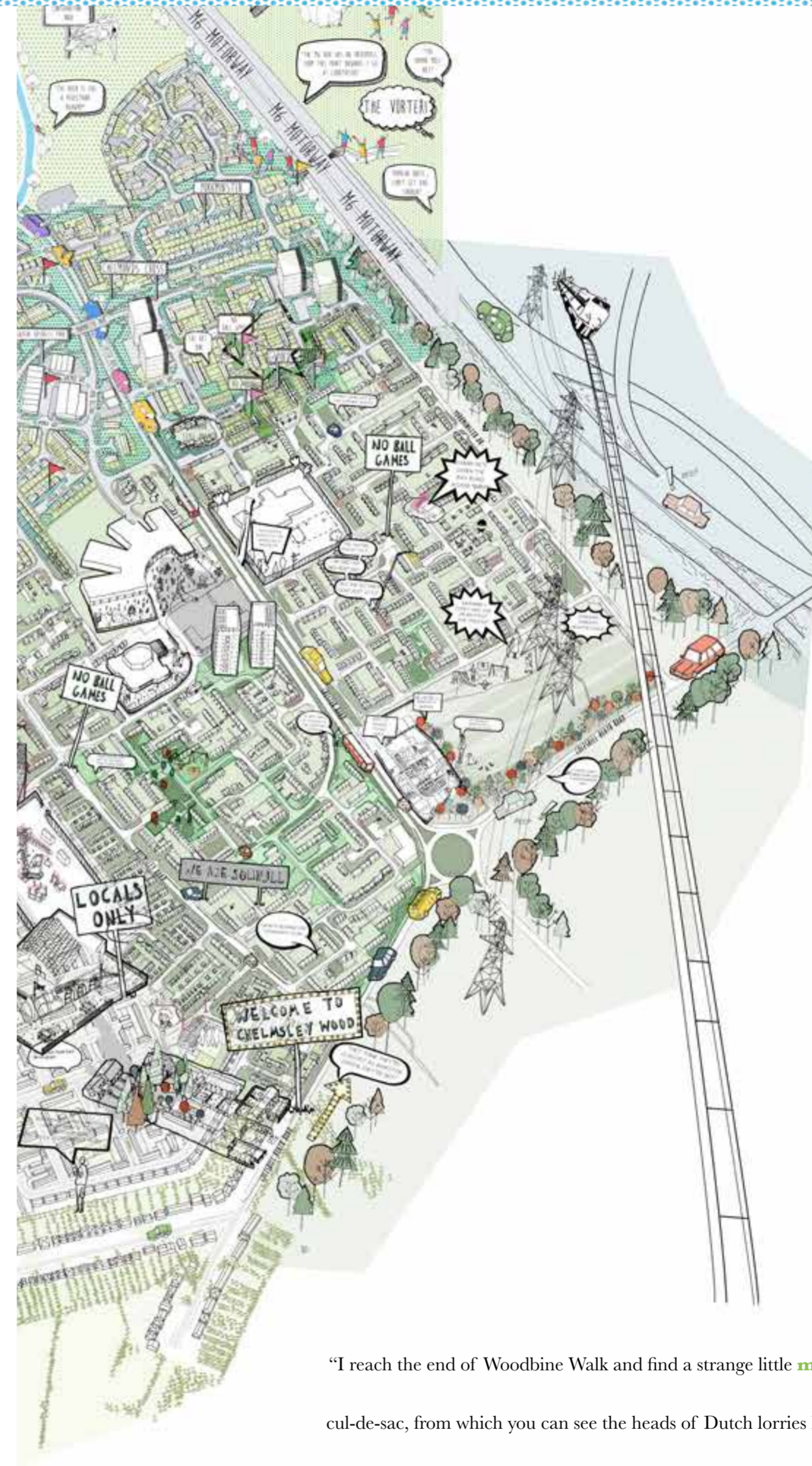


## “Taxonomy of The Commons: Soft Map”

In quadrant three we have identified the commons available to the residents, as well as a lot of “un-common” spaces that are yet to be developed. The main resources we feel are important within our area are as follows...**The River Cole + Kingfisher Park** - also described as “a public highway” which, if followed, can lead someone 15 miles along the path of the water. The pathway along river is widely used within Chelmsley Wood and can be used to lead you through almost all of quadrant three. Secondly, **Meriden Park** is a material common which has been co-created by the residents, and continues to be adapted as the needs of the user changes. “Any adventure playground that is finished is dead”. Our site area also includes a lot of informal **Open Green** spaces between the Radburn typology of housing, which is accessible to all. There are also many pleasures, politics and rituals within Chelmsley Wood such as **St Andrews Church, The Labour Club and the Public House**. Most important to our observations has been the **Countryside** which lies just outside of the M6 boundary. This space has been identified by many of the residents to hold sentimental value as an ‘escape to the country’, providing scenic views and a route to Colleshill, especially The Parish Church.

# Taxonomy of 'The Commons'.

A Map of Chelmsley Wood.



- Lynsey Hanley

"I reach the end of Woodbine Walk and find a strange little **mole-hole for humans** at the bottom of a cul-de-sac, from which you can see the heads of Dutch lorries heading north. There is a twenty-foot fence here that was intended to block the noise from the M6. It doesn't: all it does is tell you that here there is a wall you cannot climb. I walk closer to the mole-hole to inspect it: it's muddy and riven with the wheel marks of our old friend, the abandoned supermarket trolley. It opens out to a tunnel that burrows under the motorway, and **on the other side of it is open country**".

# The Image of 'The City'.

Kevin Lynch, 1960: Chapter 1, The Image of The Environment, P1-13.

## Legibility

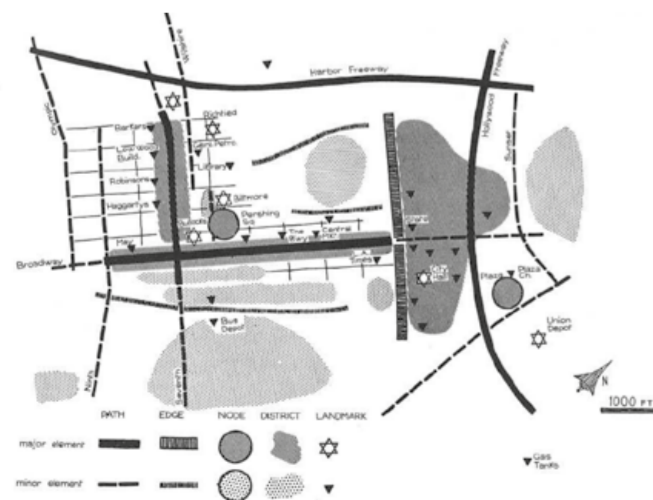
Lynch begins by stating *"Moving elements in a city, and in particular the people and their activities are as important as the stationary physical parts."* Circulation and navigation within a city, within Chelmsley Wood, or within the proposed thesis scheme, is a critical factor in what makes a place legible. *"We are not simply observers of this spectacle, but are ourselves a part of it, on the stage with the other participants."* (P.2) Lynch describes the city as ever changing, in a constant state of flux. The city is inhabited by a diverse mix of class and character and that builders are constantly at work modifying the city for their own personal gains. In a smaller scale this is true of Chelmsley Wood, and will be true of the proposed scheme. Similar to Alison Smithson's views of Mat-Building, the proposed scheme will be able to adapt and change to each users requirements. The challenge described within the text is how to design a sense of legibility and navigation into a place that is open to change. How can you design a scheme where by the inhabitant feels comfortable navigating the space and does not feel lost.

Lynch details the importance of clarity within a city, *"the ease with which its parts can be recognised and organised into a coherent pattern."* (P.3) Lynch links our ability to be able to structure and identify the environment which we are in, to our own feelings of security, safety, and feelings of unease if we are lost. *"A distinctive and legible environment not only offers security but also heightens the potential depth and intensity of human experience".* (P.5)

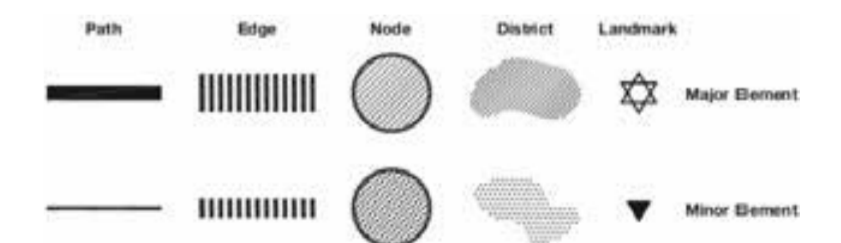
## Structure and Identity

An image can be analysed into three components, **'identify, structure and meaning'**. Lynch describes how when building cities it is better to focus on creating a image with physical clarity and allow the user to develop their own meaning without any direct guidance. In relation to the proposed scheme the image is instead the circulation routes, and the users orientation though them. Similar to Lynsey Hanley's journey through Chelmsley Wood, she was navigating using meaning/ or memory, associating images or buildings forming an internal map of where she was. The proposed scheme will adapt this method in terms of its hierarchy of routes, providing primary and

secondary corridors to allow for the instant recognition of where you may be within the site. Additionally through the design of each building, wall, open space, or sight lines, they will all create mental image to help the user navigate the scheme. The thesis project will analyse the development by mapping the process similar the Lynch maps below.



Lynch Map | Chelmsley Wood



# Folly for the 'Green Estate'.

“The ‘folly for the green estate’ is a group proposal for an intervention on site that responds to the research across the studio, one of four ‘structures’ that reveals the conditions of the site, responding directly to the readings of the precedents explored across the unit, and makes suggestions for change according to ideas of the commons”.

Through intensive research of Chelmsley Wood - especially Quadrant Three - the perfect site to propose a ‘Folly for the Green Estate’ was the location of the M6 underpass, and the countryside that follows once you have walked through. The underpass, to a lot of the residents - and even one of our key texts by Lynsey Hanley - has been identified as a key part of Chelmsley Wood, as through this underpass you travel through to open countryside, and a picturesque view of the much-loved Church within Coleshill. The community have even gone as far as to call the underpass a ‘vortex’ to open countryside, and many share fond memories of childhood spent within the open fields and the walk to Coleshill.

A lot of inspiration has been gathered for the Folly, especially through structuralist attitudes of repeating components, the use of reluctant materials and creating a space that the user can adapt. The key precedent being Diagoon House by Herman Hertzberger. We have used the floor plates and arrangement as an initial basis for forming the Folly, and the idea of refining one set component and repeating the element by rotating and mirroring to create a more organic form.

The purpose of the Folly is to create a space where, once the residents have ventured through the initial underpass, they now have a place to sit, relax and play. The use of reluctant materials gives the residents the opportunity to really put their stamp on the Folly with additions to suit their needs, such as an exhibition space for the many artists, a play space for children and an observatory for night-time viewing of astronomy. There have also been key viewports created throughout the structure, to frame picturesque views of the landscape and Church at Coleshill.

As the location of the Folly is where HS2 will eventually be built, it is also a way for the residents to put a stamp on their home and create something that HS2 will have to take in to account with its building, not just bypass. As time passes and the construction begins we see the residents being able to adapt the Folly to suit their needs.



Folly Proposal | Axonometric Views

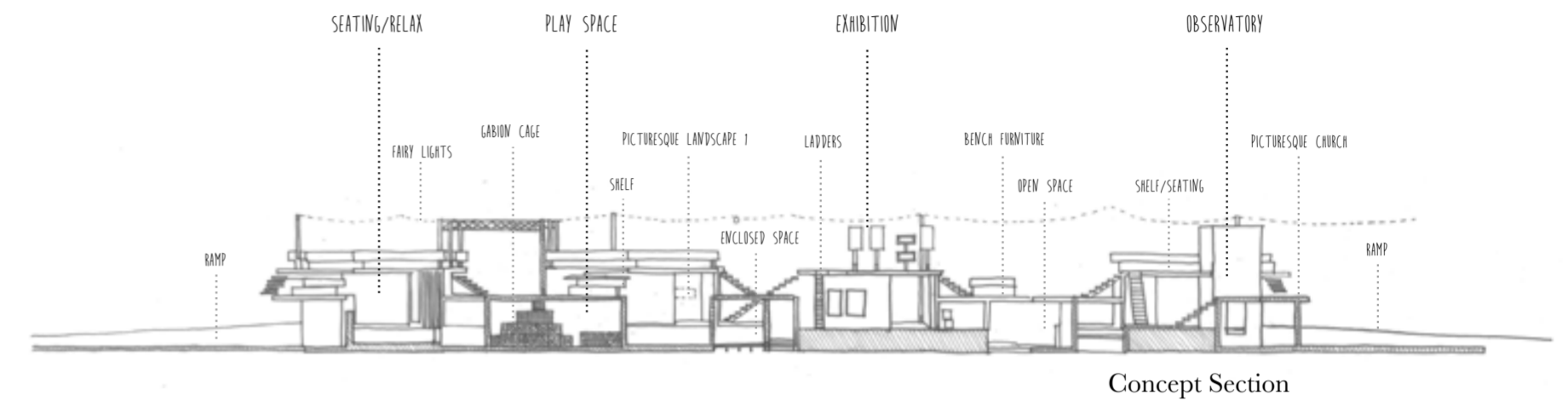


# Folly for the 'Green Estate'.

Seating & Play | Model & Visual Representation.



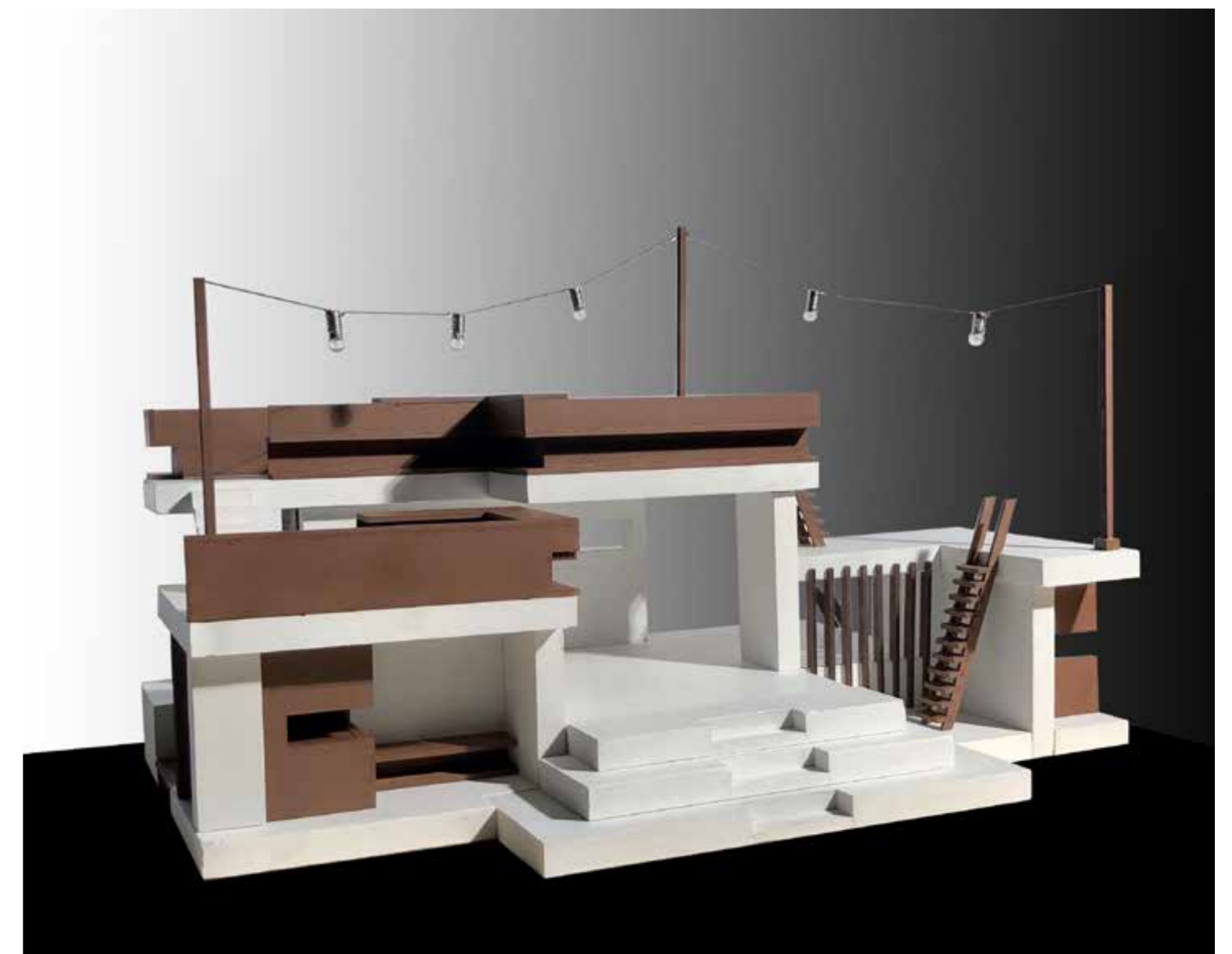
Proposed Elevation



Concept Section

Concept Sectional Model | Scale 1:20

Split Level Interactions





# The New Materialism.

How our relationship with the material world can change for the better.  
A. Simms & R. Potts, 2012.

## Old Materialism

*“Like an abusive relationship with the real world, materialism has become synonymous with consumerism – wasteful, debt-fuelled and ultimately unsatisfying. Yet, inescapably, we are part of the material world. How, then, can we develop a healthy connection to it?”*

Karl Marx pinpointed a false promise at the heart of material accumulation that even today whole cultures remain largely in denial of. He described the mechanisms of dissatisfaction that drive the spiral of demand for baubles and palaces, suggesting that, ‘A house may be large or small; as long as the neighbouring houses are equally small, it satisfies all social requirement for a dwelling. But let a palace arise beside the little house, and it shrinks the house to a hut.’

The Old Materialism explores comments made by Marx, Adam Smith & Thorstein Veblen detailing the ‘Storey of Stuff’, how our society has tended towards a wasteful consumerism which has continued to escalate through the twentieth century. The post war productive capacity, as well as the swathe of new oil discoveries in the 50’s & 60’s, global trade rocketed and the consumer debt bubble grew. **Between 1970 & 2009 the UK’s energy consumption grew at over 600%.** The unsustainability of the current consumerist model is depleating the earths resources.

## New Materialism

The concept of living more sustainably, being ‘green’ or environmental’ has been transformed within society as to be against progress. George Osborne’s famous quote of ‘environmental taliban’ has placed fear and doubt into the concepts of living simply and ‘Less is More’. The document explores the ironies that nothing has driven actual austerity more than the collapse of the model of debt fuelled over consumption.

When it comes to consumer issues, the green agenda has been distilled for decades. Instead of a ‘throwaway’ society (in every sense of the word), we know we should move to one in which value is created with more of a ‘closed-loop’ of material use in which we repair, reduce, reuse, recycle and all the other appropriate actions pre xed with ‘re’. The tide is turning. Economic necessity and a rejection of impoverished consumerism is making re-skilling the rage. One tabloid newspaper called sharing ‘The new rock’n’roll’. Apart from deeper, more lasting satisfaction, learning new crafts and skills not only equips us for a world in transition, but also helps us connect to it. Understanding how to work with materials.



Common Tools & Resources

## A Way Ahead: The New Materialism as a Living Manifesto

Less is More | The New Materialism Manifesto:

- **Liking ‘stuff’ is okay, healthy even.** We can learn to love and find pleasure in the material world.
- Wherever practical and possible **develop lasting relationships with things** by having and making nothing that is designed to last less than 10 years.
- **Get to know things.** Before you acquire something, find out at least three things about it.
- **Love stuff.** Mend, maintain and re-use things until it is no longer possible, then recycle them.
- **Get active.** Only acquire something new if you are also learning a new, useful skill.
- **Share.** Look at all your things, think about what your friends might need or could benefit from, and share at least one thing a week.

## Reflections & Thesis Integrations

The concepts discussed and proposed within The New Materialism are important factors which to address within the Thesis project. Ideas of sustainability, responsibility towards the use of things, Less is More. The thesis project will seek to import these ideals, designing facilities of production through



# Thesis Statement.

## Thesis Abstract

*How can a programme of infrastructure fiction be sensitively introduced to an urban context ; that critically responds to the needs of the community, whilst providing a richness of expression that reflects the past?*

The thesis project seeks to build an argument for the implementation of a new form of community. One with renewed ideals of ownership, community living, affordability, shared resources and the integration of various forms of social and physical infrastructure. A community that can directly assist in improving the lives of its residents but also provide benefits to the centre of Chelmsley Wood.

The Speculations:1 project has provided a detailed exploration into the site and the surrounding context of Chelmsley Wood. Whilst analysis of the principles of Structuralism, Housing and The Commons have provided key precedent studies in which to help define and shape the project.

The projects intention is to explore ideals of infrastructure fiction based on new forms of social and physical strategies defined by the concept of the 'Kitchen Garden'. The project will be influenced by structuralist principles of Mat Building and precedent studies of The Free University of Berlin by Candilis and Álvaro Siza's Quinta Da Malagueira Housing Scheme. Themes of The Commons will be explored by integrating The New Materialism's Living Manifesto to direct a sustainable agenda of self sufficiency and the concept of 'Less is More' Ideals of Community Participation explore with the B37 project and the Folly for the Green Estate will provide a context which will help inform the project.

The materiality of the project will be explored through the concept of the 'Kitchen Garden'. The historic use of brickwork creating walled gardens to help with the growth of fruit&vegetables will lead to the creation of a food infrastructure which will help support each resident within the community. The authenticity of brickwork will be explored through the precedent study of Gottlieb Paludan Architects, who challenge the modern use of the material and suggest more traditional uses the help reflect a richness of expression of the past. This will form a new physical infrastructure fiction taking the form of utility provision. Integrating Siza's concept of aqueducts to provide the required water and utility provisions to the community and their gardens.

Finally the methods of modularisation, adaptability and flexibility of physical accommodation will be explored using the researched principles of Team 10, and the precedent studies of the Quinta Da Malagueira, Diagoon House by Hertzberger and Cadilis's Free University of Berlin.

## What |

The project will create a new form of community development providing affordable, modular accommodation based upon the concept of the 'Kitchen Garden'. A complex of walled gardens will define a mix of public and private spaces. Organised and structured through the orientation of the sun and through the use of primary and secondary circulation routes passing through the site. Different levels and conditions will define the scheme. These layers will consist of Circulation routes, Modular Inhabitation Concepts , Social Infrastructures such as shared public facilities and communal areas and Physical Infrastructures such as the delivery of water for irrigation etc.

## How |

Detailed analysis of the precedent studies within this document will help to create a series of defined conditions which will be used to create the project brief. Through a series of Polyvalence methods of model making and drawn analysis the project will under go a large degree of iteration to strengthen the desired concepts.

## Where |

The site within the centre of Chelmsley Wood is approximately 1.85ha. It constitutes a large urban area and brown field site which has the opportunity to create a new community which must meet the needs of the residents but also the requirements of the wider community. Currently the site consists of an old police station, job centre, sorting office and car park which was the site of the old library. All these buildings have been marked for demolition by the council with current plans for a new housing scheme to be built. It is hoped this thesis project could potentially offer an alternative solution to its future development.

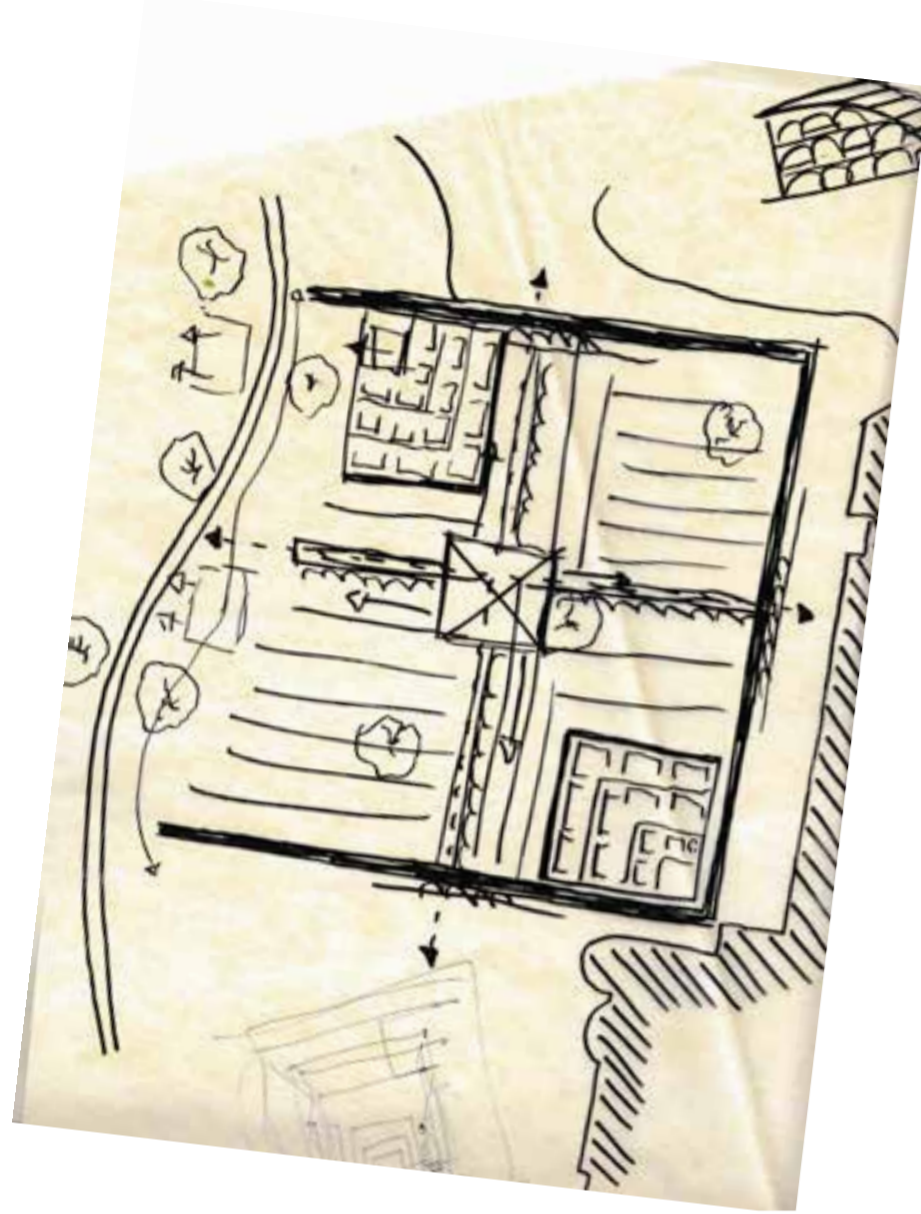
## When |

Enabling works and demolitions could effectively begin immediately. However integrating themes of The Commons, a large degree of community participation would be designed in to the scheme, similar to the precedent studies of Hertzberger. This would take a great deal of time to conduct and to implement the publics and residents requests into the scheme.

## Why |

There is a particular need to address the need for affordable housing. The demographics of Chelmsley Wood show a high level of young families with single parent occupancy. The opportunity exists to create an affordable housing scheme that introduces new concepts based on The Commons as well as creating new communal areas for the wider public to enjoy. The projects proposals could be presented to potential residents, giving them the opportunity to buy into the project and its ideals, in order to maximise the potential for the successful growth of the new community.

# Thesis Statement.



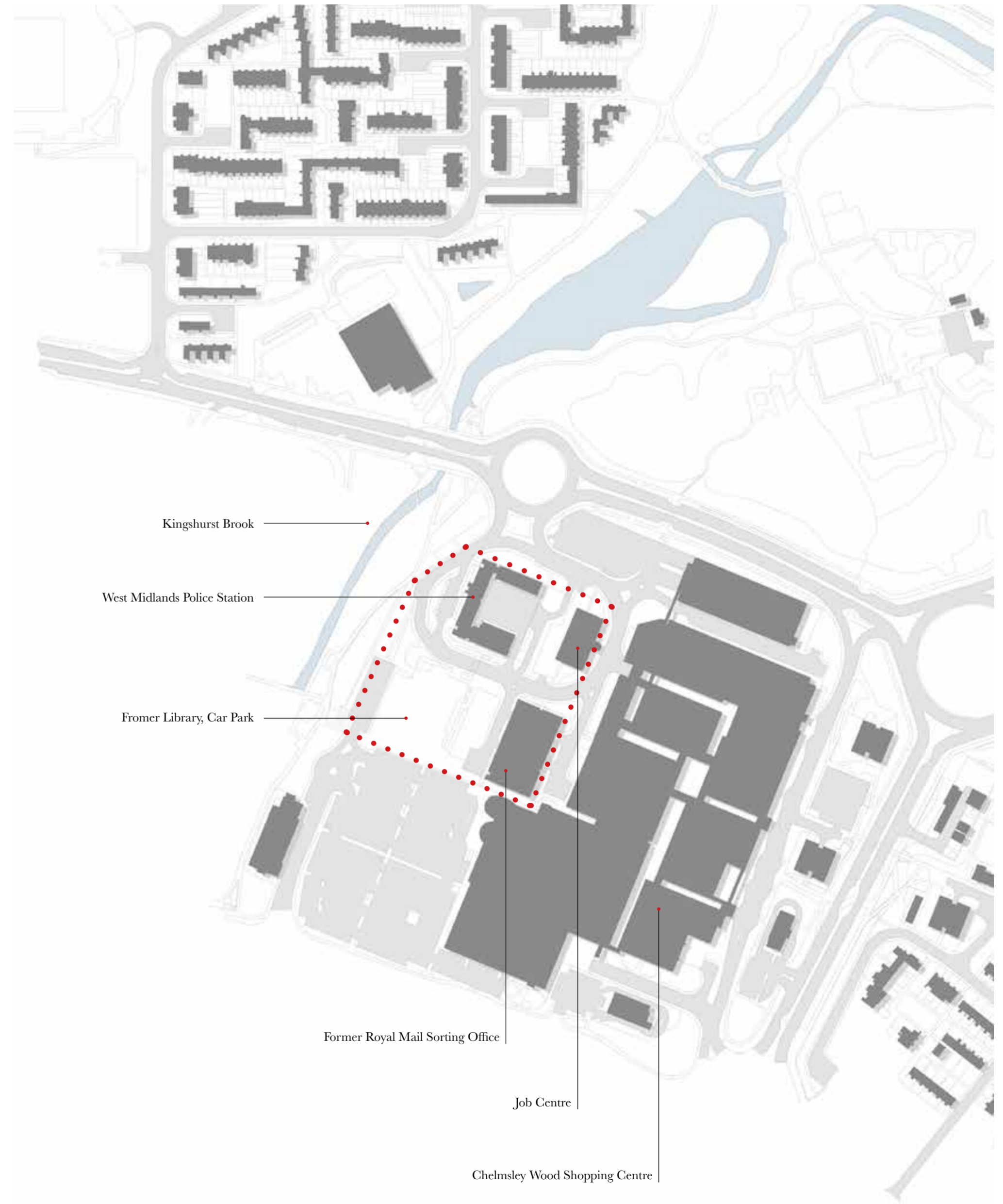
## Concept Sketch

Draft concept sketch detailing the potential structuralist layered approach to the sites design. Incorporating primary and secondary circulation routes with various hierarchies of public and private spaces.



## Concept Sketch

The project concept proposes the modular integration of walled garden and housing, each with the ability to grow. A grid like pattern draws inspiration from the structuralist principles of the Free University of Berlin, and provides conditions to design a mix of public and private spaces logically with an ordered approach.



# Quinta Da Malagueira.

Álvaro Siza, 1977, Évora Portugal.

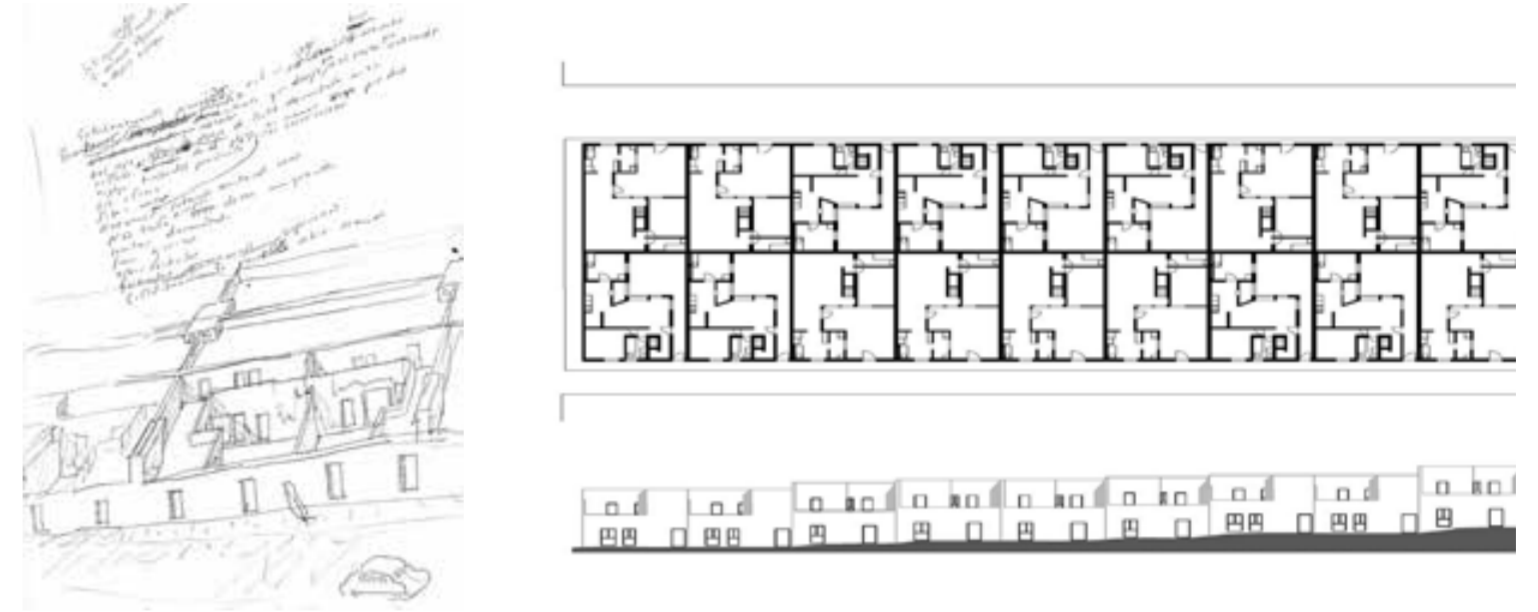
## Quinta Da Malagueira.

Malagueira was Siza's third housing project and was designed as a suburban community on the outskirts of Évora, a town east of Lisbon. The housing scheme is a large low-rise, high-density development of about 1200 dwellings. The development was built over a twenty year period on a 27 hectare site. The scheme was formed from a series of dwelling types that could be customised and adapted to the owners requirements but all shared a similar architectural vocabulary. A sparse cubic form is used to develop the geometry and repetitive order.

The scheme was designed under very difficult political and economic conditions which Siza adapted to and successfully utilised just a few basic design strategies and elements to create a powerful collective result. Malagueira is a collective ownership community with Siza rejecting the term 'social housing' stating that all housing is social. The development was organised as a gridiron pattern, with a new street layout forming a tartan like system of parallel rows of streets and alley ways with back to back patio/courtyard housing. The meandering interstitial spaces between neighbourhoods are part of the public open spaces that followed pre-existing paths and other features in the landscape. These areas between built-up regular clusters of houses are used for community uses, shopping, parking, recreation, and pedestrian circulation.

A system of raised concrete aqueducts connects the separate residential clusters together and provides the infrastructure for water and electric distribution. Aqueducts were a feature of the Roman and later of the Renaissance era and remains of these are still visible in Évora. This established a precedent for a system of aqueducts to be used to distribute water in the new community. Raised channels made of exposed concrete block that are supported on columns forming a more-or-less continuous loggia structure that connects neighborhoods while servicing each house within the neighborhood clusters. The aqueduct system was justified on the basis of cost, but it also functions as a large-scale planning device that connects neighborhoods and forms public arcades defining entrances to groups of shops and other public facilities. Because it is built to the height of the roof of the second floor and is left as unfinished concrete, it provides visual and formal relief to the relentless, repetitive white walls of the dwellings.

The dwellings at Malagueira are patio or atrium types with an "ell"-shaped group of rooms on two sides of a small interior patio. There are two similar types, both built on an 8m x 12m plot, one with the courtyard in front and the other with the courtyard at the rear. Both have living, dining and kitchen spaces at the courtyard level with an interior stair leading to bedrooms and terraces above. The two types can be combined in several different ways resulting in different patterns of solid and void.



# The Strategies of Mat-Building.

## Mat-Building.

Dismantling and reframing programme and composition, mat-building envisaged architecture as a dynamic, flexible armature

We owe the term mat-building to Alison Smithson. Her article 'How to Recognise and Read Mat-Building. Mainstream Architecture as it has Developed Towards the Mat-Building' in *Architectural Design* of September 1974 included a definition of this type of building and an extensive list of works and projects from the 1950s to the '70s related to it. Several studies have recently revived the interest in this topic.<sup>1</sup> As in the case of the buildings themselves, the appeal of re-reading Smithson's article lies in its open and flexible theoretical framing.

Smithson reviewed the items discussed at Team 10 meetings, pointing out that mat-buildings were not dependent on a specific architectural language, and identifying certain contemporary works as offshoots of this phenomenon. 'Mainstream mat-building became visible, however, with the completion of the Berlin Free University', she said – but what are the characteristic features of a mat-building? We aim to answer this question by analysing five case studies: four projects mentioned by Alison Smithson and another in our own locale of Valencia. Our research, which gave rise to an exhibition, explains and provides clear examples of the main mat-building strategies. The basic hypothesis focused on three compositional principles: metrics, programme and place.

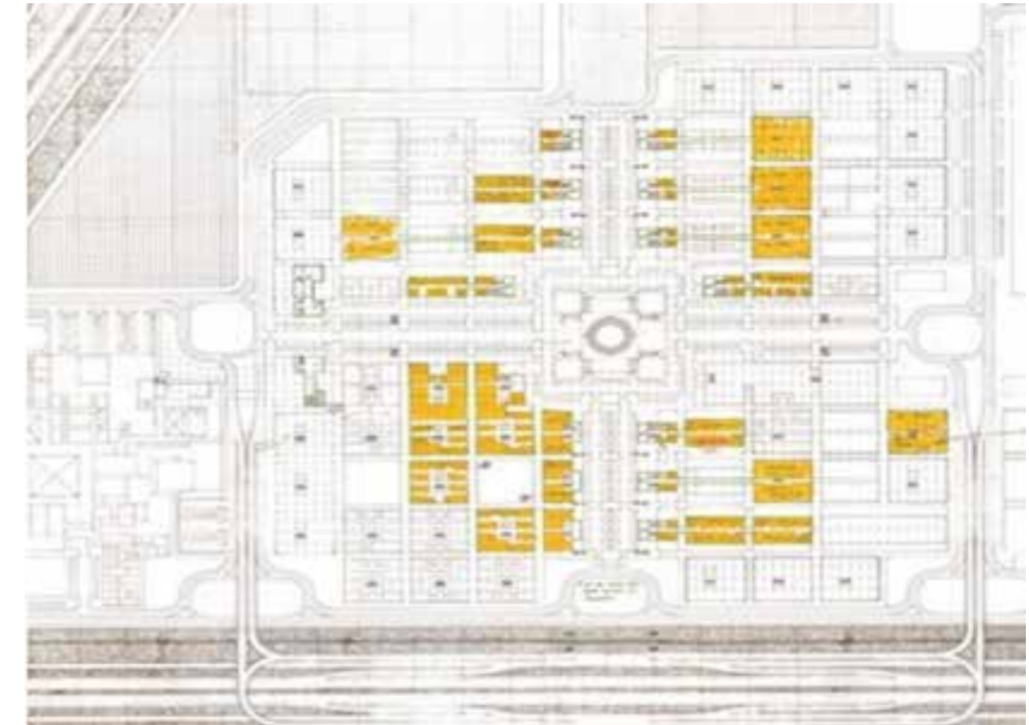
Many of Candilis, Josic and Woods' aspirations finally materialised in the paradigmatic Free University of Berlin whose open-plan design – typical of the universities in the 1960s – matched the characteristics of mat-building perfectly. This university is an exceptional example: its construction involved the French engineer Jean Prouvé and was overseen by the Berlin studio run by Manfred Schiedhelm, in collaboration with the American architect Shadrach Woods. In addition, the university was reconditioned and enlarged with a library by Foster + Partners, resulting in new reviews.

**'In the Free University of Berlin, the module is a function of time: 65.63 metres (another Modulor dimension), is roughly the distance covered by a one-minute walk'**

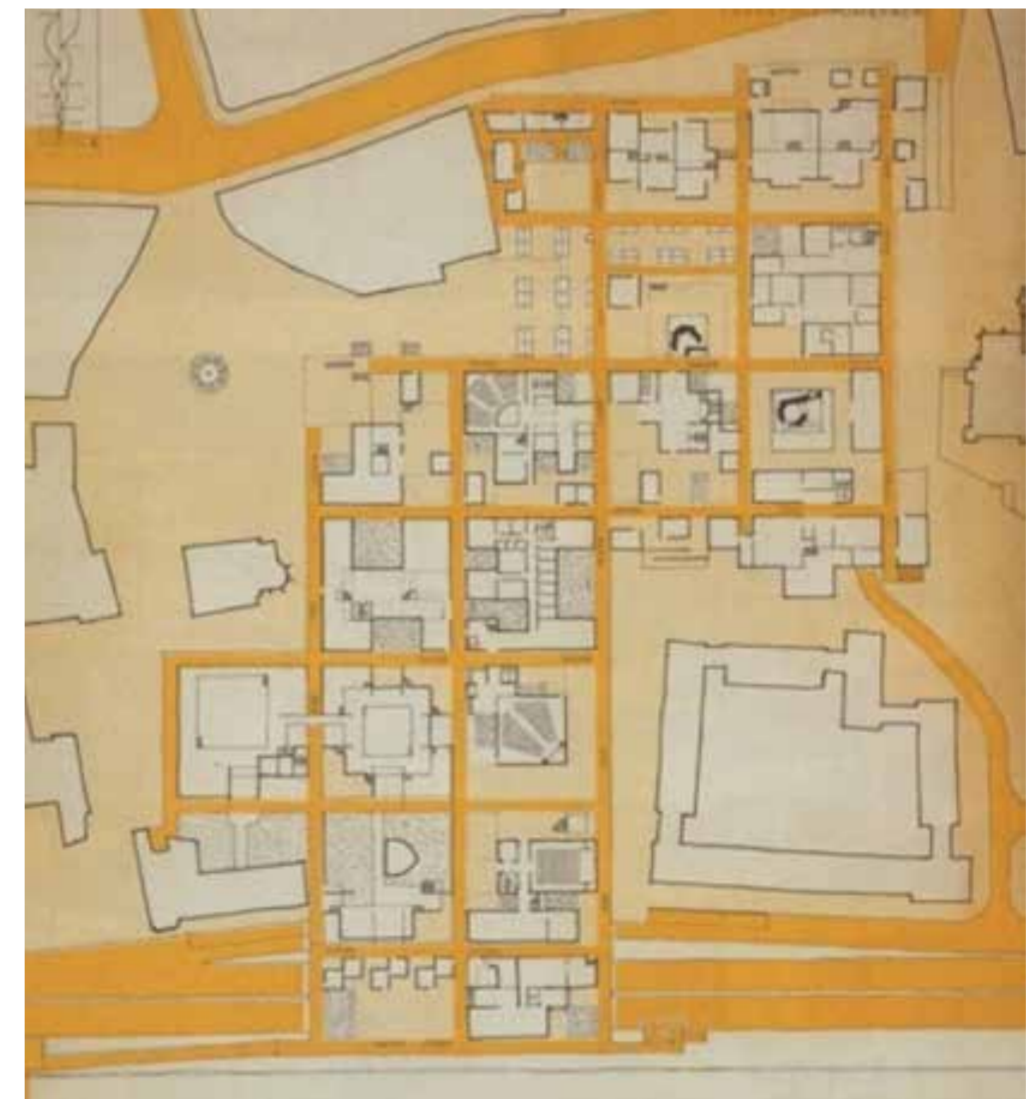
**Compositional Principles:**

- 1 | Metrics
- 2 | Programme
- 3 | Place

The Thesis proposals will seek to capture these methods of compositional design within the work for the proposed Chelmsley Wood scheme.



Completed in 1974, the landscaping plan of the university of Valencia by L35 Arquitectos typifies and rationalises the mat-building ideals of flexibility and growth.



1963 competition drawing for the reconstruction of the centre of Frankfurt, by Candilis, Josic, Woods and Scheidhelm.

# Unsentimental Brickwork.



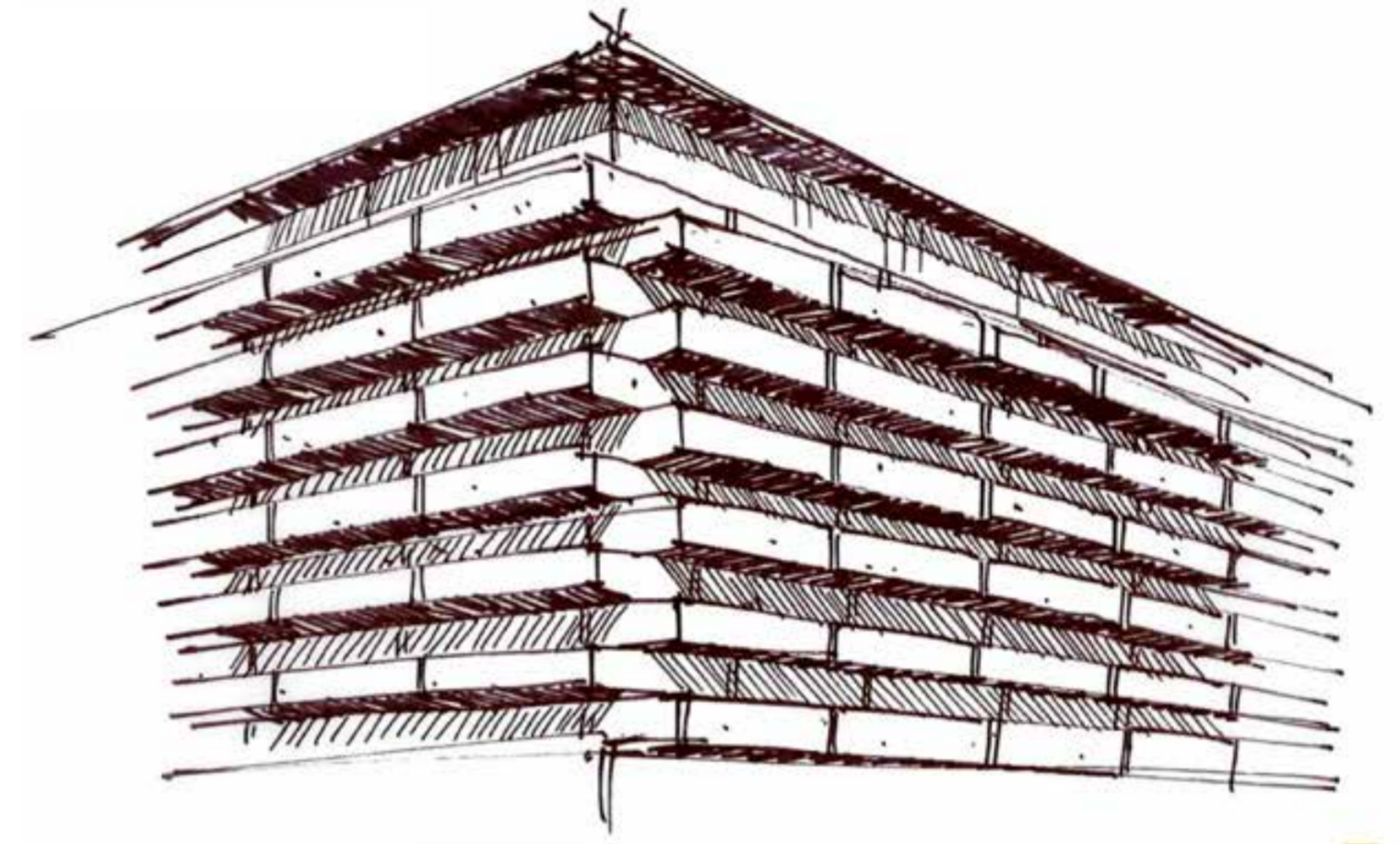
“The non-bearing brick-faced façade wall has prevailed and today we miss the structural logic that helped give the masonry of the past its rich expression. By following the structural rules of the brick-faced façade – can we give the masonry of today a richness in expression that can match the past?”

Gottlieb Paludan Architects

The use of brick as a material within Chelmsley Wood directly relates to the town's creation and the mass slum clearance within Birmingham. The traditional brick terraced housing of the 19th century, the industrial nature of the material, the loss of communities as they moved out of the city all inform the choice of material.

The design of the proposed scheme would explore the concept of 'Unsentimental Brickwork' and the issues of authenticity of materials. The Victorian period within the United Kingdom as well as Danish and North European masonry all held a similar richness of architectural expression.

The challenge and critical approach to the thesis would explore how genuinely contemporary architecture needs to react to the fact that it is rare for modern brickwork to be structurally load-bearing and how this could be perceived as a loss of authenticity and quality of the architectural form.



## Unsentimental Brickwork

The non-bearing brick-faced façade wall has prevailed and today we miss the structural logic that helped give the masonry of the past its rich expression. By following the structural rules of the brick-faced façade – can we give the masonry of today a richness in expression that can match the past? For Gottlieb Paludan Architects, this has long been a central, professional challenge.

How do you conceive expert ideas as to how to achieve a similar richness of architectural expression found in earlier Danish and North European masonry traditions? Genuinely contemporary architecture should react to the fact that it is rare for modern brickwork to be structurally load-bearing.

The building industry has used facings since the 1920s. The oil crisis of 1973 definitively established the division of the walls in a load-bearing inner leaf and a non-bearing outer leaf. Though connected by wire ties, they live quite separate lives. The inner leaf has become the preserve of the concrete industry. For the outer leaf - at least in a Danish context - bricks are favoured by virtue of its unique role in the country's building traditions.

# ‘Structuralism, Housing + The Commons’

Adam Richards | S11733895 | Jan. 2018 | ARC7208