

# **MICRO-LIVING & THE HUMAN EXPERIENCE**

A PHENOMENOLOGICAL APPROACH TO WELL-BEING

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What strategies can be implemented to achieve optimal well-being for micro-flat users?

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The 'micro-living' trend has catalysed in response to urban, high-density living on a finite planet. In principle, this housing style aims to address socio-economic struggles and environmental damages as a result of residential developments. However, current micro-flats available in London, England serve as inadequate housing options due to the harmful effects on user well-being. Negative user well-being is argued to result from unintelligent, function-centric design and a lack of shared communal spaces. This poses the question - what strategies can be implemented to achieve optimal well-being for micro-flat users?

Through photo elicitation survey, in-depth focus group discussion, visual analysis of micro-flat and micro-co-living apartment tower case studies, and an examination of the 7 Types of Rest theory, I propose two strategies to achieve optimal well-being for micro-flat users: (1) the application of phenomenological design, and therefore human-centric design, to the inhabiting spaces, and (2) the provision of shared communal spaces. I put forth a design proposal for a micro-co-living apartment tower that incorporates phenomenological human-centric design, and provides shared communal spaces informed by the theory of 7 Types of Rest, in order to achieve optimal user well-being. The proposed design solution offered in this thesis suggests the challenges current micro-flat options face can be overcome, and an optimistic and bright future for micro living is possible, which will provide genuine choices within the landscape of housing options.

## 1. THE MODERN CRISIS

PAGE 10

Introduces the contemporary issues that catalysed the concept of 'micro-living'. Uncovers the negative consequences of urban sprawl with respect to housing, including socio-economic struggles and environmental damages as a direct result of residential developments.

## 2. THE CHALLENGES OF CONSTRAINT

PAGE 16

Highlights the negative effects users face while living in function-centric micro-flats. Recognises the need for improvement of micro-flats by placing emphasis on living conditions despite a sacrifice of square metres, in order to improve the overall well-being of inhabiting users.

## 3. THE CASE FOR PHENOMENOLOGY

PAGE 20

Briefly introduces and defines the design philosophy 'phenomenology' in the context of architecture and design. Fundamental principles of phenomenological design are presented and supported by research, which will inform a proposed solution aimed to improve user well-being.

## 4. THE USER AND THE PRIVATE SPACE

PAGE 24

Visual analysis of a case study, by way of interior photographs, aims to uncover a correlation between improved user well-being and phenomenologically designed micro-spaces. Establishes improved living conditions through human-centric design is key in supporting user well-being.

## 6. THE PROTOTYPE

PAGE 40

Proposes a case study in the form of a micro-co-living apartment tower that establishes optimal user well-being through phenomenological design and the provision of shared communal spaces. The design proposal is informed by research and analysis gathered from previous chapters.

## 5. THE USER AND THE SHARED SPACE

PAGE 32

Proposes phenomenology alone is not sufficient in providing optimal user well-being for micro-flat users, nor can it be classified as human-centric design without the aspect of socialisation. Analyses the importance of shared communal spaces, supported by the theory of 7 types of rest.

## 7. THE FUTURE OF MICRO

PAGE 50

Analyses a proposed micro-living tower case study by Proctor & Shaw. Highlights the current negative stigma placed on micro-living, and examines the possibility of a positive shift in mindset with regards to micro-living as one sustainable design solution for the future of inner-city housing.

## 00 / INTRODUCTION

**MICRO-LIVING**

The practice of residing in a residential property that does not meet current UK minimum space standards (BPF, 2018).

The trend of micro-living has increased in popularity as a response to urban, high-density living on a finite planet. While in principle this emerging housing idea seems a viable solution to several contemporary issues, such as socio-economic struggles and environmental damages, current executions in London seem to be lacking.

Micro-flats, smaller than average space saving residences, have been proposed as a solution to urban sprawl. However, a majority of micro-flats on the London market induce negative well-being for inhabitants, namely due to unintelligent, function-centric design and a lack of shared communal spaces. This lends to the argument that current proposals for micro-living within London are inadequate and do not offer a valuable solution for urban living.

This dissertation sets out to answer the question - what strategies can be implemented to achieve optimal well-being for micro-flat users? I first propose that human-centric design informed by the philosophy 'phenomenology' can improve a users well-being while inhabiting a micro-flat. However, addressing interior and spatial design alone is not sufficient in ensuring optimal user well-being.

**FUNCTION-CENTRIC DESIGN**

A non-holistic design approach that emphasises practicality and intended use.

**HUMAN-CENTRIC DESIGN**

A holistic design approach that considers physiological and psychological impact upon the spaces user.

I further propose that providing shared communal spaces for micro-flat users, informed by the 7 Types of Rest theory, can support optimal well-being.

The combination of phenomenologically designed interiors along with shared communal spaces have significant potential for ensuring optimal well-being for micro-flat users.

Investigations relating to these claims are carried out through qualitative research methods, in the form of photo elicitation surveys and visual analysis of case studies.

**“IN ORDER TO DESIGN BUILDINGS WITH A SENSUOUS CONNECTION TO LIFE, ONE MUST THINK IN A WAY THAT GOES FAR BEYOND FORM AND CONSTRUCTION.”**

FIGURE 1  
Quote by Peter Zumthor.

I have designed the photo elicitation survey with the aim of investigating general attitudes towards micro-living. This will be carried out with a focus group of 7 participants using a close, familiar network of known respondents to ensure ease of communication, and mitigate any expected timely recruitment issues that time constraints will not allow for. Case studies for visual analysis have been specifically chosen to better understand the impact phenomenologically designed interiors have on inhabiting users. The research gathered from these methods aim to provide support to the arguments put forth in

this dissertation, as well as inform my design proposal for improved micro-living. The research presented in this dissertation, as well as my proposed design for a micro-co-living tower, has two aims; firstly, to propose a design solution that ensures optimal user well-being for micro-flat inhabitants, and secondly, to improve people's perception of micro-living. The hope is that there will be a shift in mindset, so that micro-living is no longer seen as an inevitable negative outcome as a result of poor housing options in London, but instead will be seen as a positive choice that people make to inhabit such spaces.

**MICRO-CO-LIVING**

Purpose-built and managed developments, that do not conform to current UK minimum space standards, and include a combination of personal and shared amenity space (BPF, 2018).

**PHENOMENOLOGY**

A philosophical approach to design that considers the influence the built environment has on the sensuous experience of the user.

# 1

## A MODERN CRISIS

01/ CHAPTER ONE

**ECOLOGICAL OVERSHOOT**  
Human demand on natural resources surpasses the Earth's capacity to replenish the resources (WWF, 2020).

**EARTH'S REGENERATIVE CAPACITY**  
Earth's ability to regenerate natural resources and maintain balance within ecosystems (WWF, 2020).

01 / A MODERN CRISIS

The modern crisis that London's housing market faces is driven by contemporary issues, which have led to an increase in popularity of a concept known as 'micro-living'.

**SOCIO-ECONOMIC STRUGGLES**

Urban sprawl has resulted in an influx of people migrating to cities in search of opportunities that offer a better quality of life, however cities are ill-equipped to supply the populations needs - in London's case, housing. An increase in demand for housing as a result of urban sprawl has been met with increased rental prices, and subsequently a lack of supply of affordable dwelling options (Nelson, 2018).

**ENVIRONMENTAL DAMAGES**

The current approach London takes towards housing uses space inefficiently. Allocating a relatively large number of square metres per person challenges the earth's resources, such that residential developments contribute significantly to resource depletion and global carbon emissions. The threat of overconsumption is no longer a threat; ecological overshoot is a pressing matter - especially with regards to housing projects. It is unsustainable to continue to build residential developments in the same manner that is currently being done, as humanity has been and still is consuming at rates that far supersede the earth's regenerative capacity (Nelson, 2018).

**“THERE IS NO SUSTAINABLE ARCHITECTURE - THERE IS ONLY GOOD ARCHITECTURE. THERE ARE ALWAYS PROBLEMS WE MUST NOT NEGLECT. FOR EXAMPLE, ENERGY, RESOURCES, COSTS, SOCIAL ASPECTS - ONE MUST ALWAYS PAY ATTENTION TO ALL THESE.”**

**FIGURE 2**  
Quote by Eduardo Souto de Moura.

**SOLUTION ROOTED IN CORRUPTION**

In response to the aforementioned contemporary issues, developers and landlords have begun to offer spaces that have rapidly decreased in size compared to previous years, advertised as 'micro-flats'. Offering a relatively smaller space per person seems an agreeable solution to the housing crisis Londoner's face for several reasons. Firstly, it could offer enough supply to potentially alleviate high demand for housing in the inner city. Secondly, unaffordable prices could perhaps be tackled as it is reasonable to expect a reduced cost for a smaller living space. Thirdly, using fewer resources in the construction of these smaller residences could combat environmental pressures by reducing

over-consumption, and instead building to reflect changes needed to reduce ecological overshoot.

However, unprecedented events have led to a situation wherein inflation and greed catalysed a movement producing micro-flats that utilise space inefficiently and distribute resources inappropriately, resulting in unintelligent design. This combination has created living conditions that do not support positive psychological and physiological user well-being.



FIGURE 3  
Quote by leoh Ming Pei.

“ARCHITECTURE IS THE  
VERY MIRROR OF LIFE.  
YOU ONLY HAVE TO CAST  
YOUR EYES ON BUILD-  
INGS TO FEEL THE PRES-  
ENCE OF THE PAST, THE  
SPIRIT OF A PLACE; THEY  
ARE THE REFLECTION OF  
SOCIETY.

Arguably, the micro-flats available on the London market are inadequate and cannot be proposed as a solution for the housing crisis, such that the current approach taken to the design of these micro-flats can have harmful effects on the inhabitants well-being. If individuals' well-being experiences a significant decline, to the point where it becomes predominantly negative, it is worth considering the chain reaction for society as a whole. It is chal-  
lenging for a population filled with

individuals whose well-being is not properly supported in their place of living to make positive contributions to their community, work, and personal life. Negative well-being of society as a whole could harm social cohesion, potentially resulting in an increase in social issues such as crime, poverty, substance abuse, et cetera. It is therefore imperative for housing developments to prioritise spaces that foster positive well-being.



# 2

## CHALLENGES OF CONSTRAINT

02/ CHAPTER TWO

## 02 / CHALLENGES OF CONSTRAINT

### HIDDEN HEALTH RISKS

Research suggests the potential health risks of long-term inhabitation of a micro-flat might outweigh the benefits the solution proposes. One potential risk includes the issue of crowding and claustrophobia. The issue of crowding is present within micro-flats as the inhabitant is challenged by the constraint pieces of furniture and personal belongings can have, leading the user to experience claustrophobia. Research has shown that residential crowding can elevate physiological stress (Evans, 2003). Furthermore, high-density living environments can bring about different emotional states for men and women; men have been shown to experience withdrawal and aggression, and women tend to experience depression (Regoeczi, 2008).

### INTERACTION OR INCONVENIENCE

Many have proposed modular or interactive furniture as a way to combat claustrophobia, such as the Murphy bed. However, what seems like a good solution at first quickly turns to inconvenience, as users tend to dislike adding extra steps into their routine, such as folding away a Murphy bed (Urist, 2013). These inconveniences deter

#### MURPHY BED

A bed that can be folded into the wall when not in use.

people from interacting with the furniture, which eventually harnesses the same claustrophobic effects as non-interactive furniture.

### A MATCH FOR SOME, NOT FOR ALL

While micro-flats could be appropriate for young professionals opting for a smaller space as opposed to shared housing, micro-living might not be a suitable option for individuals with different lifestyles. For instance, children living in constrained spaces lack a fundamental sense of privacy, leaving them feeling withdrawn, unable to concentrate or study to the fullest potential, and having trouble in social settings (Urist, 2013), which could have detrimental implications for opportunities presented in adulthood.

### FUNCTIONALITY OVER IDENTITY

A user's home serves as an important space in communicating personal identity through one's possessions (or lack of), also known as 'identity claims', says psychology professor Samuel Gosling (Urist, 2013). Research has shown that feelings of happiness arise when individuals bring others to their personal space and demonstrate their identity claims. Micro-flats may serve as inappropriate spaces to host guests - therefore, the demonstration of identity claims might not be achieved. Moreover, most intelligent

design for constrained spaces focuses on functional needs - emphasis is placed on ensuring enough room for the essential furniture and appliances one needs to live comfortably. Gosling argues this makes it difficult to fulfil psychological needs that a home requires, such as room for self-expression through personal belongings or room for rest and relaxation (Urist, 2013). With such a strong emphasis on functionality, the user's psychological needs are disregarded during the design process, which inevitably leads to decreased user well-being.

### THE MYTH OF MORE

A common assumption is that there is a positive correlation between size of living space and user well-being, however, research highlights there is only an association. Research concluded that size of dwelling didn't have a causal effect on user well-being, however an asymmetrical relationship is possible - an increased size of dwelling could increase user well-being, but a decreased size of dwelling doesn't necessarily decrease user well-being (Foye, 2016).

This is possibly due to the fact that a decreased dwelling size doesn't necessarily mean decreased living conditions, as hypothesised by Eric Bunge, co-founder of nArchitects (Urist, 2013). Perhaps the larger dwelling does not provide design elements that induce positive well-being, such as sufficient natural light, compared to a smaller dwelling. In this situation, living conditions are increased in the space that sacrifices the square footage.

What micro-flats lack in square metre could perhaps be supplemented by positive living conditions, in turn providing inhabiting users with an overall positive well-being. One hypothesis lending support to this claim is the idea that phenomenological design can increase living conditions and therefore user well-being by way of sensory stimulation of positive emotions.

nARCHITECTS  
Firm that designed award-winning micro-apartment block 'Carmel Place' in New York, USA.

# 3

## THE CASE FOR PHENOMENOLOGY

03/ CHAPTER THREE

### 03 / THE CASE FOR PHENOMENOLOGY

It is hypothesised that user well-being can be enhanced through the application of the design philosophy 'phenomenology' to an interior space. Ideology presented by Heidegger and Norberg-Schulz, analysed by Korydon Smith, reveals this philosophy pertains to the relationship between environmental phenomena and human phenomena (Smith, 2012).

Environmental phenomena refers to tangible, physical design elements such as materiality, colour and light, whereas human phenomena refers to intangible, metaphysical elements such as the user's senses, emotions and well-being. The two concepts are interlinked, such that the tangible physical influences the intangible metaphysical, wherein the built environment directly influences user well-being. Both physical and metaphysical elements are essential to consider during the design process, as the two inherently shape the users overall psychological and physiological experience.

Arguably, a users emotional experience is effectively stimulated by the

sensory aspects incorporated in the design of an interior (Lee, 2022). It can therefore be deduced that a positive multi-sensory environment can generate positive emotions within the user, leading to improved well-being. As phenomenology deals directly with the human senses through design elements, it can be argued that applying phenomenological design to the interior of a dwelling can positively influence user well-being. Inhabiting a space of which the design has been informed with special consideration to the human senses inherently provides added stimulation that is able to positively influence its inhabitant.

Architect Peter Zumthor suggests an essential function of architecture is 'to enrich experience and enhance the life that takes place within it' (McCartner, 2016). By manipulating the physical space in a positive manner, the metaphysical space is influenced positively, meaning architects and designers can successfully create a phenomenological space that positively influences user well-being. This is important to consider when designing a micro-space of which would otherwise be somewhat unpleasant to inhabit due to spatial restrictions.

**“WHEN DESIGNING PHYSICAL SPACES, WE ARE ALSO DESIGNING, OR IMPLICITLY SPECIFYING DISTINCT EXPERIENCES, EMOTIONS AND MENTAL STATES. IN FACT, AS ARCHITECTS WE ARE OPERATING IN THE HUMAN BRAIN AND NERVOUS SYSTEM AS MUCH AS IN THE WORLD OF MATTER AND PHYSICAL CONSTRUCTION... SCIENCE HAS ESTABLISHED THAT ENVIRONMENTAL CHANGE OUR BRAINS, AND THOSE CHANGES IN TURN ALTER OUR BEHAVIOUR.”**

Phenomenological design, at its core, is human-centric. This design philosophy recognises the deep impact the built environment has on user well-being, and approaches design in such a way that emphasises user experience and individual perception of the space. The same level of care given to the functionality of the space is

also given to the psychological fulfilment of the user. This is achieved by way of careful manipulation of design elements, in order to achieve a functional and aesthetically pleasing space that, above all, enhances user well-being through the stimulation of the human senses.

FIGURE 4  
Quote by Juhani Pallasmaa.

PETER ZUMTHOR  
Known as the founding father  
of phenomenological architec-  
ture and design.

# 4

## THE USER AND THE PRIVATE SPACE

04/ CHAPTER FOUR

#### 04 / THE USER AND THE PRIVATE SPACE

This section of the dissertation examines the application of phenomenology to private spaces, to investigate the idea that phenomenology can increase quality of living conditions and therefore increase user well-being. Interior photographs of Shoji Apartment by Proctor & Shaw will be visually analysed.

PROCTOR & SHAW  
London-based architecture  
and design firm.

Shoji Apartment, considered a micro-flat at 29m<sup>2</sup>, was designed with the intention of revealing “how space might be reviewed or understood in a qualitative way” (Beath, 2021). Therefore, this micro-flat can be seen as an experimentation with phenomenological design principles, such that the designers wish to uncover user experience through a qualitative entity. This suggests human-centric design has informed the interior of this micro-flat. Shoji Apartment is not situated within a building that offers shared amenities, therefore the visual analysis of this interior will focus solely on the potential for phenomenological design to increase quality of living conditions for inhabiting users.



Figure 5 alludes to the importance of abundant natural light within a micro-flat. Large bay windows allow a significant amount of natural light within the space, harbouring a bright and airy atmosphere that permeates a majority of functional zones. Zones where the user spends a substantial portion of their time, such as the living area and kitchen, are awash in natural light. Studies indicate that an abundance of natural daylight significantly improves a users emotional well-being, with large sun-facing windows having the most positive effect (Morales-Bravo & Navarrete-Hernandez, 2022). Not only does access to natural light have a positive impact on user emotional well-being, but also positively impacts a users physical health. Research highlights exposure to sunlight increases levels of serotonin, a neurotransmitter responsible for feelings of happiness, satisfaction and calmness, and decreases levels linked to depression and anxiety (Park, 2017).

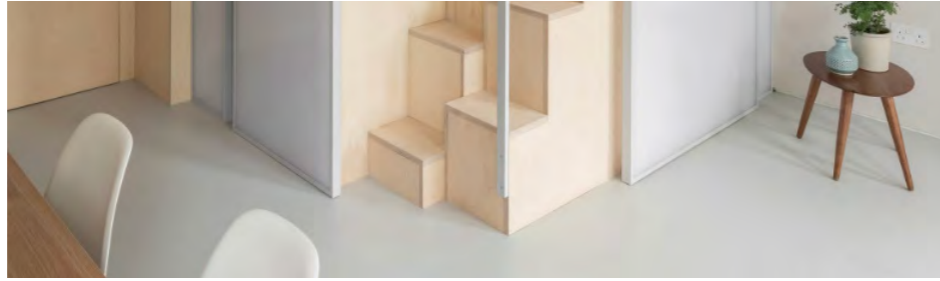
With the knowledge of a positive correlation between living conditions and user well-being, analysis suggests living conditions can remain of good quality despite a sacrifice of square metres, as a larger space with less natural light cannot be held to the same quality of living conditions, resulting in a negative user well-being.



FIGURE 5  
3 large bay windows create a bright and airy atmosphere, due to the substantial amount of natural light let in the space.

While the central focus of Figure 5 analyses the element of natural light, it is also noteworthy to mention the unobstructed view of nature. Research suggests that environments devoid of nature have a negative impact on user health and well-being, however incorporating plants, such as potted flora, or offering a view through windows, can have the opposite effect (Grinde & Patil, 2009). Therefore it can be argued that the living conditions of Shoji Apartment are of high quality, despite a lack of overall size, as nature is present in multiple ways.





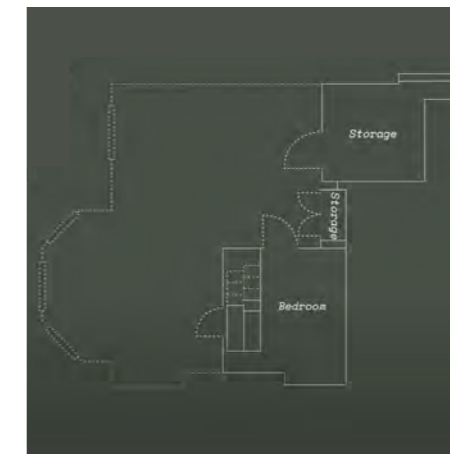
RESEARCH PARTICIPANTS VOTED VERTICAL STACKING OF FUNCTIONS AS THE 'MOST INNOVATIVE DESIGN TECHNIQUE'

Figure 6-8 alludes to the effectiveness of vertically stacking functions within a micro-flat. Doing so can be argued as an intelligent design decision, as it allows more floor space to be freed for the user to navigate the environment. In Shoji Apartment, the sleeping area has been stacked above the wardrobe, and the storage area has been stacked above the bathroom, leaving ample floor space without sacrificing any of the important functions a larger dwelling would provide. This further highlights that a lack of square metres doesn't necessarily lead to a loss of living conditions as the vertically-stacked functions in this micro-flat have not had to sacrifice space, ultimately offering support for a positive user well-being.

Other benefits to user well-being as a result of vertically-stacked functions include improved access to natural light and an increased sense of privacy. Natural light has unobstructed access to the stacked functions, and user privacy is achieved by way of distance from more public lower level functions. However, intelligent design can only be achieved if lighting is taken into consideration, such as within the Shoji Apartment. As mentioned previously, frequently used functions placed in areas that receive natural light will improve user well-being, therefore it is a strategic move to place the wardrobe and bathroom on the lower level, as these functions are typically lit artificially.



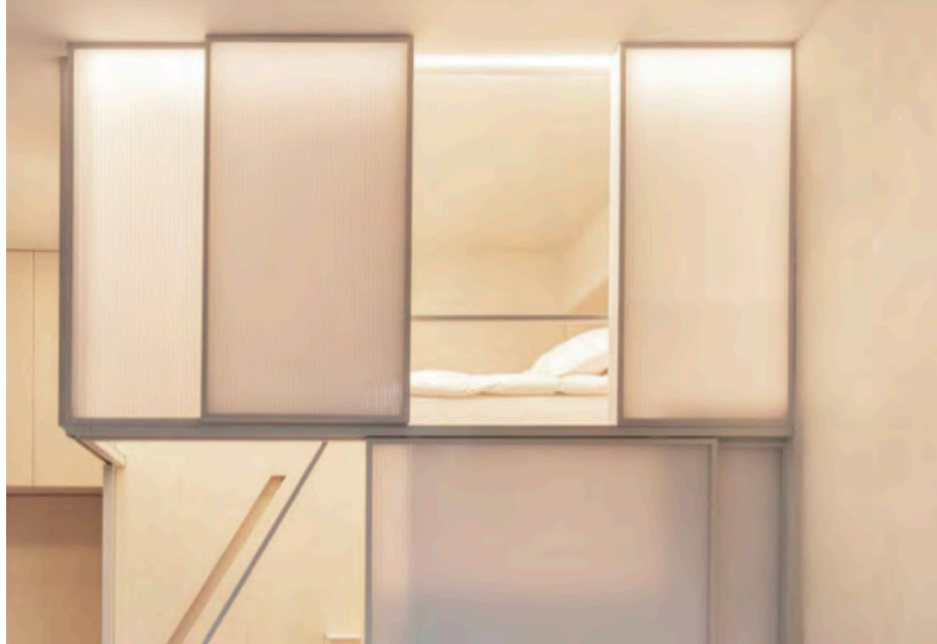
**FIGURE 7**  
Pre-renovated floor plan highlights inefficient use of space and poor spatial planning of functional zones.



**FIGURE 8**  
Post-renovated floor plan reveals vertically-stacked functions taking advantage of high ceiling and maximising floor space.

**FIGURE 6**  
Space saving techniques: The pod features an alternate tread staircase, leading to the sleeping area which has been stacked above the wardrobe.





**FIGURE 9**  
Space saving techniques: The pod features an alternate tread staircase, leading to the sleeping area which has been stacked above the wardrobe.

Materiality is one of the most successful design elements that physically convey the design philosophy of phenomenology. According to Zumthor, materiality of the built environment can evoke unique experiences within the user, making it imperative to analyse within this case study.

Proctor & Shaw have used a limited but high quality material palette, that creates a sense of continuity and complementarity. Primary materials include: birch ply, clay plaster, polycarbonate panels and lino flooring (Beath, 2021). Using a limited material palette creates an atmosphere of cohesion and unity by way of reducing visual clutter; this sense of continuity can harbour a calming effect within users, which is advantageous for long-term inhabitation of micro-flats. A sense of continuity is emphasised through the application of birch ply to multiple spaces and functions, allowing the user to feel connected to the spaces, as a unified environment could evoke a sense of unity and balance within the user themselves. Furthermore, the user is able to engage with their environment in a more meaningful way through the unique emotional qualities of the chosen materials; the warm atmosphere created as a result of the birch ply can support feelings of cosiness within the user, further enhancing positive user well-being.

Polycarbonate panels were chosen for the pod, specifically to evoke feelings of being within a cocoon (Beath, 2021) - natural daylight gives a soft wash of warm light in the mornings, evoking feelings of productivity and refresh, however as the evening approaches, warm yellow light evokes feelings of cosiness and calamity within the cocoon. As the change in lighting harbours an appropriate shift in mood for the different times of the day, harmony between the built environment and the biological clock of the user is created. Studies have shown that these lighting differences align with the body's natural circadian rhythm, improving mood and daily function of users (Park, 2017), in turn supporting positive user well-being. Using contrasting yet complementary materials within a micro-flat can help establish specific zones for specific functions, which is considered intelligent design for smaller spaces. For instance, the bedroom is constructed with polycarbonate panels, whereas the kitchen cabinetry is made entirely from birch ply. Not only does the complementary effects of the materials create a separation in function, it evokes separate emotions within the user when occupying the spaces. This subtle separation can positively influence user well-being within a micro-flat as the recognition of separate functions can counteract a cramped feeling.



*"MATERIALS REACT WITH ONE ANOTHER AND HAVE THEIR RADIANCE, SO THAT THE MATERIAL COMPOSITION GIVES RISE TO SOMETHING UNIQUE" - PETER ZUMTHOR*



**FIGURE 10**  
Dining area utilises contrasting yet complementary materials to create a sense of harmonious continuity throughout the space.

Furthermore, utilising different yet complementary materials within a space can heighten the sensory qualities of the space, allowing the user to feel an appreciation and attachment to the space despite the size.

It is naive to suggest phenomenological design can completely eliminate the negative psychological effects inflicted upon a user living within a constrained space. No matter how intelligently designed a constrained space is, the fact remains that the space is spatially limited. It is therefore imperative to consider alternative solutions applied to micro-flats in conjunction with phenomenological design.



# 5

## THE USER AND THE SHARED SPACE

05 / THE USER AND THE SHARED SPACE

While phenomenological design can help improve user well-being within a micro-flat, this alone is not sufficient. Despite the benefits human-centric interior design has on inhabiting users, human-centric design at its core encourages human interaction, therefore the inclusion of shared communal spaces is essential to promote optimal user well-being given the circumstances. This chapter analyses the role of shared spaces in micro-living complexes, highlighting the importance of shared space with regards to overall user well-being and human socialisation, to combat the negative effects of long-term inhabitation of micro-flats.



TYPE OF REST	
PHYSICAL	PASSIVE
	ACTIVE
MENTAL	
SENSORY	
CREATIVE	
EMOTIONAL	
SOCIAL	
SPIRITUAL	

The 7 Types of Rest theory argues that in order for an individual to feel truly restored, and therefore have optimal well-being, rest (not to be confused with sleep) needs to be taken in 7 keys areas: physical, mental, sensory, creative, emotional, social, and spiritual (Dalton-Smith, 2021).

The Italian Building could be viewed as a good example of how a micro-co-living residential building can incorporate some of these elements of rest within the functional design of the shared communal spaces.

HOW TO ACHIEVE
ENGAGING IN BIOLOGICALLY RESTORATIVE ACTIVITIES (E.G: SLEEPING, NAPPING, ETC)
ENGAGING IN BIOLOGICALLY RESTORATIVE ACTIVITIES THAT IMPROVE THE BODY'S CIRCULATION (E.G: YOGA, MASSAGE, ETC)
DISCONNECTING FROM STRESSFUL ACTIVITIES (E.G: WORK) BY TAKING SEMI-FREQUENT SHORT BREAKS
TAKING INTENTIONAL MOMENTS OF SENSORY DEPRIVATION TO COUNTER THE OVER-STIMULATING EFFECTS OF EVERYDAY OCCURENCES (E.G: BRIGHT LIGHTS, ELECTRONIC DEVICES, ETC)
FREELY EXPRESSING ONE'S CREATIVITY TO RE-AWAKEN A SENSE OF INSPIRATION WITHIN
FREELY EXPRESSING ONE'S EMOTIONS AND EMOTIONAL NEEDS, PHYSICALLY AND VERBALLY
SPENDING TIME ALONE OR WITH OTHERS THAT PROVIDE A SENSE OF REINVIGORATION
MINDFULLY CONNECTING TO THE PRESENT TO FEEL A DEEP SENSE OF BELONGING, LOVE, ACCEPTANCE AND PURPOSE

**THE ITALIAN BUILDING**  
A micro-co-living apartment tower featuring private rooms and shared communal spaces, situated in Bermondsey, London.

**FIGURE 11**  
Table expands on the 7 Types of Rest, each of which should be fulfilled in order for a user to experience optimal well-being.

SUN	MON	TUES	WED	THURS	FRI	SAT
		Sculpt with Georgia				
Yoga with Imogen	Rant and Reflect with Nat Winsor		Troy's Supper Club			
		Sculpt with Georgia		Horror Movie Night		
Pilates with Kristen					Halloween Party	

**FIGURE 12**  
The monthly calendar is available for residents online and in the shared elevator, to encourage socialisation in the shared spaces.

**PHYSICAL REST**

Active physical rest is provided for residents through regular yoga and pilates sessions held in the courtyard, as evident by the monthly calendar. Not only does this encourage movement and supports physical well-being, engaging in these activities as a group can strengthen social bonds between community members, thereby supporting mental well-being as well. While much research highlights a link between exercise and improved mental health, studies show that group exercise is especially effective in combating depression and loneliness, due to the fact that physical exercise is carried out as a shared experience (Stevens et al., 2021).

**CREATIVE REST**

Creative rest is fulfilled by offering residents varying activities to express their own creativity. "Each month features different art-based outlets for our members to get creative," says Community Manager Joseph. The monthly calendar promotes a sculpting class, wherein residents can create objects with clay. Communal art activities allow individuals to create on their own while remaining in a group setting, achieving a balance between present mindfulness and interpersonal socialisation.

Studies show that a 30-minute clay art therapy session can improve ones psychological well-being through the temperate and tactile sensory stimulation clay offers (Wong & Au, 2019).

**EMOTIONAL REST**

The monthly calendar also highlights a particular emphasis on emotional rest, provided to users through a 'rant and reflect' session. "Our members gather round in a circle and are given a safe space to unload anything stressful on their mind to the community. Members use this time to receive advice from trusted community members," says Joseph. One could argue that this activity not only encourages inter-personal relationships between users, but also evokes an internal sense of acceptance within their community.

**SOCIAL REST**

The shared dining area is the most used shared area according to Joseph, as people often find their moods increased after eating with others. "It's a good way for people to learn about other cultures as well, trying food they might not have known about before, made with love by a community member," says Joseph. Including a shared space for eating meets the criteria of social rest as users are able to feel rejuvenated while eating with others. The act of



**FIGURE 13**  
The shared dining area is one of the most used communal spaces in The Italian Building.

eating food as a shared experience not only reinvigorates users mentally by interacting with the community, but users could also experience reinvigoration and replenishment physically from the nourishment of food. Studies have shown to support this claim, such that individuals who eat socially report feeling happier and more satisfied with life. Individuals also reported being more trusting of others, and having a tighter support network of friends. This study highlights a causal relationship from eating together to bondedness, rather than the other way around (Dunbar, 2017).

This might be particularly true for extroverted users, however for introverted users, a quiet reading corner is present. Social rest is met for introverts in this way, as users are able to carry out solitary quiet activities, with other community members present. Without the pressure of direct interaction with others, introverted users could still feel a sense of rejuvenation through the peace of being solitary yet together.

**COMMUNITY MANAGER**  
The Italian Building appoints a community manager to look after the general building and resident concerns.





**FIGURE 14**  
The Italian Building offers residents several shared spaces to enjoy together.

#### SPIRITUAL REST

While this type of rest can be fulfilled as an accumulation of the other 6 types of rest, having a shared communal space in itself can be a form of spiritual rest. This concept is rooted in the understanding that humans are social creatures who inevitably search for a sense of self within a community. Shared spaces offer users an outlet to connect with others in a meaningful way, through sharing experiences,

ideas and memories with one another, which would be difficult to achieve in a private dwelling. Offering communal areas for individuals living in micro-dwellings is essential for optimal user well-being, such that users are able to feel a deep sense of belonging, love, acceptance and purpose by carrying out functions that could be carried out in their private dwellings, as a community.

While The Italian Building offers some support of the 7 types of rest, not all types of rest are accounted for within the shared spaces. Proposals for functional spaces informed by the 7 types of rest will be outlined in the chapter 'The Prototype'.



# 6

## THE PROTOTYPE

## 06 / THE PROTOTYPE

It has been established that improved user well-being can be achieved by way of phenomenological design, in conjunction with shared spaces that meet the criteria of fulfilling the 7 types of rest. To strive for optimal user well-being within a micro-co-living building, both of these concepts must be incorporated in the building's design.

As part of my research, I conducted a visual elicitation survey to investigate emotional experience in response to the interior design of a micro-flat. The chosen case study was the renovation of the Shoji Apartment, demonstrating unintelligent interior design pre-renovation, and intelligent interior design post-renovation, arguably informed by phenomenology. Participants were shown a video wherein the designer of the micro-flat highlights and discusses the design changes, and were then instructed to fill out two worksheets, considering how they would feel in the pre-renovated and post-renovated flat. As hypothesised, results revealed a negative emotional response towards the pre-renovated micro-flat; participants recorded feelings of anxiety, confinement and loneliness, influenced by poor interior design. However, participants reported

VISUAL ELICITATION SURVEY  
Survey and relevant materials can be found in the Appendix under 'Research Method One'.

IN-DEPTH FOCUS GROUP  
DISCUSSION  
Discussion dialogue and relevant materials can be found in Appendix under 'Research Method Two'.

a positive emotional response towards the post-renovated flat, as the phenomenological interior induced feelings of comfort, relaxation and happiness. These results reveal that using phenomenology to inform the interior design of micro-flats could improve user well-being by way of positive emotional experience.

To further my research, I conducted an in-depth focus group discussion that explored emotional experience in response to the interior design of a micro-flat, more substantially. Two participants were shown the same Shoji Apartment renovation video, and were then asked a series of questions relating to topics such as: general emotional experience, design elements influencing experience, sense of home and self, and sense of community. Participants reported positive emotional response to the post-renovation micro-flat, citing phenomenological design elements such as lighting and material choice as major influences. Subtly contrasting materiality of the space provided sensory stimulation that activated 'a perfect balance' of positive emotions, which helped form an attachment to the space, making it feel like a home for the participants. The improvement to the overall spatial design, especially the vertically stacked functions,

was reported as another key influence to their positive emotional experience. Most importantly, participants reported that feeling a part of the community was crucial if they were to choose a micro-flat as their residence, therefore providing micro-flat users with shared communal spaces is imperative in achieving optimal well-being.



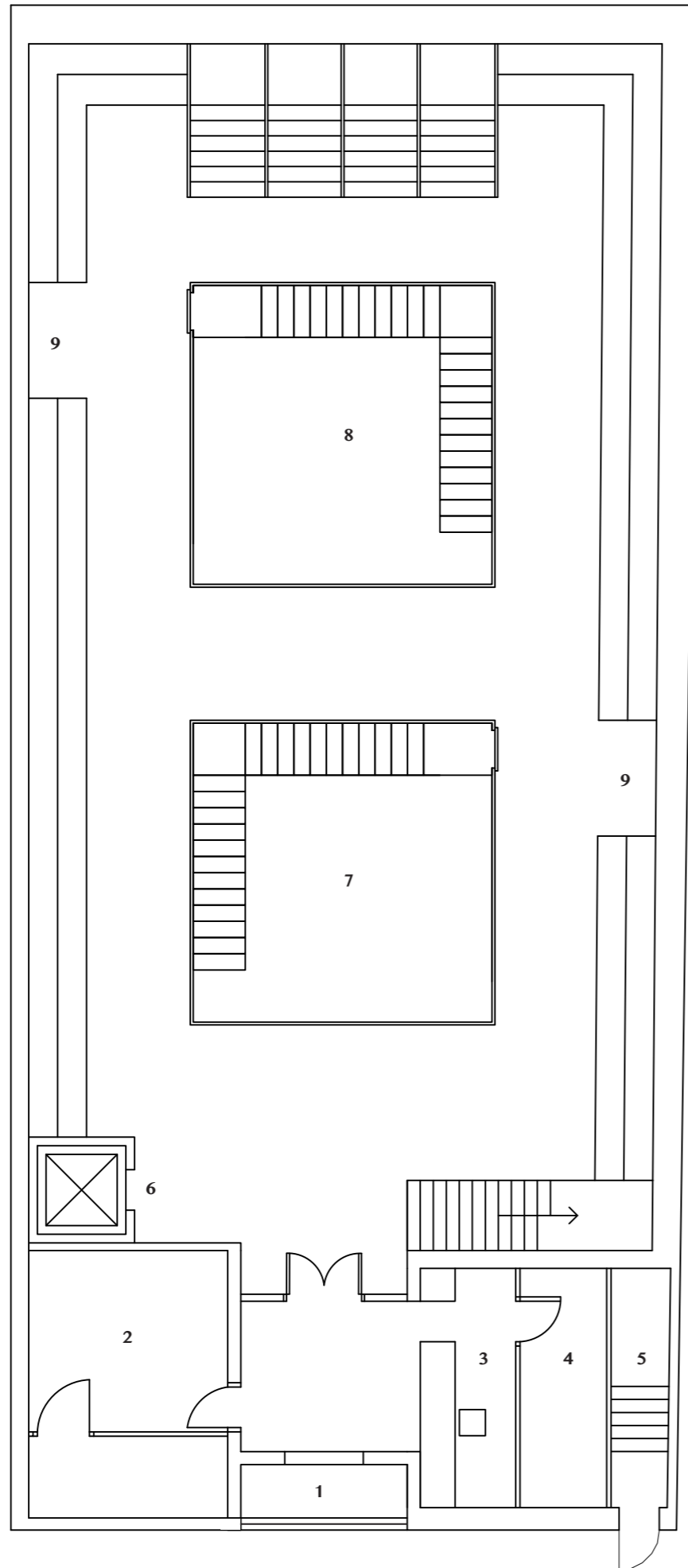


FIGURE 15  
1: Lobby  
2: Changing Room  
3: Reception  
4: Staff Room  
5: Micro-Flat Stairwell  
6: Lift  
7: Cold Pool  
8: Hot Pool  
9: Seating Area

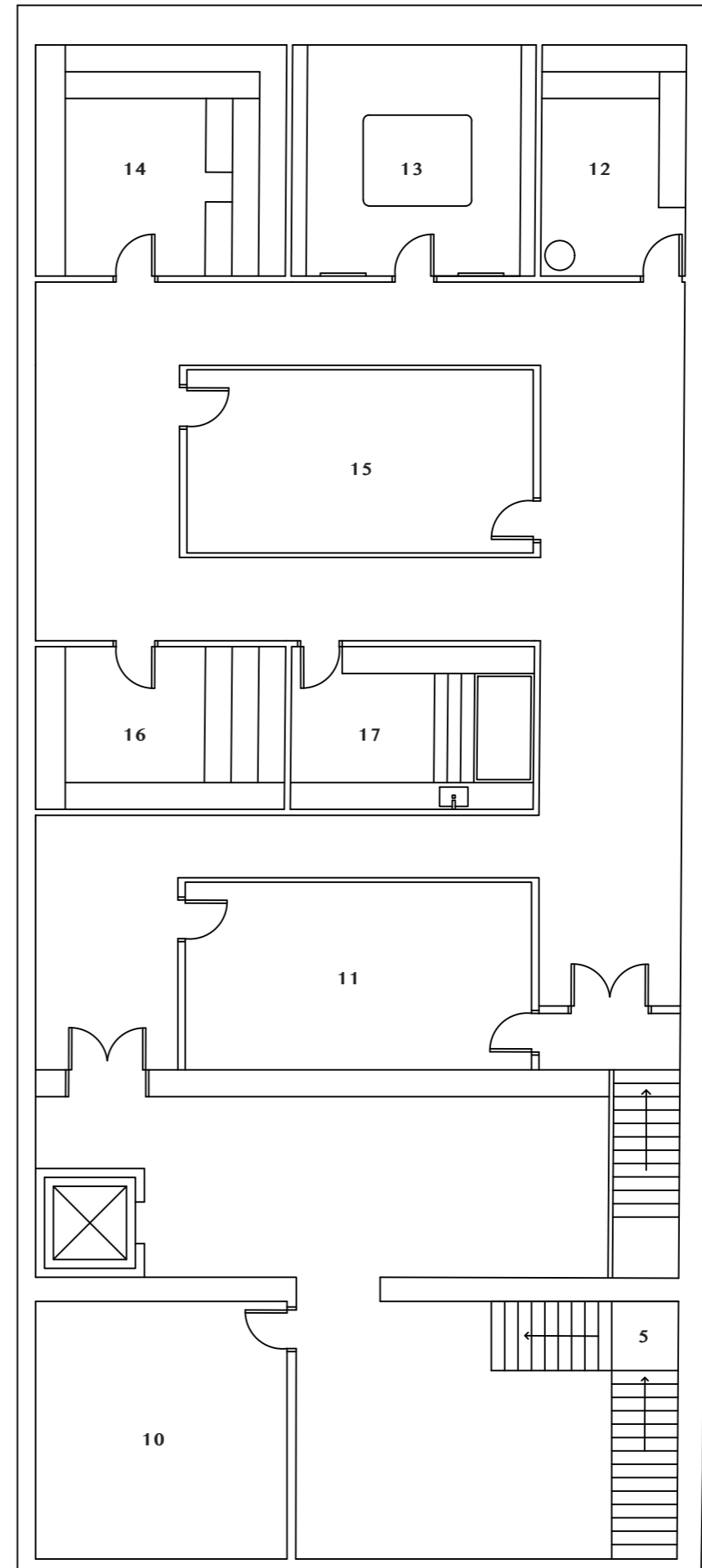


FIGURE 16  
10: Back of House  
11: Courtyard 1  
12: Steam Room  
13: Hammam  
14: Sauna  
15: Courtyard 2  
16: Ice Room  
17: Mineral Bath

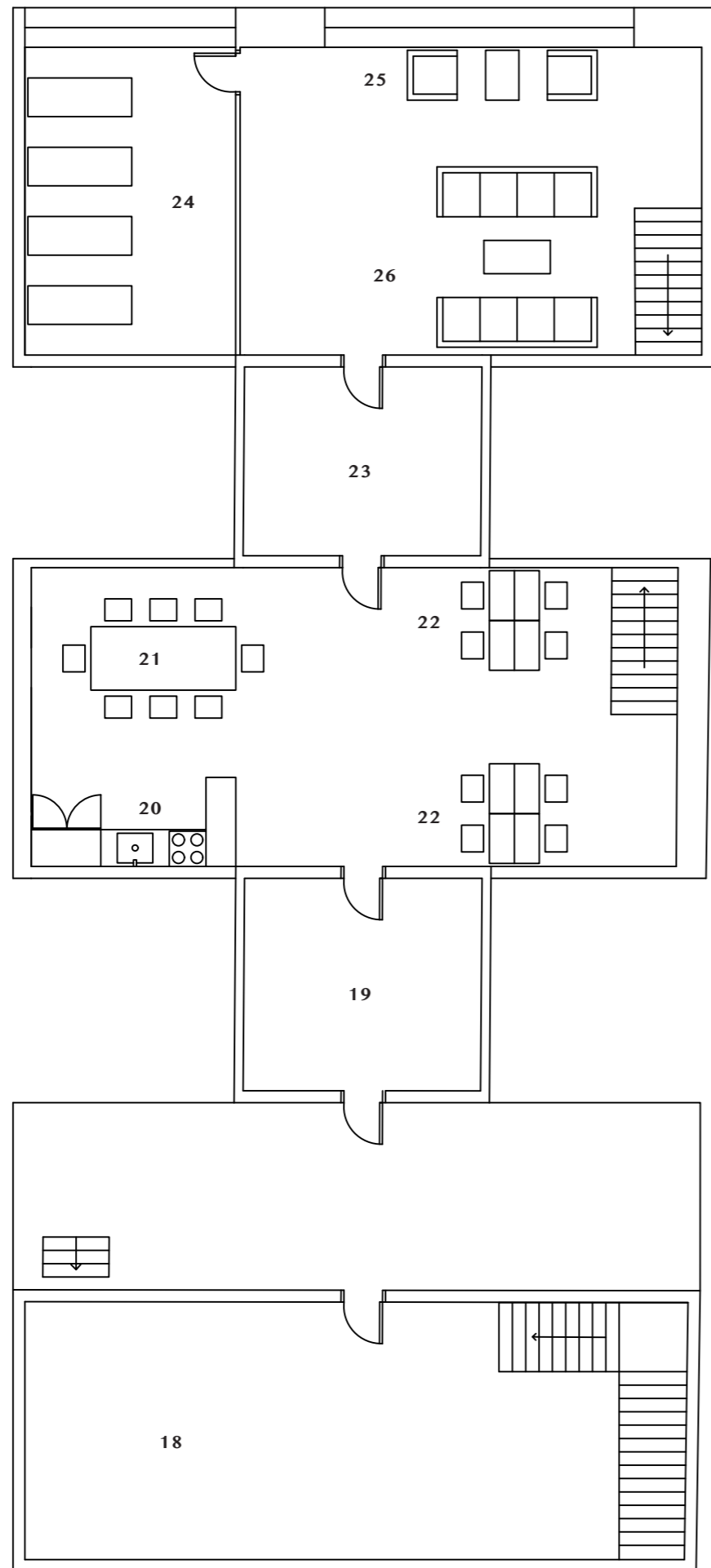


FIGURE 17  
18: Rainwater Collection Area  
19: Glass Bridge Above Courtyard  
20: Shared Kitchen  
21: Shared Dining Area  
22: Individual Desks  
23: Glass Bridge Above Courtyard  
24: Shared Yoga/Meditation Room  
25: Shared Lounge 1  
26: Shared Lounge 2

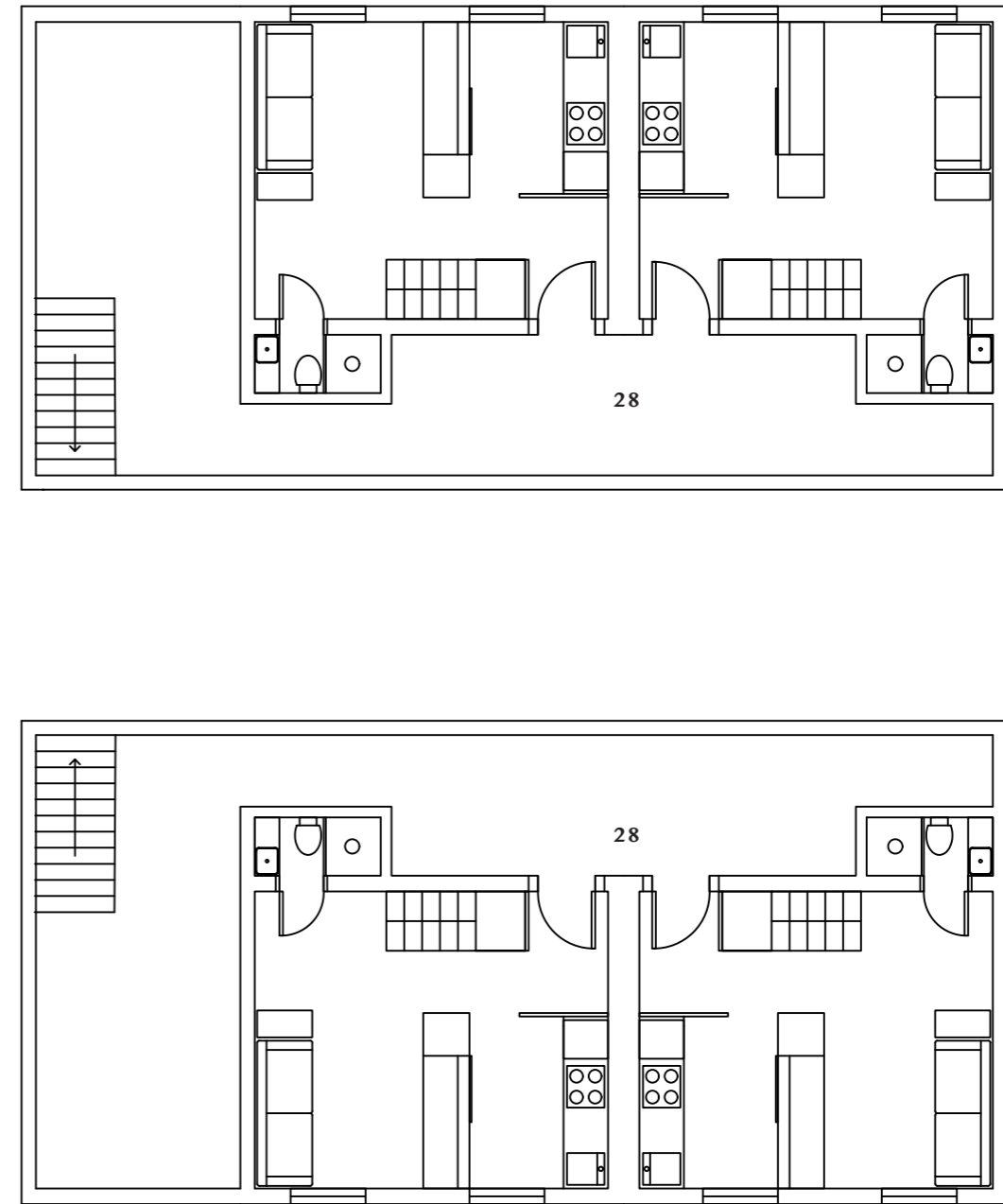


FIGURE 18  
28: Private Micro-Flats



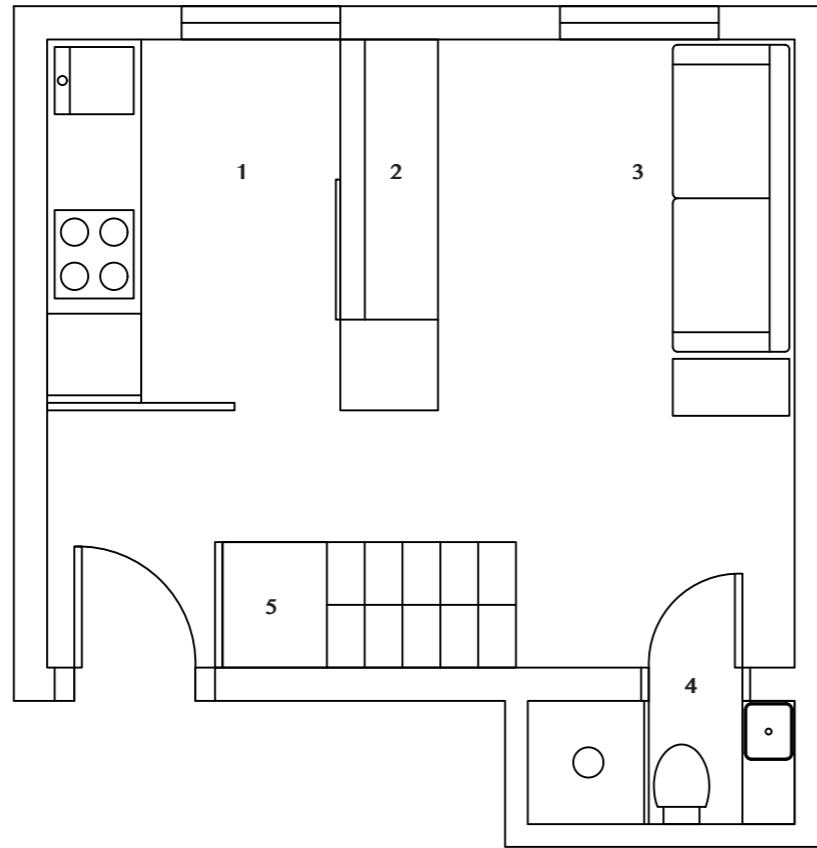


FIGURE 19  
1: Kitchenette  
2: Wall Partition  
with Storage  
3: Living Area  
4: Bathroom

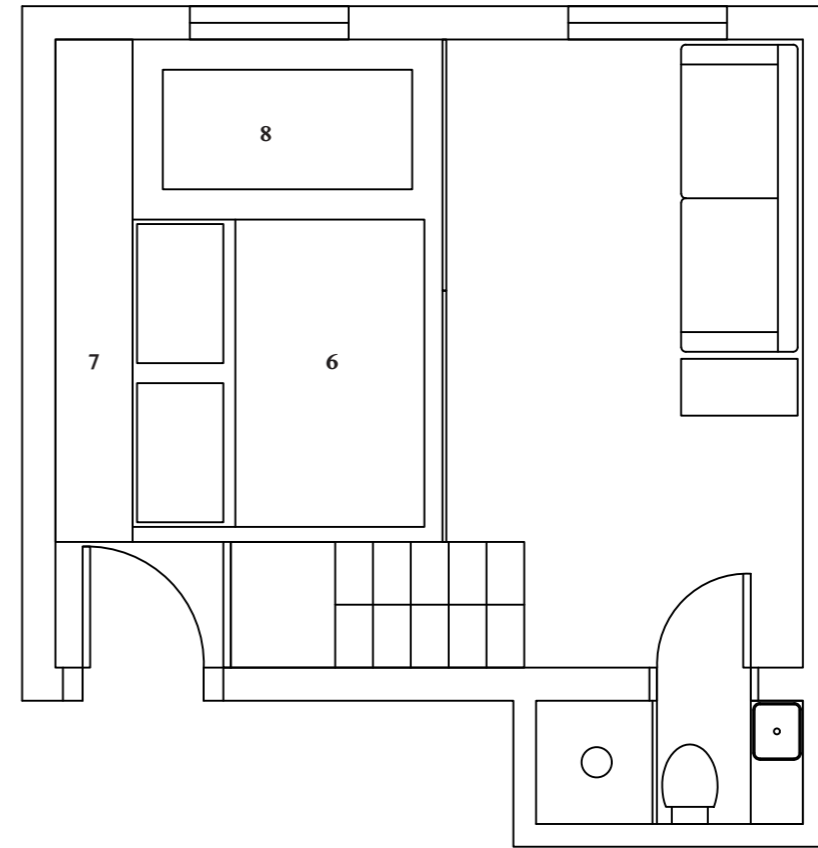


FIGURE 20  
6: Bed  
7: Bedroom Storage  
8: Rug

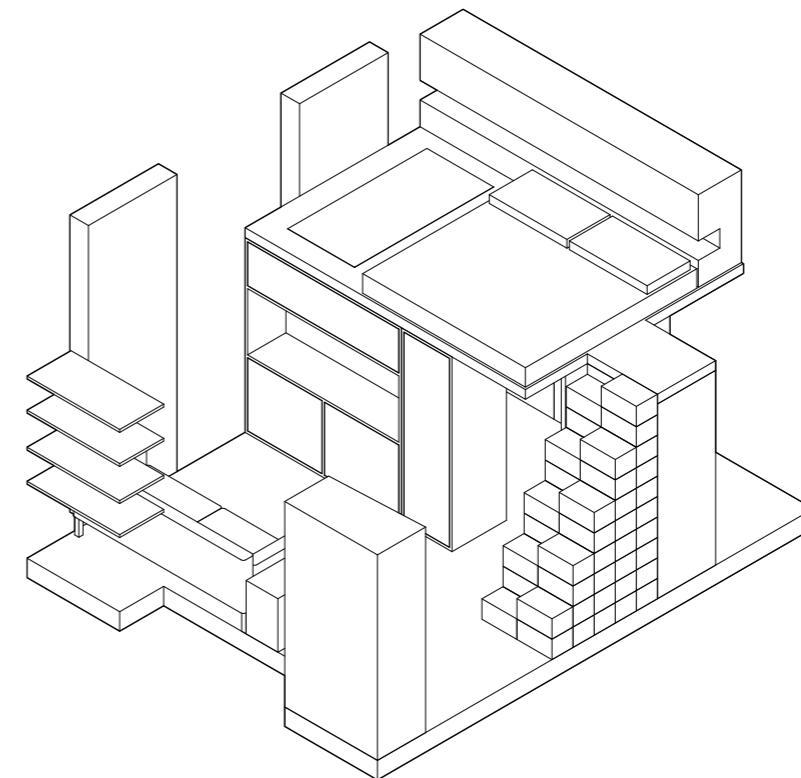


FIGURE 21  
SW Isometric 3D View of  
Private Micro Flat

# 7

## THE FUTURE OF MICRO

“THE DESIGN IS BUILT ON THE PREMISE THAT MINI CAN BE MAXI-MISED THROUGH HIGH QUALITY DESIGN”

FIGURE 22  
Quote by Proctor & Shaw.

### 07 / THE FUTURE OF MICRO

After successfully designing a single micro-flat in an existing building, Proctor & Shaw have put forth a design proposal for three micro-flat towers in London that include 25m<sup>2</sup> micro-flats and shared communal spaces. This speculative project explores the ideas of high density living and sustainability in residential developments.

meanwhile antagonising current statutory guidance on U.K.'s national space standards and use of timber in construction. Footprint, material use, waste and expense is minimised, whereas quality, sustainability and connectivity are maximised in the proposed 'Minimax Tower' (Proctor & Shaw, 2022).



FIGURE 23  
Minimax Tower: Visualisation highlights the connection to the surrounding site, a lush green park.

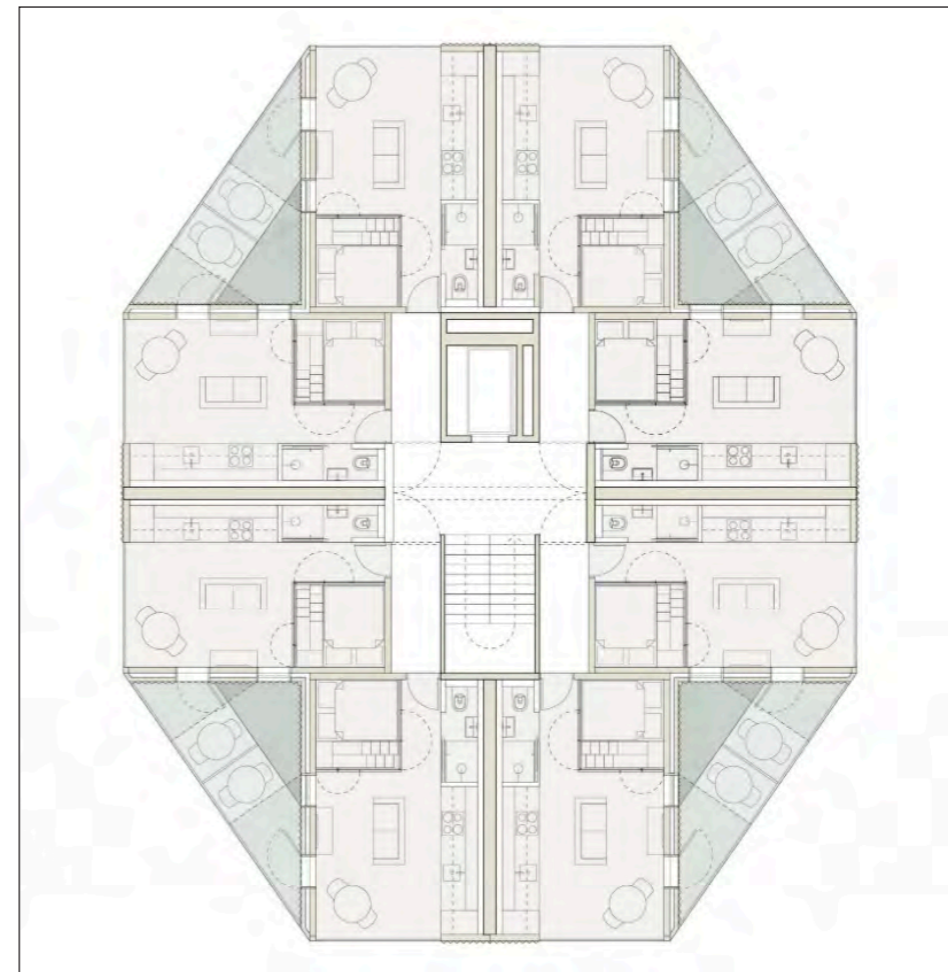


FIGURE 24  
Minimax Tower: Floor Plan highlights the intelligent spatial design of the private spaces, as well as shared balconies and terraces.



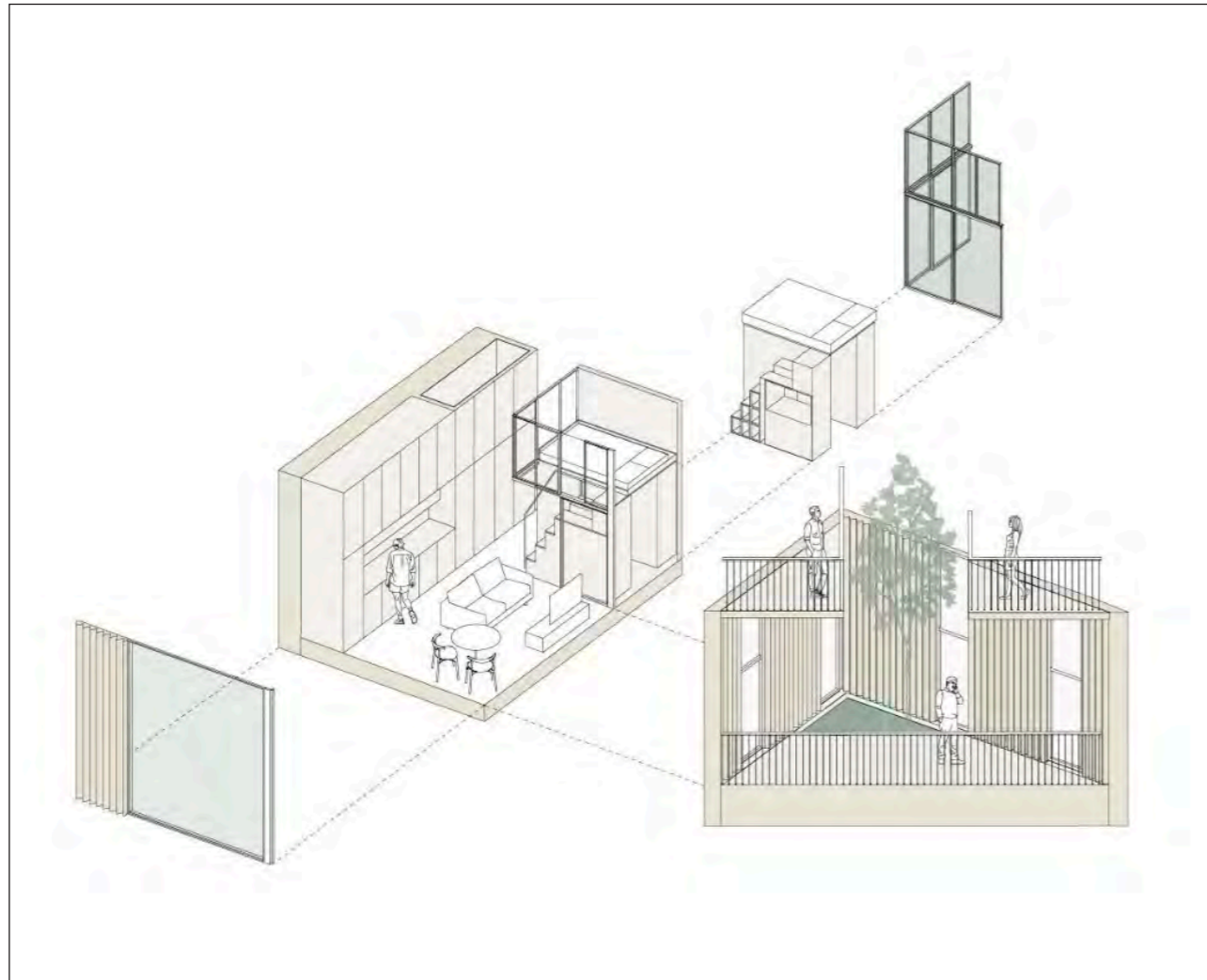


**FIGURE 25**  
Minimax Tower: Floor Plan  
highlights the intelligent  
spatial design of the private  
spaces, as well as shared balcon-  
ies and terraces.

The individual micro-flats incorporate the firm's successful method of vertically stacking functions. Figure 25 reveals the sleeping area has been stacked on top of the wardrobe, providing the user a private space to dress within an otherwise open and airy space. The firm's repeated use of polycarbonate sheets in the sleeping area provides a sense of privacy without sacrificing the user's exposure to natural light. Placing the bedroom on top of other functions allows natural light to fill the space without

obstruction, benefiting the user by way of designing with consideration of the circadian rhythm. Allowing the natural light into the sleeping area facilitates the user in regulating body functions, such as sleeping and awaking, in tune with the natural cycle of the sun. Research suggests that this helps reduce harmful effects to health, such as depression and cardiovascular problems, and increases sleep quality, overall supporting a positive well-being for the user (Suni & Singh, 2023).

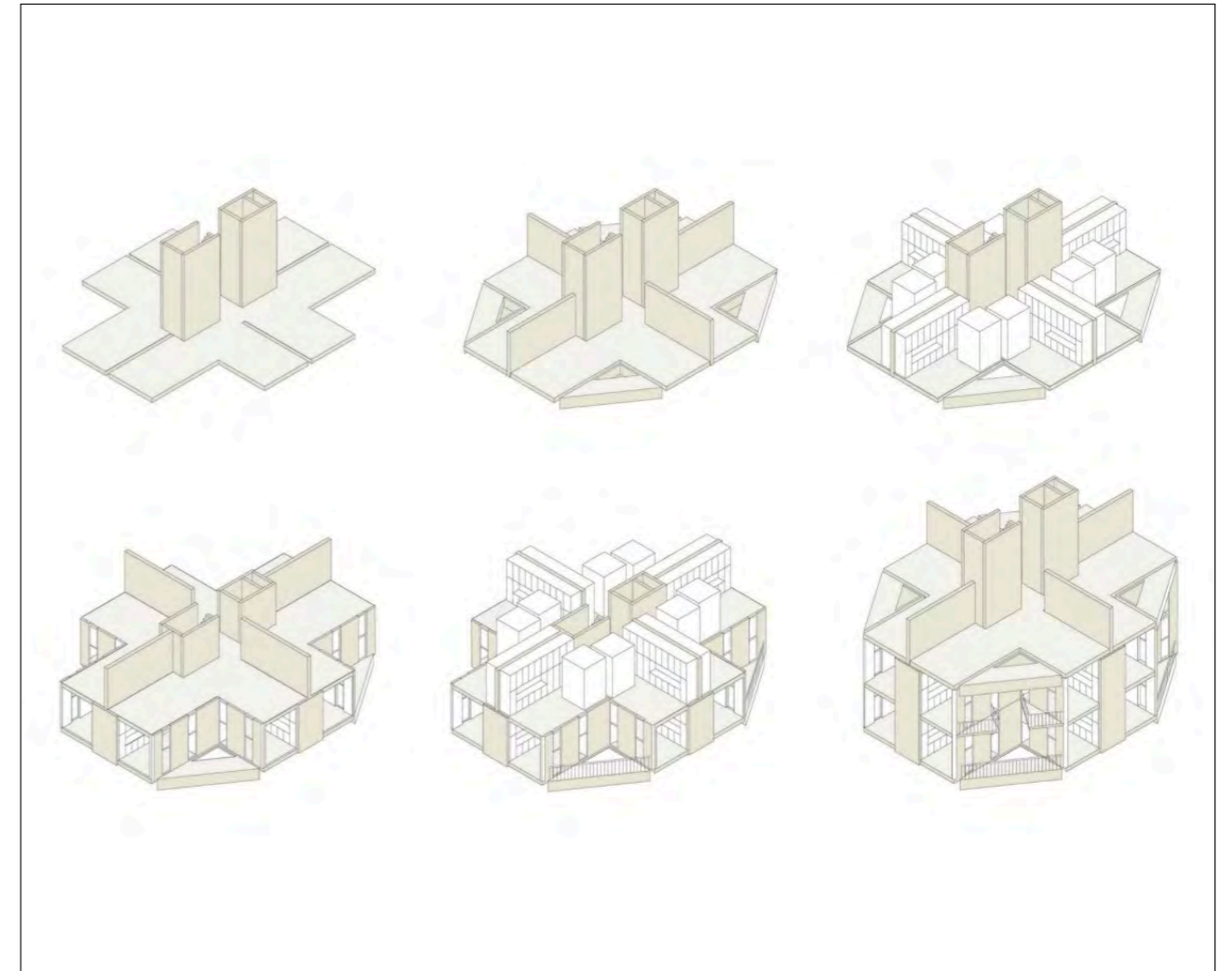




**FIGURE 26**  
Minimax Tower: Exploded axonometric highlights the vertical stacking of functions and the linearity of the space.

Figure 26 reveals the storage area has been tucked away underneath the bedroom, which combats a sense of clutter that would otherwise be present. Referencing the floor plan in Figure 24, the bathroom is placed at the entrance of the space but does not disrupt the overall linear layout of the space. Some of the most important design factors to consider with micro-spaces are the spatial allocation of functions and the anticipated circulation of user traffic. Proctor & Shaw have successfully allocated enough space for major functions,

keeping in mind a central pathway for ease of navigation. This clean linearity of the micro-flat helps reduce visual clutter and enhances the feeling of minimalism, evoking a harmonious relationship between the user and the micro-space.



**FIGURE 27**  
Minimax Tower: Massing blocks reveal the inner structure and allocation of spatial volumes.

Harmony is not only mentally present within the user, but physically present through the use of a limited but high quality material palette. Proctor & Shaw intentionally utilised timber throughout the design of the micro-flat to investigate the practical use of sustainable building materials within interior design. The extensive use of timber is successful in a way that promotes biophilic design, as the timber interior resonates with the surrounding sites forest. While previous chapters note the positive effects of biophilic design, it is interesting to

consider the effects of wood materials within an interior. Research highlights positive psychological and physiological effects within users inhabiting a wood-based interior, however several physical health benefits were also observed. The wooden materials inhibit certain bacteria and also help moderate humidity fluctuations of the indoor air (Alapieti et al., 2020). This suggests that timber-clad interiors not only support the fight for sustainable residential development, but also the fight towards improving user well-being.

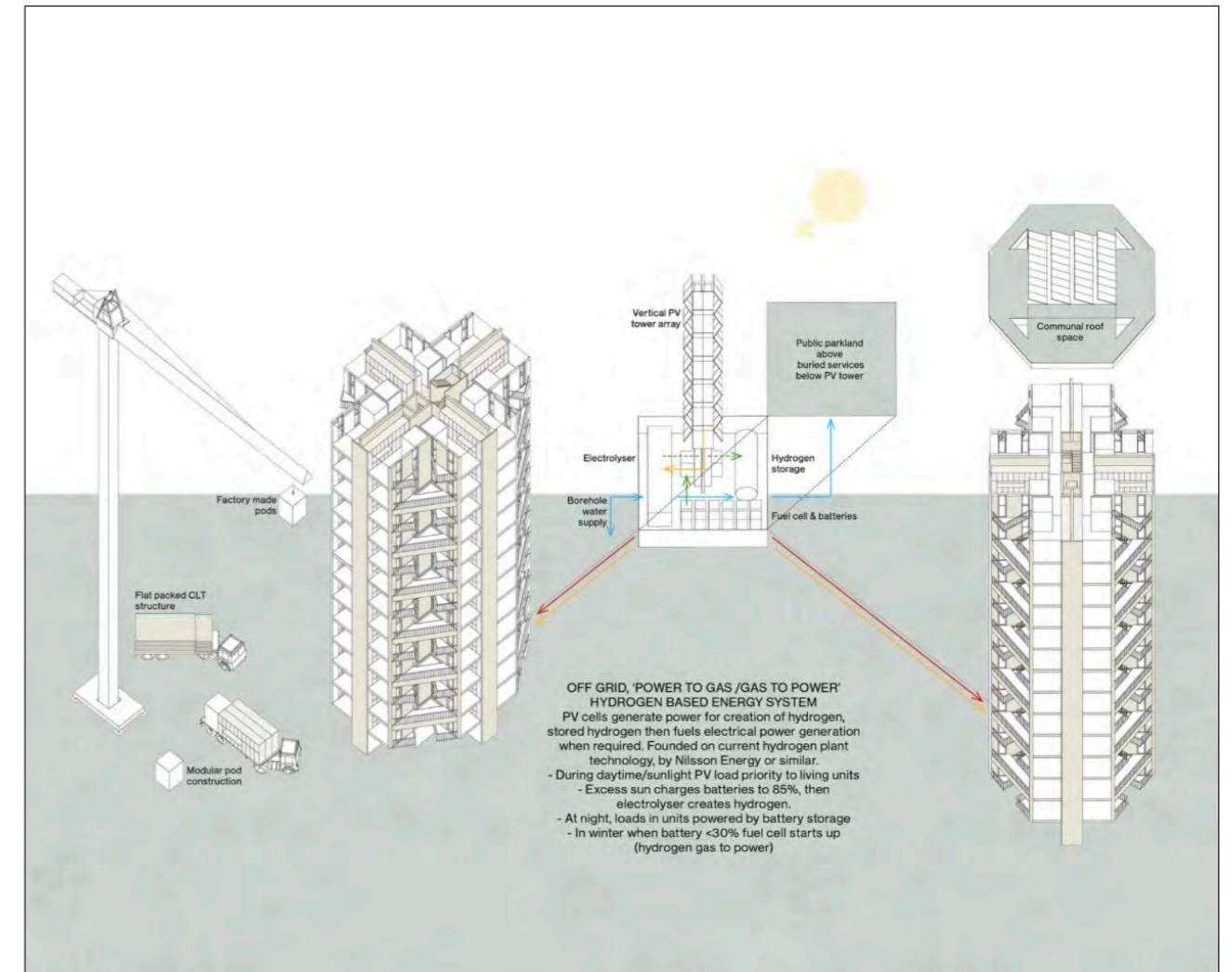
While connectivity to other users is provided through shared balconies and terraces, shared spaces that encourage community interaction are provided to users through rooftop gardens, gyms, and co-working spaces. Referencing the 7 types of rest theory, all types of rest are provided for the users through the shared spaces the Minimax Tower offers its users.

Private and shared balconies encourage the user to interact with others as per their preference. Shared terraces with greenery promote direct social interaction with other users, however both the balconies and terraces meet the criteria for social rest.

Offering users shared gym facilities encourages movement and therefore meets the requirements for active physical rest, supporting optimal user well-being. The communal rooftop gardens provide sensory rest for users by way of reducing digital exposure time and increasing exposure to nature. Extensive research has shown strong associations with nature exposure and improved cognitive function, brain activity, blood pressure, mental health, physical activity, and sleep (Jimenez et al., 2021). Moreover, research pertaining to recreational digital exposure suggests that adults who limit screen use resulted in significantly improved self-reported

well-being and mood (Pedersen et al., 2022). One can also argue that the shared rooftop garden can also support mental rest, by providing users with a quiet space for reflection and contemplation. Therefore, designing a micro-flat tower with a shared rooftop garden promoting a reduction in digital exposure lends support to optimal user well-being in several ways. Creative rest is provided for users by way of shared co-working spaces that can allow users to work on personal creative projects. However, emotional rest is also offered to users who choose to use this space to complete tasks relating to their responsibilities as employed adults. With increased hybridisation of work, providing a space for users to work outside of the office in a shared setting can improve productivity (Avila et al., 2018). This research lends support to emotional rest in regards to completing work outside of the office, as users can feel emotionally supported by those working in the shared area as well.

Spiritual rest is met for users simply by providing shared spaces, as these spaces by nature promote feelings of belonging, love, acceptance and purpose within the Minimax Tower community.



Sustainability in residential development is addressed through an off grid 'power to gas/gas to power' hydrogen energy supply system, which can be scaled for viability and efficiency. Figure 28 highlights a comprehensive review of this system, considering how the system runs appropriately and efficiently during a 24 hour cycle as well as the different seasons (Proctor & Shaw, 2022).

With the Minimax Tower, Proctor & Shaw propose incredible solutions by way of intelligently designed interiors that can be argued are informed by phenomenology, a range of shared spaces that encourage communal socialisation and address the 7 types of rest, as well as the achievement of truly sustainable levels of high density urban living.

**FIGURE 28**  
 Minimax Tower: Diagram of the sustainable energy supply system.

## 00 / CONCLUSION

Currently, negative attitudes towards micro-living remain. Many options of micro-flats in London fall short in two categories: firstly, most micro-flat options are unintelligently designed, wherein the space is informed by function-centric design rather than human-centric design, and secondly, most micro-flat complexes lack quality communal spaces for users that leave the need for meaningful social interaction unmet. These two shortcomings harbour an overall negative well-being for individuals living in these micro-flats, which can have detrimental effects on society as a whole.

This dissertation puts forth the notion that addressing these issues can reduce negative outlook towards micro-living, through the application of phenomenological design principles to the interior and the provision of shared communal spaces.

Design informed by the philosophy of phenomenology can increase living conditions despite a loss of square metre space, in turn increasing user well-being. Moreover, incorporating shared spaces that have been informed by the theory of 7 types of rest can encourage optimal user well-being. Advocating for the above elements for future micro-flat complexes can reduce limitations that come with the current micro-living options. This is by no means a fool-proof solution to a housing crisis, however with implementations mentioned in this dissertation, the future of micro-living complexes can be significantly improved, as the design approach shifts from being function-centric to human-centric.

In order for micro-flats to transform into positive, sought-after housing options, private and shared spaces need to be rethought. Private spaces should be informed by user well-being, placing human-centric design at the forefront of the design process by way of phenomenological design principles, in turn encouraging a positive relationship between the private space and user well-being. Shared spaces should place an emphasis on amenities that support optimal user well-being across several facets, as well as encourage socialisation, in turn reducing the negative effects that users face due to long term inhabitation of micro-flats.

While this dissertation includes research on the psychological and physiological well-being of micro-flat inhabitants, further research could discuss the redistribution of resources and efficient use of land to address the contemporary issues that catalysed the movement of micro-living in a more comprehensive manner.

The hope for the future of micro-living is such that the negative stigma is lifted, and a sense of humanity is added back into micro-spaces. However, change cannot only be created by the architecture and design industry, there is also a political shift needed within government bodies to properly address this contemporary housing crisis. While micro-flats may seem a viable solution for modern socio-economic and environmental issues, work still needs to be done to address poor housing options and poor living conditions. The proposed micro-living solution offered in this thesis suggests that these challenges can be overcome and that an optimistic and bright future for micro living is possible, which will provide genuine choices within the landscape of housing options. It is making these micro homes a choice and not a forced necessity that will mark the shift in an improved social-political landscape.





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THE ITALIAN BUILDING: SITE VISIT



EXTERIOR OF BUILDING



BUILDING ENTRANCE



EXERCISE CORNER



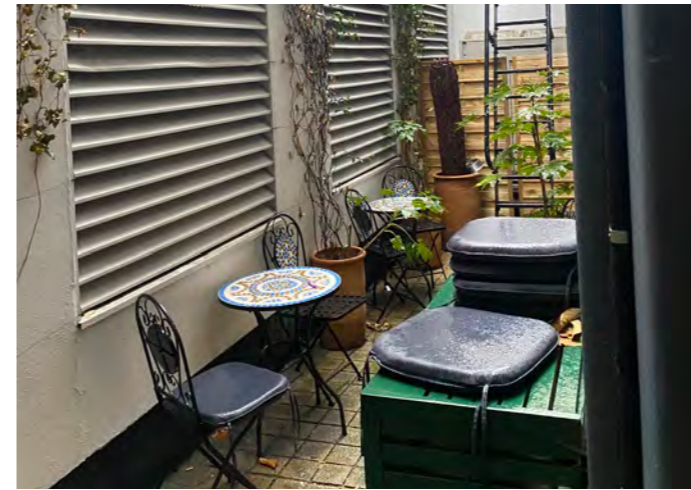
EXERCISE CORNER



LOBBY



LOBBY CHANDELIER



OUTDOOR MINI-COURTYARD



MONTHLY CALENDAR



SHARED DINING AREA



SHARED LOUNGE AREA 1



OUTDOOR SIGN



OUTDOOR COURTYARD



QUIET READING AREA



SHARED LOUNGE AREA 2



## VISUAL ELICITATION SURVEY

**Aim:** To highlight the negative effects of living in unintelligently designed micro-spaces.

**Purpose:** To gauge participants emotional experiences with regards to phenomenologically designed micro-spaces.

**Rationale:** This photo elicitation survey aims to translate people's visual experiences and perceptions of micro-spaces into quantifiable responses. The data gathered from this research could highlight the positive benefit of incorporating phenomenological design within micro-spaces as a way to reduce negative user well-being as a result of long-term inhabitation of poorly designed micro-spaces.

**Hypothesis:** It is hypothesised that photos of an unintelligent non-phenomenologically designed micro-space will elicit a more negative reaction from participants, whereas photos of an intelligent phenomenologically designed micro-space will elicit a more positive reaction.

**Materials:** Visual stimuli relating to a micro-flat based in London, in the form of a 9 minute video clip, and a set of worksheets featuring interior photographs of the micro-flat and a set of simplified floor plans of the pre-renovation and post-renovation. The video clip shows the architect/designer of the micro-flat discussing the renovation of the space, highlighting the changes made to the space and justifications for doing so. The simplified floor plans reveal the previous placement of functions and the intelligent re-placement of the same functions within the micro-flat.

**Procedure:** Participants will be seated on a table with visual materials in front of them. Participants will be briefed (see Script 1.1), followed by watching the video clip and being given 2 minutes to view the photographs. I will then hand the participants a survey worksheet and give the participants 10 minutes to fill out the worksheet. This exercise will be done in a relaxed manner, so participants can ask questions for clarification during the 10 minutes if needed. Following the completion of the worksheets, a guided discussion will ensue wherein the participants are able to speak freely on any beliefs, opinions or thoughts they have regarding micro-spaces. Participants will then be debriefed so as to understand the aim of this research and their participation. No monetary reward will be given to participants.

\*Participants will not be initially briefed on the concept of phenomenology.

By leaving out the knowledge of phenomenological design, participants will be able to share as close to a true unprompted account of their emotional reaction to the visual stimuli, thereby reducing bias.

**Sampling:** This will be carried out with a focus group of 7 participants using a close, familiar network of known respondents to ensure ease of communication, and mitigate any expected timely recruitment issues that time constraints will not allow for. Participants will focus on students and individuals in a stage of life where this living arrangement is an appropriate option.

**Data Set:** The worksheets will feature closed ended questions to form a structured interview, as well as open ended questions to allow for a casual but guided discussion.

**Analysis:** This survey could have been improved with regards to bias reduction in the form of introducing certain controls. For instance, including photographs of average sized flats that are phenomenologically designed versus non-phenomenologically designed could eliminate bias of size. Furthermore, including photographs of phenomenological design with unintelligent spatial design could have eliminated any bias with regards to the positive reaction for phenomenological design stemming from intelligent spatial design.

**Advantages:** Participants might express themselves more freely as opposed to a traditional interview or focus group as they are able to gather their response from their subjective experiences relating to the visual material. Dr. Soaita, a research associate at the UK Collaborative Centre for Housing Evidence, argues that photo elicitation evokes a more meaningful response from participants, as the visual aid are able to stimulate a deeper part of human consciousness compared to words and written prompts. Visual material is typically more enjoyable than written material, which can encourage positive engagement with the participants, allowing for more data to be gathered.

**Limitations:** Participant response could be influenced by researcher bias. As visual material elicits a subjective response, outlier data could be more present as participants responses are based on their unique individual experiences relating to the visual material.

## VISUAL ELICITATION SURVEY

## SCRIPT 1.1

Hello everyone, and thank you for participating in this visual elicitation survey. The aim of this survey is to gauge your emotional response to a renovation of a micro-flat, as well as your personal perceptions of micro-living.

In a moment, you will be presented with 2 forms of visual stimuli. First you will be shown a 9 minute video clip where the architect/designer of a micro-flat discusses the renovation of the space, highlights the changes made to the space and justifications for doing so. I will then hand out a 2-page worksheet to you - the first page shows images and a simplified floor plan of the pre-renovated micro-flat and the second page shows images and a simplified floor plan of the post-renovated micro-flat. Both pages will have some questions that I would appreciate you take the time to answer truthfully. You will be given 2 minutes to analyse and compare the photos and floor plans in detail, then 10 minutes to answer the questions. I'd like to inform you that your participation is entirely voluntary, and you are free to withdraw at any time. This is a casual survey so if at any time you have questions, please feel free to ask.

//

Thank you for taking the time to complete these worksheets and have this discussion with me. Your responses will be used to inform my design proposal of a co-living micro-flat tower that seeks to promote optimal user well-being.

If you decide you would like your data withdrawn after the completion of this survey, please don't hesitate to contact me on S19002720@regents.ac.uk and I will ensure your data is removed.

## KEY POINTS TAKEN FROM DISCUSSION:

- At the point of the video where photos of the micro-flat pre-renovation were shown, some participants displayed noticeable signs of disgust, both visually through facial expressions, and audibly by scoffing or saying 'ew'.

- A majority of participants displayed noticeable signs of admiration for the phenomenological design, and appreciation for this style of design increased as the video went on. This was evident by participant's smiles growing after the architect discussed their design decisions throughout the video.

- Almost all participants believed the vertical stacking of functions was innovative and a smart decision for micro-flats, given that the ceiling height could accommodate for that. Many participants also believed that the high ceilings make the space feel less claustrophobic.

- Participants had mixed views about the alternate tread staircase - some believed it was innovative and appreciated this design, whereas some believed it would take some time to get used to as the majority of stairs in private and public spaces are single tread.

- One participant commented on the ambient versus direct light within the space, noting that the perfect balance between ambient and direct light gives the interior a sophisticated feel.

- After hearing the previous participants comments on lighting, another participant shared their appreciation for the material choice with regards to the reflection of light. The participant admired the use of light coloured wood and muted colours for the interior, as it helped reflect the natural light and brightened the space, making it feel 'less micro'.

- A majority of the participants were surprised at how big the bedroom seemed, as it can fit a king size bed. Some participants commented again on the innovative idea of vertically stacking functions.

- 'It's amazing that the designer was able to make the space seem SO much bigger compared to how the flat looked in the beginning', said one participant.

- One participant commented on their appreciation for the spatial layout of the flat, especially regarding the living room. 'The fact that the couch is positioned towards the windows means I'd get a lot of natural light, which is really important to me', said the participant. Almost every other participant showed signs of agreeing, evident by nodding or verbal agreement.

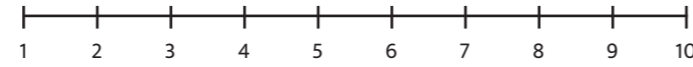
- A few participants showed their appreciation for the bits of nature in the social areas, saying it gives life to the space, which would make them feel more lively if they lived there.

# LONDON MICRO FLAT: PRE-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied).



2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).



3. What emotions/feelings do you believe you would feel living in this micro flat?

4. What design elements of the micro flat contributed to your answer for question 3?

5. Are there any aspects of the interior design that you find innovative/creative?

6. Are there any aspects of the interior design that you find unappealing/off-putting?

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely   b) somewhat likely   c) neither likely not unlikely  
d) somewhat unlikely   e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

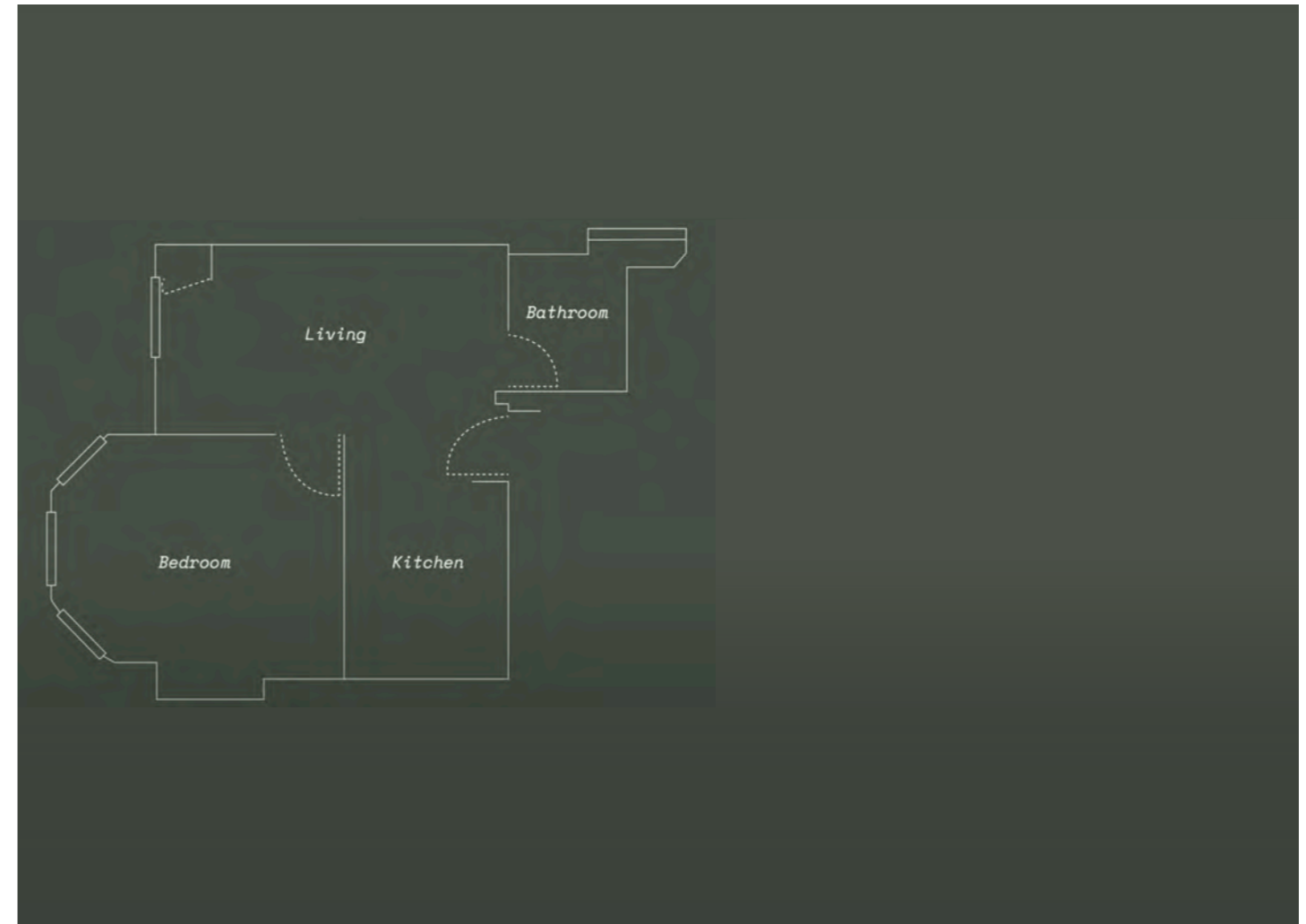
- a) very likely   b) somewhat likely   c) neither likely not unlikely  
d) somewhat unlikely   e) very unlikely

Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?

Use this space to jot down any first thoughts...

Discussion Q: How important is it to have a sense of community or connection to others when living in a micro flat?

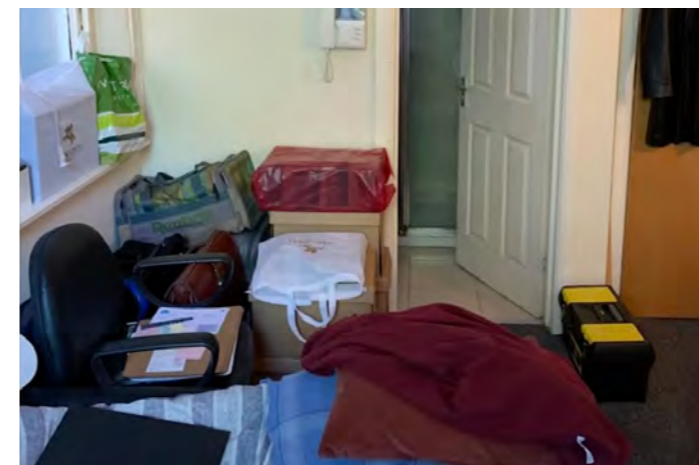
Use this space to jot down any first thoughts...



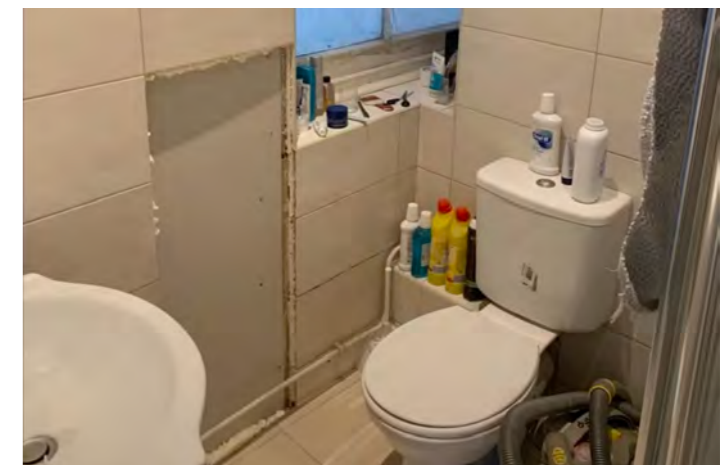
Kitchen + Dining Space



Bedroom

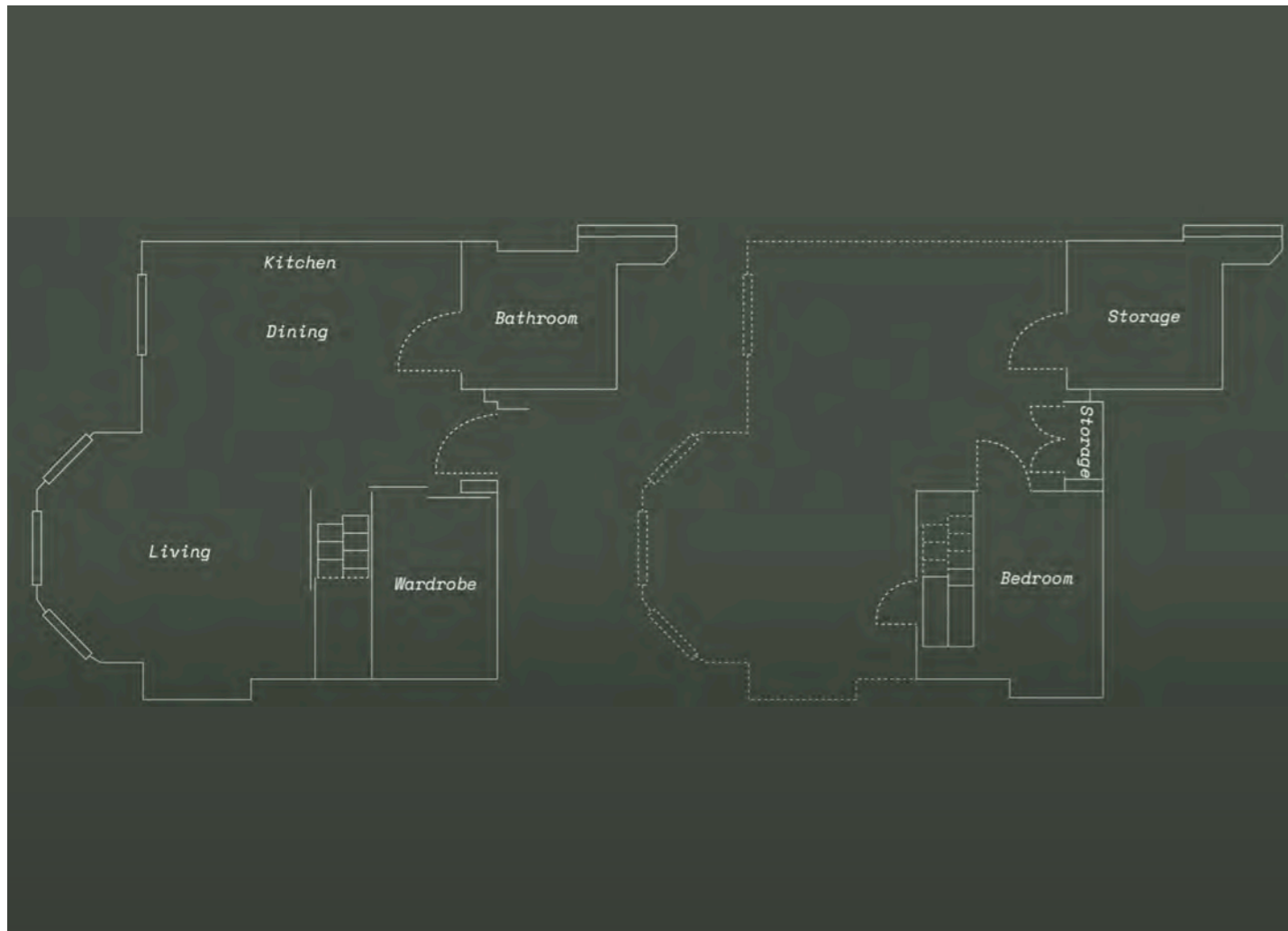


Living Space



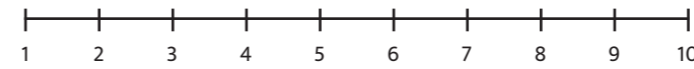
Bathroom



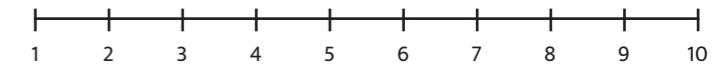


# LONDON MICRO FLAT: POST-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied).



2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).



3. What emotions/feelings do you believe you would feel living in this micro flat?

4. What design elements of the micro flat contributed to your answer for question 3?

5. Are there any aspects of the interior design that you find innovative/creative?

6. Are there any aspects of the interior design that you find unappealing/off-putting?

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely    b) somewhat likely    c) neither likely not unlikely
- d) somewhat unlikely    e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

- a) very likely    b) somewhat likely    c) neither likely not unlikely
- d) somewhat unlikely    e) very unlikely

Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?

Use this space to jot down any first thoughts...

Discussion Q: Would you have to alter your daily routine within your current living space to adjust to living in a micro flat?

Use this space to jot down any first thoughts...



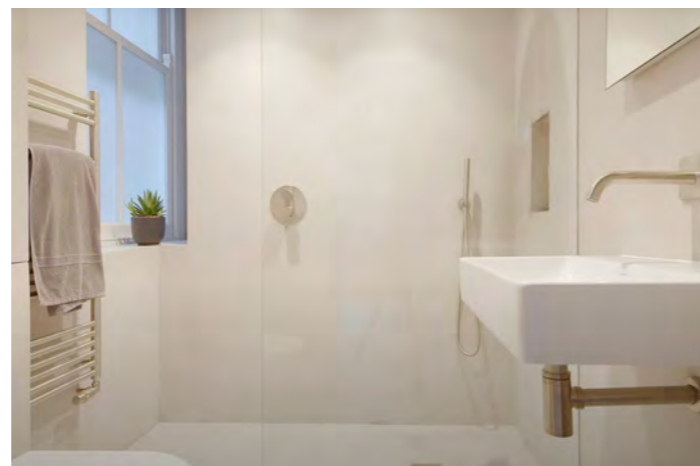
Kitchen + Dining Space



Bedroom + Wardrobe Pod



Personalised Living Space



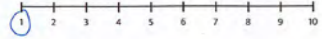
Bathroom



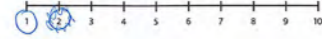
Nathalie

LONDON MICRO FLAT: PRE-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied)



2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life)



3. What emotions/feelings do you believe you would feel living in this micro flat?

Lonely, anxious, uncomfortable, cluttered, claustrophobic

4. What design elements of the micro flat contributed to your answer for question 3?

Lighting conditions, furniture arrangement, dull colors, materials

5. Are there any aspects of the interior design that you find innovative/creative?

No not really it is lacking character and the micro space is not used to its full potential

6. Are there any aspects of the interior design that you find unappealing/off-putting?

The non-covered washing machine and unfinished bathroom design. Looks very cluttered and ~~lots~~ many elements are squished into one space.

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?

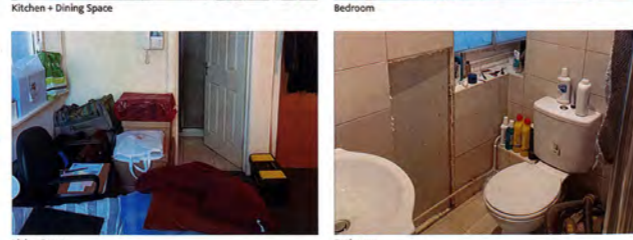
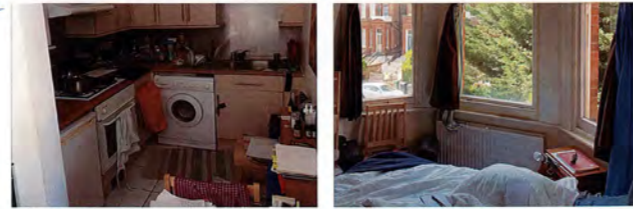
Use this space to jot down any first thoughts...

Yes they would for someone living alone or who can not afford a big apartment.

Discussion Q: How important is it to have a sense of community or connection to others when living in a micro flat?

Use this space to jot down any first thoughts...

Somewhat important because you do not want to feel lonely but I feel like someone who lives in a micro flat you want to have that closure and sense of privacy

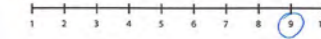


Kitchen + Dining Space Bedroom Living Space Bathroom

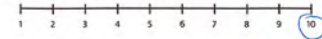
Nathalie

LONDON MICRO FLAT: POST-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied)



2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life)



3. What emotions/feelings do you believe you would feel living in this micro flat?

Sorted, comfortable, happy, satisfied, clean, homely

4. What design elements of the micro flat contributed to your answer for question 3?

The open space, smart design decisions of using the height of the space as a benefit. Arrangement of furniture and interior elements -> spacious

5. Are there any aspects of the interior design that you find innovative/creative?

The built in shelves, the bedroom at ceiling height with the built in stairs. The open shower and use of materials and color create harmony and make the space look bigger.

6. Are there any aspects of the interior design that you find unappealing/off-putting?

For my taste I would change some of the furniture but it looks great.

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?

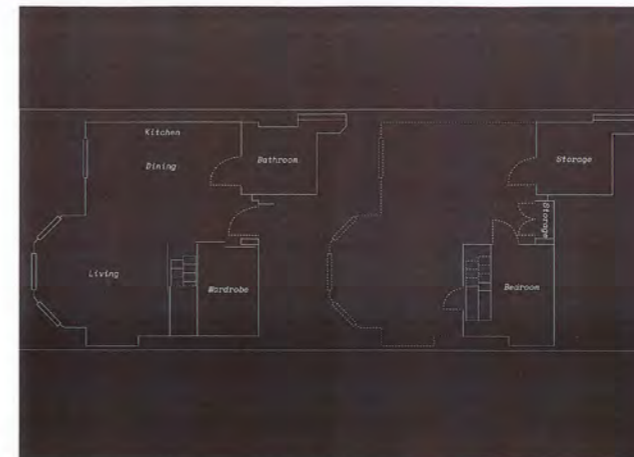
Use this space to jot down any first thoughts...

One feels more productive and more open-minded due to the open floor plan

Discussion Q: Would you have to alter your daily routine within your current living space to adjust to living in a micro flat?

Use this space to jot down any first thoughts...

Not really but since all the rooms are in one spot I would need to adjust my mental connection to the spaces but that can be easily done

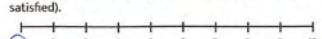


Kitchen + Dining Space Personalised Living Space Bedroom + Wardrobe Pod Bathroom

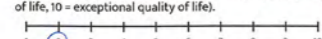
Saida

LONDON MICRO FLAT: PRE-RENOVATION

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2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life)



3. What emotions/feelings do you believe you would feel living in this micro flat?

uncomfortable, trapped, tense, anxious

4. What design elements of the micro flat contributed to your answer for question 3?

small living space, lack of space for storage, poor lighting in the kitchen, cluttered furniture pieces

5. Are there any aspects of the interior design that you find innovative/creative?

no

6. Are there any aspects of the interior design that you find unappealing/off-putting?

poor spatial layout which makes the flat look even smaller - furniture pieces that are not harmonising with one another - personal belongings overcrowding the space

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

- a) very likely
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- d) somewhat unlikely
- e) very unlikely

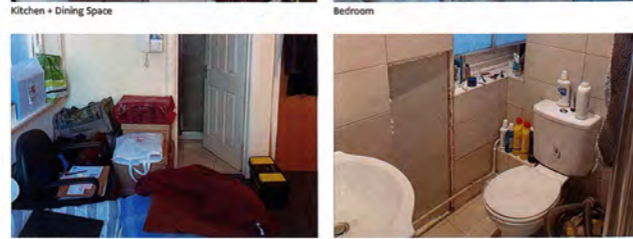
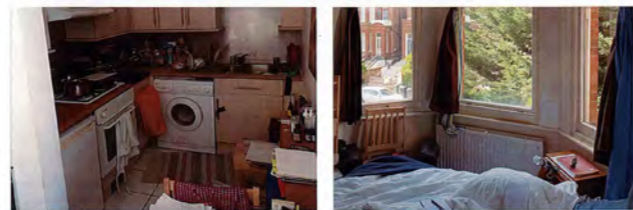
Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?

Use this space to jot down any first thoughts...

Yes, people on a budget, students, elderly or young professionals who are looking for a temporary accommodation or can't afford a better designed and bigger space

Discussion Q: How important is it to have a sense of community or connection to others when living in a micro flat?

Use this space to jot down any first thoughts...

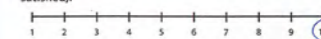


Kitchen + Dining Space Living Space Bedroom Bathroom

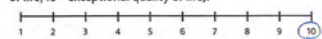
Saida

LONDON MICRO FLAT: POST-RENOVATION

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3. What emotions/feelings do you believe you would feel living in this micro flat?

a sense of comfort, balance, positive mindset, relaxation

4. What design elements of the micro flat contributed to your answer for question 3?

neutral color palette - good lighting - smart spatial layout

5. Are there any aspects of the interior design that you find innovative/creative?

The use of high ceiling to install a bedroom on a higher level & using the space below for storage

6. Are there any aspects of the interior design that you find unappealing/off-putting?

no

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

- a) very likely
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- e) very unlikely

Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?

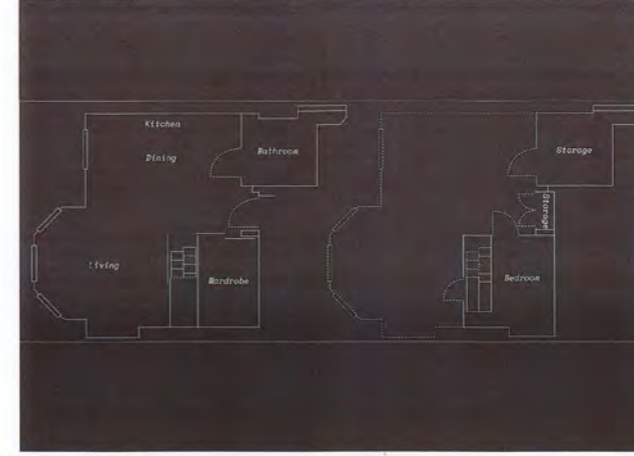
Use this space to jot down any first thoughts...

It brings a sense of belonging & helps to bring a more positive and motivational mindset

Discussion Q: Would you have to alter your daily routine within your current living space to adjust to living in a micro flat?

Use this space to jot down any first thoughts...

In a well designed flat with plenty of storage space I would not have to alter my daily routine as there would be enough space designed for all of my belongings



Kitchen + Dining Space Personalised Living Space Bedroom + Wardrobe Pod Bathroom



LONDON MICRO FLAT: PRE-RENOVATION

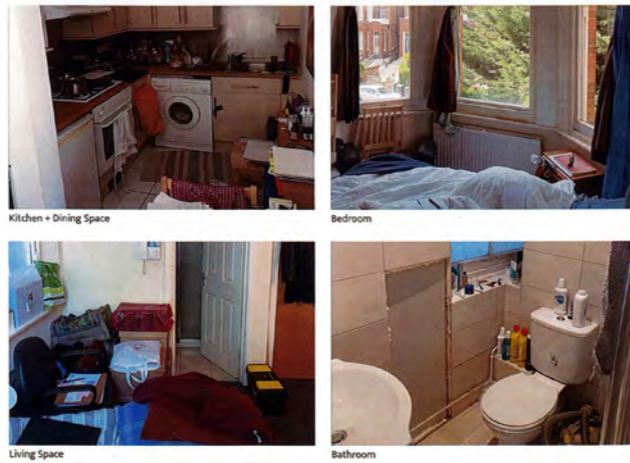
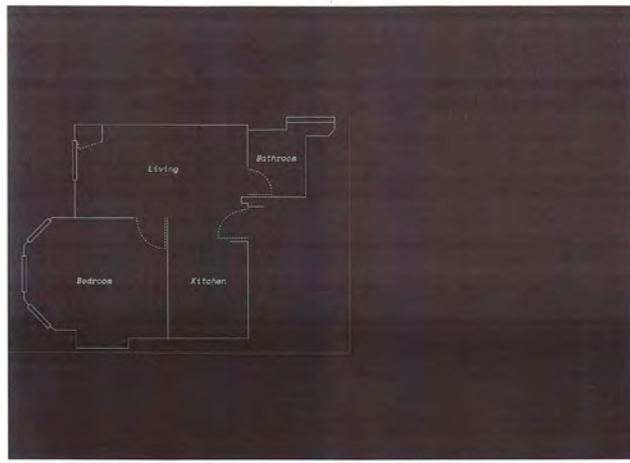
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3. What emotions/feelings do you believe you would feel living in this micro flat?  
 4. What design elements of the micro flat contributed to your answer for question 3?

5. Are there any aspects of the interior design that you find innovative/creative?  
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7. If given the choice, how likely would you consider living in this micro flat?  
 8. How likely are you to recommend a micro flat with a similar design to a friend?

Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?  
 Discussion Q: How important is it to have a sense of community or connection to others when living in a micro-flat?



Hai

LONDON MICRO FLAT: POST-RENOVATION

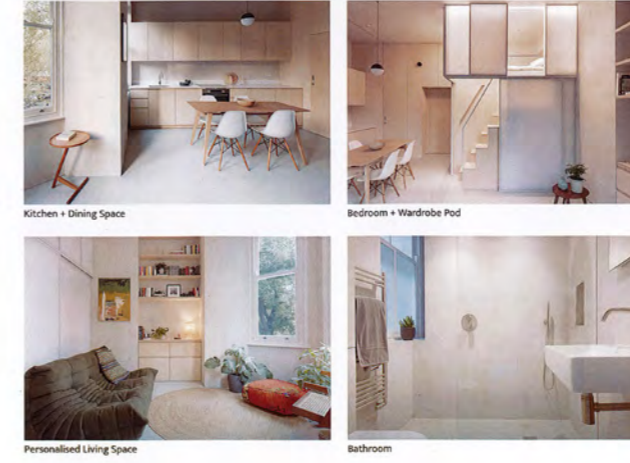
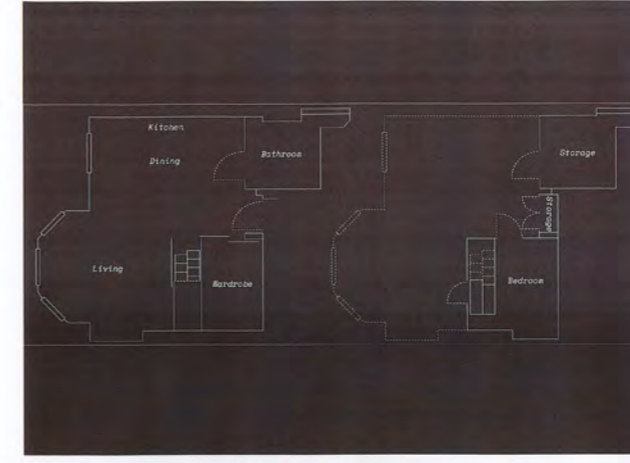
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Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?  
 Discussion Q: Would you have to alter your daily routine within your current living space to adjust to living in a micro flat?



Hai

LONDON MICRO FLAT: PRE-RENOVATION

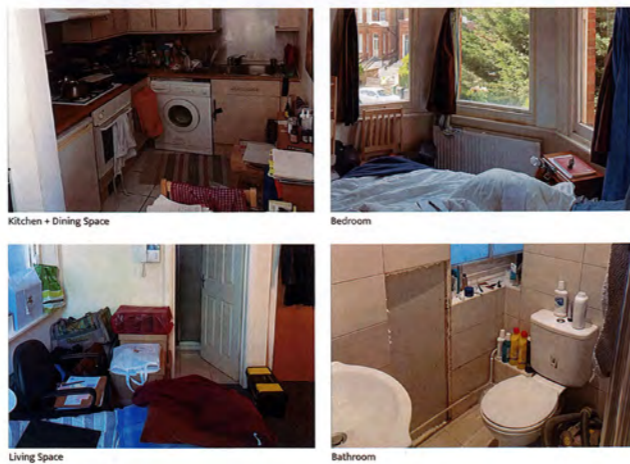
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 8. How likely are you to recommend a micro flat with a similar design to a friend?

Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?  
 Discussion Q: How important is it to have a sense of community or connection to others when living in a micro-flat?



Maha Saeed Khan

LONDON MICRO FLAT: POST-RENOVATION

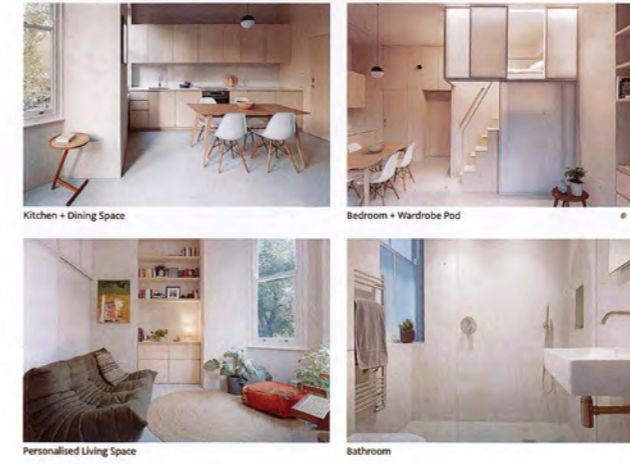
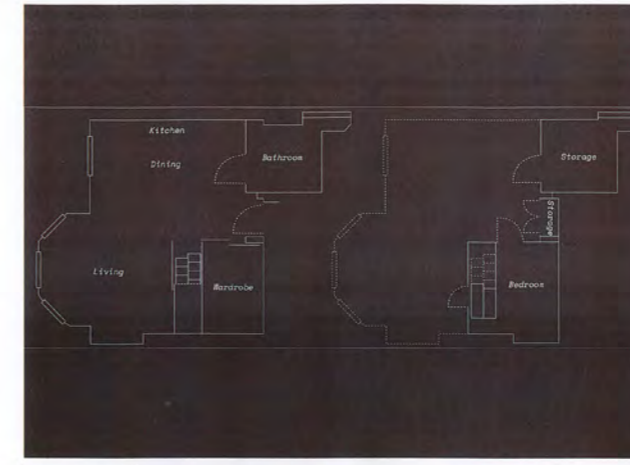
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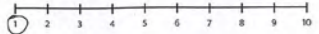
Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?  
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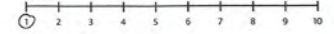


Elizabeth  
LONDON MICRO FLAT: PRE-RENOVATION

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2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).



3. What emotions/feelings do you believe you would feel living in this micro flat?

I would feel like my life is not together (sad, upset, ~~not~~ not organized, hard to be productive)

4. What design elements of the micro flat contributed to your answer for question 3?

-Not enough storage  
-Not using all the potential space

5. Are there any aspects of the interior design that you find innovative/creative?

-The bedrooms three windows

6. Are there any aspects of the interior design that you find unappealing/off-putting?

-It's not using the space to the highest potential (also things not fitting like the washer is tighter than the space provided)

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

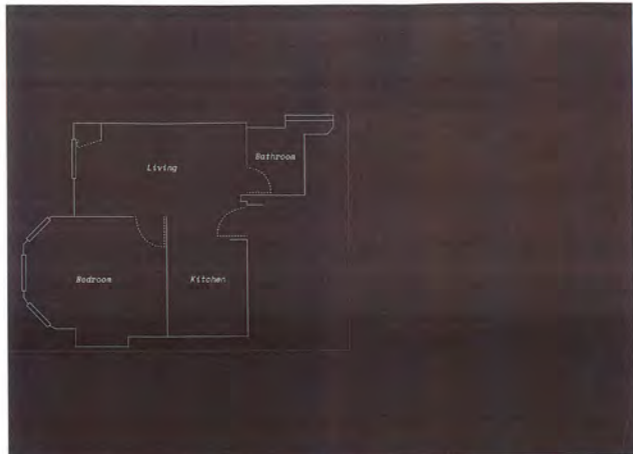
- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?

Use this space to jot down any first thoughts...  
-Yes, young single people either university students or young professionals - adults who may want to live somewhere central but don't have a big budget or don't want to take care of a big place

Discussion Q: How important is it to have a sense of community or connection to others when living in a micro flat?

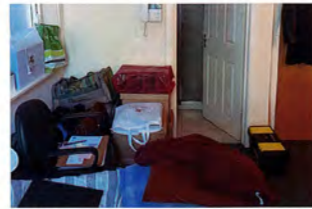
Use this space to jot down any first thoughts...  
Pretty important because in micro flats to live alone and that can get lonely so the sense of connection is nice



Kitchen + Dining Space



Bedroom



Living Space

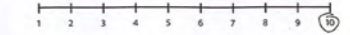


Bathroom

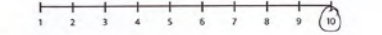
Elizabeth

LONDON MICRO FLAT: POST-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied).



2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).



3. What emotions/feelings do you believe you would feel living in this micro flat?

Relaxed, calm, homey, nice

4. What design elements of the micro flat contributed to your answer for question 3?

lighting, materials, organizing, everything has a space

5. Are there any aspects of the interior design that you find innovative/creative?

The use of vertical space and that there is a lot of storage

6. Are there any aspects of the interior design that you find unappealing/off-putting?

No

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

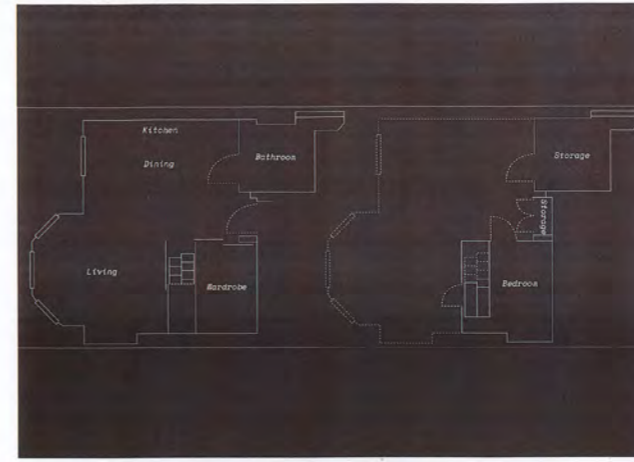
- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?

Use this space to jot down any first thoughts...  
A motivated and focus everything has a place and I could move on with my day unlike the other pre-renovated

Discussion Q: Would you have to alter your daily routine within your current living space to adjust to living in a micro flat?

Use this space to jot down any first thoughts...  
Not really. If everything had a place I don't think much would change



Kitchen + Dining Space



Bedroom + Wardrobe Pod



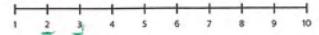
Personalised Living Space



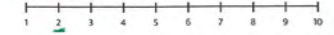
Bathroom

Flo  
LONDON MICRO FLAT: PRE-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied).



2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).



3. What emotions/feelings do you believe you would feel living in this micro flat?

Trapped  
Anxious  
Demotivated

4. What design elements of the micro flat contributed to your answer for question 3?

Everything looks cramped in old furnishings  
not well organized space  
little floor space

5. Are there any aspects of the interior design that you find innovative/creative?

6. Are there any aspects of the interior design that you find unappealing/off-putting?

The colour of the furniture  
lack of storage

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?

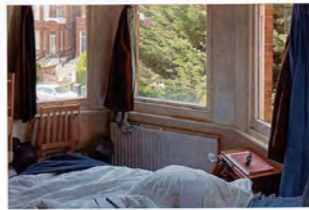
Use this space to jot down any first thoughts...  
Yes people who are single who are always working or young people or those looking for something affordable

Discussion Q: How important is it to have a sense of community or connection to others when living in a micro flat?

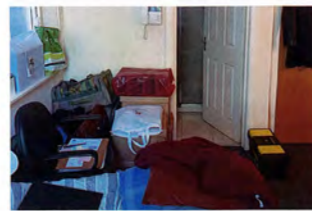
Use this space to jot down any first thoughts...  
Very because the space is small so commonly for single people who could become isolated living in the space



Kitchen + Dining Space



Bedroom



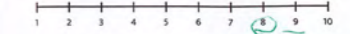
Living Space



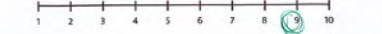
Bathroom

Flo  
LONDON MICRO FLAT: POST-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied).



2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).



3. What emotions/feelings do you believe you would feel living in this micro flat?

relaxed  
focused  
motivated

4. What design elements of the micro flat contributed to your answer for question 3?

It does not look so busy  
it looks simple

5. Are there any aspects of the interior design that you find innovative/creative?

The bedrooms being of the floor allowing floor space

6. Are there any aspects of the interior design that you find unappealing/off-putting?

No

7. If given the choice, how likely would you consider living in this micro flat?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

- a) very likely
- b) somewhat likely
- c) neither likely not unlikely
- d) somewhat unlikely
- e) very unlikely

Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?

Use this space to jot down any first thoughts...  
Peace of mind  
order  
relaxed

Discussion Q: Would you have to alter your daily routine within your current living space to adjust to living in a micro flat?

Use this space to jot down any first thoughts...  
~~Yes~~ No



Kitchen + Dining Space



Bedroom + Wardrobe Pod



Personalised Living Space



Bathroom



VISUAL ELICITATION SURVEY: RAW DATA

Nafisah  
LONDON MICRO FLAT: PRE-RENOVATION

1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied).

1 2 3 4 5 6 7 8 9 10

2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).

1 2 3 4 5 6 7 8 9 10

3. What emotions/feelings do you believe you would feel living in this micro flat?

cluttered, tight, uncomfortable

4. What design elements of the micro flat contributed to your answer for question 3?

the usage of space; the entrance and lack of privacy within the spaces

5. Are there any aspects of the interior design that you find innovative/creative?

for a micro flat, the usage of space for each room is quite maximal

6. Are there any aspects of the interior design that you find unappealing/off-putting?

the placing of the spaces...

7. If given the choice, how likely would you consider living in this micro flat?

a) very likely b) somewhat likely c) neither likely not unlikely d) somewhat unlikely e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

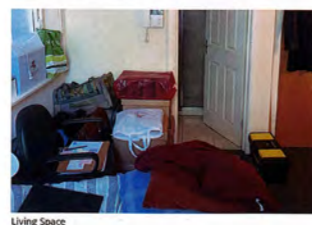
a) very likely b) somewhat likely c) neither likely not unlikely d) somewhat unlikely e) very unlikely

Discussion Q: Do you think micro flat's appeal to a specific user demographic or lifestyle?

Use this space to jot down any first thoughts...

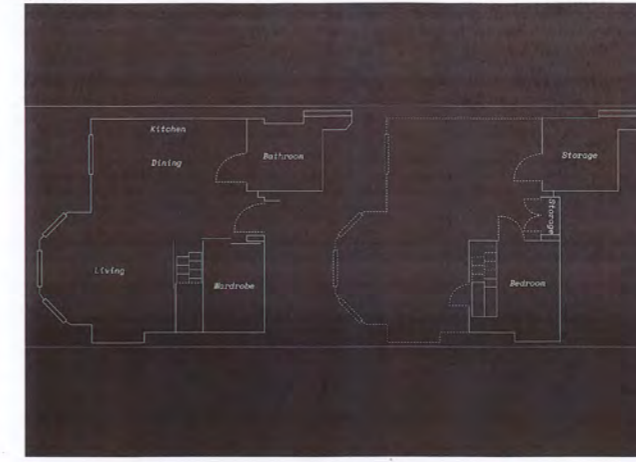
Discussion Q: How important is it to have a sense of community or connection to others when living in a micro flat?

Use this space to jot down any first thoughts...



VISUAL ELICITATION SURVEY: RAW DATA

Nafisah  
LONDON MICRO FLAT: POST-RENOVATION



1. On a scale of 1-10, how satisfied are you with the interior design of the micro flat? (1 = very unsatisfied, 10 = very satisfied).

1 2 3 4 5 6 7 8 9 10

2. On a scale of 1-10, what quality of life do you think this micro flat offers for potential inhabitants? (1 = poor quality of life, 10 = exceptional quality of life).

1 2 3 4 5 6 7 8 9 10

3. What emotions/feelings do you believe you would feel living in this micro flat?

comfortable, excited, motivated

4. What design elements of the micro flat contributed to your answer for question 3?

The privacy availability; the sharing of space between floors; the ability of having space...

5. Are there any aspects of the interior design that you find innovative/creative?

the innovation of creating a bedroom that is that area...

6. Are there any aspects of the interior design that you find unappealing/off-putting?

the kitchen/dining + bathroom being in the same area as the wardrobe being on a different floor

7. If given the choice, how likely would you consider living in this micro flat?

a) very likely b) somewhat likely c) neither likely not unlikely d) somewhat unlikely e) very unlikely

8. How likely are you to recommend a micro flat with a similar design to a friend?

a) very likely b) somewhat likely c) neither likely not unlikely d) somewhat unlikely e) very unlikely

Discussion Q: What emotional or psychological benefits might someone gain from living in a well-designed micro flat?

Use this space to jot down any first thoughts...

more organised everything in a specific area...

Discussion Q: Would you have to alter your daily routine within your current living space to adjust to living in a micro flat?

Use this space to jot down any first thoughts...

reduce the clutter I could possibly have...

## DISCUSSION IN A FOCUS GROUP SETTING

\*Please note this discussion was meant to be had with micro-flat users of the Italian Building, however due to time constraints it could not be arranged. The following information is in relation to a discussion with Italian Building micro-flat users, in case this discussion were to be carried out in for future research. Instead, this discussion was carried out with prospective micro-flat users, using the material from the visual elicitation survey. The dialogue recorded is useful in supplementing the information gathered from the visual elicitation survey.

**Aim:** The purpose of this focus group is to gain an in-depth understanding of micro-flat user well-being during the inhabitation of a micro-flat.

**Rationale:** Conducting a discussion in a focus group setting with micro-flat users will provide accurate accounts of user experience within a smaller than average dwelling. Discussion topics will include: general user experience, design elements contributing to their experience, sense of home and self, sense of community, as well as some general questions pertaining to micro-living life. Speaking on general user experience will establish some sort of baseline understanding, and the subsequent investigation of specific design elements that contribute to said experience will provide information on which design elements to include or not include in future micro-flat builds. Discussing sense of home, self, and community will provide a wider context to understand user well-being, as well as stimulating a deeper part of the users consciousness with relation to introspection. General questions pertaining to micro-living life could provide data that further supplements the information gathered from the discussion, and could provide insight into topics that future designers and builds should take into consideration.

**Hypothesis:** It is hypothesised that responses will provide a spectrum of data that highlights both positive, negative and neutral experiences during their time living in a micro-flat.

**Materials:** Notebook with the questions (see Discussion 2.2).

**Procedure:** Participants will be seated in the shared living spaces, so as to promote a feeling of comfort. Participants will be briefed (see Script 2.1), after which the casual discussion will ensue. The aim is for the discussion to be 45 minutes long, so as to reduce interview fatigue. Participants will then be debriefed so as to understand the aim of this research and their participation.

**Sampling:** Participants will be gathered through purposive sampling, such that participants will be recruited and on a basis of meeting the requirement of living or having lived in a micro-flat. This method is useful for studying a particular group of people, and ensures a representative sample for the research topic at hand, however limitations arise in terms of generalization, such that findings might not be able to be generalised to a larger population.

**Data Set:** Discussion A will feature open ended questions to form a semi-structured interview in a focus group setting.

**Analysis:** This focus group discussion could have been improved with regards to the longevity of the discussion, which stemmed from the long list of questions. The audio recording included 65 minutes of discussion, which was 20 minutes more than originally planned, however with this qualitative research method it was somewhat expected to run over. Because of the nature of the discussion, with participants providing answers relating to other questions not in order, the discussion jumped from topic to topic to maintain some sort of relevance. Perhaps if this focus group discussion were to be repeated, a shorter list of questions that were more broad would allow participants to speak freely on a wider array of topics that might provide the same in-depth information in a shorter amount of time.

**Advantages:**

- As the nature of this research method provides an intimate setting for the interviewer and interviewee, more in-depth data is able to be gathered. Detailed data pertaining to the participants experiences, attitudes and beliefs allow for a deeper understanding of the participants perspective on the topic at hand.
- Focus group interviews have the potential to be flexible in nature, such that the interviewer can ask follow-up questions and delve into deeper relevant sub-topics depending on the participants answers. This allows for a more comprehensive exploration of the research topic.

**Limitations:**

- This research method can be quite time-consuming in regards to scheduling and conducting, particularly when the sample size includes a large number of participants.
- Researcher bias can be prominent as the interviewer's personal beliefs could influence the questions asked and subsequently the data gathered. This can be reduced by ensuring neutral language throughout the interview process, as well as interviewer training.

## DISCUSSION IN A FOCUS GROUP SETTING

## SCRIPT 2.1

Hello everyone, and thank you for participating in this focus group discussion. The aim of this survey is to better understand user experience for those inhabiting micro-flats, therefore you have been selected to participate in this discussion on the basis that you currently inhabit micro-flats within a micro-co-living building. I've brought with me a list of 25 questions that I'd like to ask you and am eager to hear your responses. This is a casual style discussion so please feel free to express your personal opinions and beliefs, and I encourage you to share your personal experiences if you feel comfortable doing so. This discussion should take around 45 minutes as I know you all have other commitments, so thank you for taking the time to participate today. I'd like to inform you that your participation is entirely voluntary, and you are free to withdraw at any time. If at any time you'd like some clarification, please feel free to ask. // Thank you for taking the time to participate in this discussion today. Your responses will be used to inform my design proposal of a co-living micro-flat tower that seeks to promote optimal user well-being. If you decide you would like your data withdrawn after the completion of this survey, please don't hesitate to contact me on S19002720@regents.ac.uk and I will ensure your data is removed.

## DISCUSSION 2.2

**General User Emotional Experience**

1. What emotions do you typically experience when you spend time in your micro-flat?
2. Do you find that the interior design of your micro-flat impacts your overall mood?
3. What impact might the micro-flat's design have on someone's mental or emotional well-being?
4. How important do you think interior design is when it comes to living in a small space?
5. What design changes or additions could be made to improve the micro-flat's liveability, and aesthetic appeal?

**Design Elements Contributing to Emotional Experience**

6. Are there any aspects of the micro-flat's design that you found particularly innovative or creative?
7. How often do you feel cramped or confined in your micro-flat, if at all?
8. Do you find that your micro-flat feels cluttered or disorganized at times? Could this be due to personal cleanliness or the smaller size of a micro-flat?
9. Are there any design elements in your micro-flat that you found particularly unappealing or off-putting? Why?
10. Which design elements contribute most to making your micro-flat feel like a comfortable and welcoming space?
11. Which design elements do you find most conducive to productivity in your micro-flat?
12. What design elements do you find most conducive to relaxation in your micro-flat?
13. How easy is your micro-flat to maintain (cleanliness, no clutter, etc)?
14. If you have previously lived in an average sized flat (not one that is advertised as micro), how much have you altered your daily routine to adjust living in a micro-flat?

**Sense of Home + Self**

15. How frequently do you feel a sense of "home" in your micro-flat?
16. What design elements do you find most important for making your micro-flat feel like a home? (Ex: personal decor, comfortable furnishings, sentimental objects, etc)
17. How do you think the micro-flat's design might affect someone's sense of privacy or personal space?
18. Which of the following design elements do you find most conducive to creating a sense of privacy in your micro-flat: (a) soundproofing, (b) opaque window coverings, (c) a separate bedroom, (d) other (please specify)

**Sense of Community**

19. How often do you feel isolated or disconnected in your micro-flat?
20. Which of the following design elements do you find most conducive to fostering a sense of community in your micro-flat building: (a) communal spaces, (b) shared amenities, (c) opportunities for socializing, (d) shared outdoor spaces, (e) other (please specify)
21. In your opinion, how important is it to have a sense of community or connection when living in a small space?

**Closing Remarks**

22. How likely are you to recommend a micro-flat with a similar design to a friend?
23. Do you think the micro-flat's design would appeal to a specific demographic or lifestyle?
24. How might the micro-flat's design affect someone's ability to work, relax, or entertain guests?
25. In your opinion, what emotional or psychological benefits might someone gain from living in a well-designed micro-flat?



## DISCUSSION IN A FOCUS GROUP SETTING: DIALOGUE

**What emotions would you experience if you were to spend time in a micro-flat?**

1- I feel like I'd be making a progressive choice, deciding to live in this type of housing. I'm aware of the environmental benefits that micro-housing has, so if I were to live in one, I'd feel a sense of liberation. Liberation from the guilt and anxiety that comes with this climate crisis.

2- I'd feel content, I wouldn't feel like I'm in a stuffy micro-flat, I'd still feel like I have space to move around.

**Do you think that the interior design of your micro-flat would impact your overall mood?**

1 & 2 - Yes, definitely.

1- You know what they say about cluttered space, cluttered mind? The design of this micro-flat is very clean and minimal, in my opinion. So that would help me feel better mentally, for sure.

2- I feel the same. I feel like, because it's a spacious micro-flat, I wouldn't feel trapped. Feeling trapped can make me feel a bit anxious sometimes, so the fact that I'd feel like I have space definitely makes me feel better.

**What impact might the micro-flat's design have on someone's mental or emotional well-being?**

2- I guess this relates to cluttered space, cluttered mind. If your micro-flat is designed in a way that sort of encourages you to be clean, it would have a positive impact on well-being.

**How important do you think interior design is when it comes to living in a small space?**

K- So (2), you've mentioned how you like the spaciousness of the micro-flat, and how the design itself contributes to the space feeling larger. I'm curious to hear your thoughts on how important you think design is for micro-flats.

2- Yeah definitely it's important, extremely. I think on some level it's about the little things, the little details, of the overall design that helps make the space feel bigger. So paying attention to the tiny details of the design is very important.

**What design changes or additions could be made to improve the micro-flat's liveability, and aesthetic appeal?**

1- If I were to add something to this micro-flat, it would just be about little decorations.

K- As in, decorating the space with your personal belongings?

1- Yes exactly.

2- I agree with that.

**Are there any aspects of the micro-flat's design that you found particularly innovative or creative?**

1- I like how the bedroom is on the upper level, I think it would get a lot of natural light in that space which I like. I think it's important to design with that in mind, because natural light is so important for us.

2- Yeah, again with the spaciousness stuff, when there's a lot of natural light in the space it makes it feel bigger, less bleak.

K- I totally agree with that. Have you guys ever gone to sleep in a pitch black room, or a room with blackout curtains, and you wake up feeling not as refreshed?

1- It makes me feel kind of afraid to be honest. Like, I wake up feeling disoriented sometimes.

2- Sometimes I wake up and I'm like 'what day is it, what time is it' hahaha.

1- For me, I definitely feel refreshed when I wake up with a bit of natural light in the room, because it's the perfect balance between under sleeping and oversleeping,

K- So, you feel like waking up when the natural light is at a certain brightness in the room is ideal?

2- Yeah that's right.

1- I totally get that. It's like, I either wake up and see it's so dark, it makes me want to sleep more and then I oversleep and don't feel great. Or, I wake up feeling a bit panicked because I don't know what time it is, like should I get up now or do I still have time to enough time to go back to sleep before my alarm goes off?

K- Right, so it sounds like the consensus is that waking up in a pitch black room doesn't really ever make us feel that good.

1 & 2: Yeah.

2- The reason why I like waking up with the sunlight rather than pitch black is because your brain needs to see light in order to process the chemical in your brain.. the one that's opposite to melatonin. That's why it's not good to have a lot of bright artificial light right before you sleep, because it tells your brain that it's not time to sleep. So, if you spend your evening in bright light, then you wake up in pitch black, you're going against your body's natural clock, your body's natural sleeping and waking process.

K- It seems like this is quite important, I'll make a note of it thank you.

1- What was the original question?

(Laughter amongst myself and the participants)

K- It was, are there any design elements that you find innovative or creative in your micro-flat?

1- I like how most micro-flat design comes with multi-functional furniture that incorporates storage wherever it can. Most furniture have double purposes.

## DISCUSSION IN A FOCUS GROUP SETTING: DIALOGUE

2- I really appreciate the minimal details that elevate the space and make it seem more elegant. It's the little details like recessed lighting or ambient lighting that you wouldn't first pay attention to, but come to think 'wow, I'm so thankful for this' over time. These kinds of details don't really come with apartments that haven't been carefully thought about.

**How often would you feel cramped or confined in your micro-flat?**

1- A lot less than my old place. It's obvious that the design of my old flat wasn't taken that much into consideration, and I didn't have as much storage space as I would have in this micro-flat even, so things naturally started to pile up. That clutter definitely made me feel cramped.

2- I mean, the interior design doesn't make me feel cramped at all, I think the designer's done a great job in designing the space to make it feel bigger than it actually is. But I still think I would feel confined sometimes, in the sense that I want to get out and take walks.

1- Yeah, I agree with that.

K- So, what about instead of just going for a walk around the block, your apartment building gave you a rooftop garden that you share with the other people in your building, or a courtyard or a shared gym, co-working space... would you feel happy taking your walks or spending your time outside of your flat in these kinds of spaces?

2- I'd go to those kinds of spaces, for sure!

1- Definitely.

2- Because then I could make friends outside of my apartment that also live in my building.

K- So you'd like the socialisation aspect of it?

2- Yeah it gives me a reason to get out and take advantage of the spaces, knowing that I'd be able to make friendships like that. Then I could invite them to my place to hang out too even!

K- So the idea of belonging to a community is attractive to you?

2- Yeah it would be nice to have a neighbour friend, you know.

1- Because there would be so many different amenities, it has a positive effect on your mental state - it's no longer like 'oh I like my flat', it's 'yeah I like my flat and it also comes with this this and that', so psychologically you attach your appreciation of the amenities to the flat you live in as well'.

K- So in other words, and please correct me if I'm wrong, you're saying your attachment to your private space is supported by an appreciation for the public spaces offered.

1- Yes, exactly.

**Do you think that the micro-flat would feel cluttered or disorganized at times? Could this be due to personal cleanliness or the smaller size of a micro-flat?**

1- Definitely because of me.

2- Yeah, same.

1- It's not that the environment is built to encourage messiness, or doesn't offer you the opportunity to be messy because of a lack of storage or something, I just think I'm a messy person sometimes.

**This relates to another question I had actually, how easy do you think the micro-flat would be to maintain (cleanliness, no clutter, etc)? Do you think the design of the micro-flat would help you to keep it clean and tidy?**

1- I think it would help encourage me to be clean actually, because the minimal details and clean lines of the space make you realise your clutter doesn't fit in. It disrupts the minimalism of the space.

K- Do you think if the micro-flat's design made the space look and feel kind of cramped, it would encourage you to be more messy?

2- Yeah for sure.

K- I guess it makes sense, like if the micro-flat didn't give you space to make your appliances look tidy, for example if the kitchen didn't give you enough space for a toaster and a blender or something, then these essential things just start to pile on top of each other, and then you add to it and it just sort of grows. What do you think?

2- Yeah I think the same, like if the overall design of your space is sophisticated, you feel some obligation to keep your space clean and tidy so that it maintains the sophisticated look.

**Are there any design elements in the micro-flat that you found particularly unappealing or off-putting? Why?**

2- Not really, no.

1- Yeah, nothing I'd comment on. Obviously with micro-flats you need to make some sacrifices, like if I'm being super picky I'd want some more headroom in the bedroom from the bed to the ceiling, but I'd definitely take this over cramping up the whole ground space. It does make getting intimate a bit funny though, haha. Like, you have to get changed underneath and then go up the ladder naked, it gives bunk bed vibes a little. But compared to the rest of the space and how elegant it is, I'd 100% make this sacrifice.

## DISCUSSION IN A FOCUS GROUP SETTING: DIALOGUE

**Which design elements do you think would contribute most to making the micro-flat feel like a comfortable and welcoming space?**

2- The chilling/living room area, with the little cushions and fold up couch in front of the window. I like how open it is and how much light I get there.

1- I like the cushions too, something about sitting on the ground makes you feel grounded inside too. I also like the little pops of colour it gives to the rest of the flat.

K- Oh that's interesting you mention that! So, the majority of the micro-flat is designed with a muted neutral palette scheme. Do you think you would like your space more if the designers added colourful structural pieces, like a colourful wall or kitchen back splash?

2- I actually really like the neutral palette, it lets me add my own pops of colour to the space, like with my paintings and posters.

K- So you would rather have a space that came with a neutral palette and then your personal belongings are what adds colour to the space?

2- Yeah that would be perfect!

1- I like how the neutral palette gives the space a timeless and classic feel. It doesn't make you feel like you're living in an outdated space that you need to move out of every couple of years to keep in line with what's trendy. You can add the trends in yourself and change those little things whenever the trend runs its course, rather than get up and move spaces entirely.

2- And the trendy things can be specific to you too, which makes the space more comfortable inevitably.

**That brings me to another question I had on my list - how frequently would you feel a sense of "home" in your micro-flat?**

2- I would feel it pretty quickly, because I like the design of the space it makes me feel excited to come home, it makes me feel proud to call it my home, and I'm happier claiming it as 'mine'. The freedom to decorate an otherwise plain space I think also contributes to this.

K- So again, having a neutral 'shell' of a space that you could claim as your own through personal decoration is what makes you feel like you can call this micro-flat your home?

2- Yes exactly.

1- I also think having these shared amenities and being able to interact with the community makes me feel like I'm home, as opposed to 'I'm in this flat for a year or so and then I'll move on'.

K- Sharing the experience of this building and the amenities with other people experiencing the same thing adds to the sense of community, and through that sense of community, you can feel at home?

2- Yeah it's like you've made a family.

**Which design elements do you find most conducive to productivity in the micro-flat?**

2- Like we were saying before about the modern, sophisticated feel of the flat helps you to keep it clean, and by keeping it clean and tidy it motivates me to do my work, when I need to work from home.

1- Yeah it relates to that messy space messy mind idea.

2- Also the fact that the micro-flat has separate zones for you to spend time in and feel like you're in a different space keeps you motivated and productive.

K- This actually reminds me of an article I recently read that says people who did work in spaces with higher ceilings tended to 'bigger thoughts' as in their ideas were bolder and they worked harder than those who did work in low ceiling spaces.

2- I can totally see how that makes sense.

1- Going back to what you said about the different zones, I feel like it gives you more space to change up the vibe - if I get bored working at the dining table, I could sit on the couch in front of the windows for a bit to do work, so it doesn't make me feel so cramped and it helps maintain my productivity.

2- The fact that the micro-flat has distinct zones, it doesn't feel repetitive or boring.

**What design elements do you find most conducive to relaxation in the micro-flat?**

2- The ambient lighting for sure! I definitely prefer the vibe that ambient lighting gives a space rather than harsh direct overhead lighting. I mean, don't get me wrong I like the overhead lighting in the kitchen for when I'm cooking or whatever, but in the evening I love having a glass of wine and dim-ish lighting, it really sets the tone for relaxation.

1- Yeah I agree with that.

**After living in your average sized apartments, how much do you think you'd alter your daily routine to adjust living in a micro-flat?**

2- Not much, because the design of the space make it seem like it's not micro.

1- Well, I guess the biggest change I would have to make is if I lived with someone else in the micro-flat. I live alone currently and it's perfect for me, and if I had a partner I think I could also live in a micro-flat with them, I just don't think I could live in a micro-flat with someone like a roommate.

1- Even if I did have to change it, for everything the flat offers in terms of nice interior design and nice shared spaces, I would change my routine no hesitation.

## DISCUSSION IN A FOCUS GROUP SETTING: DIALOGUE

**What design elements do you find most important for making a micro-flat feel like a home? (Ex: personal decor, comfortable furnishings, sentimental objects, etc)**

2- Two things: one, definitely my personal belongings because it reminds me of the good memories attached to those trinkets\*. But also, I love how the actual structural design of the space is quite geometric and harsh, like for instance the hard wood and the pointy corners in the kitchen, but the designers have softened it with the choice of lighting and the soft furnishing of the couch and cushions, so it's the perfect balance of relax/chill and productive, which makes it feel like a home because I could seamlessly switch from chill to productive and vice versa.

K- So, could you say perhaps that the contrasting materials give the perfect balance of emotions, which helps build your attachment to the space?

2- Yes!

K- So the juxtaposing materiality of the space sort of provides some sensory stimulation, and through that stimulation you attach these feelings of chill and productivity to the space, and because the materials have activated your senses which activated your emotions in this perfect balanced way, you get an attachment to the space which makes it feel like home?

1 & 2- YES!

**How do you think the micro-flat's design might affect someone's sense of privacy or personal space?**

1- Well there isn't really space to change besides the toilet, so if you have friends over or someone you recently started dating, it would be nice to have a more private space to do things like change and stuff.

2- Yeah there isn't really much space to be private, so I guess you'd need to be comfortable being vulnerable.

K- So perhaps micro-flats should provide a space other than the bathroom to be private.

1- Yeah, I mean like with my partner I don't mind not having this sense of privacy.

K- But perhaps if its a micro-flat for two flatmates, they would need a private space to be vulnerable separately. Or even just a private space for them to have alone time.

1 & 2- Yeah.

2- That would be ideal.

**How often would you feel isolated or disconnected in the micro-flat?**

1- If I had these shared spaces, I don't think I'd ever feel isolated or disconnected because I'm being provided with these outlets for interaction. But, if I lived in a micro-flat

without shared spaces, I'd probably feel pretty isolated, and disconnected from my flat because I'd constantly be going out. But that's not the same.

K- I guess the difference between going out to the shared spaces versus going out to the local pub or something is different because the shared spaces are like part of your home, part of your somewhat private space since only people living in the building can access it, whereas the pub is open to the general public.

2- I also think if I lived in a micro-flat that felt cramped and didn't offer me these shared spaces, it would make me feel kind of small too, maybe even insignificant.

**Which of the following design elements do you find most conducive to fostering a sense of community in the micro-flat building: (a) communal spaces, (b) shared amenities, (c) opportunities for socializing, (d) shared outdoor spaces, (e) other (please specify)**

1- I think opportunities for socialising, because it kind of ties together the communal spaces and shared amenities in one. But, I would be careful about offering too many things to the residents so that there's no need to leave the building, then it might be a bit too cult-y, you know?

K- Yeah for sure. I mean, personally I think it's nice to have novelty experiences with friends, because trying new activities together strengthens social bonds. But if you never had the need to experience things for the first time outside of the building, then it could be a bit suffocating maybe.

2- Yeah I agree with that. Maybe they could offer a cool experience a few times a month, so that it's not too frequent, and then you'd feel more inclined to go to.

**In your opinion, how important is it to have a sense of community or connection when living in a small space?**

2- Yeah I think it's super important. Like, I could live in the best designed micro-flat, but it's still a small space so you're gonna wanna go out and interact with others.

**How likely are you to recommend a micro-flat with a similar design to a friend?**

1- Very likely. But, I think it's because my friends and I are part of an age range where this living style is doable.

K- So do you think micro-flats are marketable to a certain demographic?

1- Yeah. I think people also need to be open to this style of living, it's certainly not for everyone, but I think it could work for a lot of people that are in a similar situation to me.

## DISCUSSION IN A FOCUS GROUP SETTING: DIALOGUE

K- So young professionals sort of?

1- Yeah probably.

K- Would you recommend this way of living for families? People with kids?

1- Hm, no. It would be too many people and it could cause strain on the relationships.

2- I think there's a lot of stereotypical housing options, like for example a rich banker probably won't choose to live in a micro-flat if he can afford a huge mansion. But I recognise the environmental strain this causes.

K- True, that's an interesting point. Maybe the future could be something like, if people can afford, and I don't mean afford in a monetary way, I mean in a lifestyle type of way, if people could afford to live in a smaller space, they should go for it?

1- Yeah, why not.

2- It's definitely unsustainable if this rich banker lived alone in an 8 bedroom house.

(Laughter amongst participants and myself)

### **How might the micro-flat's design affect someone's ability to work, relax, or entertain guests?**

2- I think the design definitely affects the way that you live within the flat. Like, I used to live in a super small studio where I was basically cooking where I was using the bathroom. It's very off-putting, made me not want to eat!

1- That's why I think it's important for designers to make these separate zones wherever possible.

### **In your opinion, what emotional or psychological benefits might someone gain from living in a well-designed micro-flat?**

1- It was like I said in the beginning, it can be quite freeing knowing that you're making a good choice for the environment.

2- I think it's like how I mentioned feeling a bit insignificant if I lived in a small, crappy flat. If I live somewhere where I like the design, I'll feel better about myself. Micro-flats are kinda hard to design I guess, but when it's done right, it makes a hell of a difference for the person living there.

## DISCUSSION: PERSONAL THOUGHTS

- It's interesting to think about how the built environment affects our ability to be vulnerable. For instance, the idea of private (bedroom) and semi-public spaces (kitchenette/living room for flatmates) in the micro-flat.

- Living in an unintelligently designed micro-flat can make you feel isolated within yourself. If you're living in a space that you don't enjoy being in, you might enter a dissociative state. Even though you can't live somewhere else, you might always be somewhere else in your head, mentally picturing a space you'd rather live in. Because we spend 90% of our lives indoors, you'd want that time to be spent in a space you like and enjoy, some place where you can therefore be present. Otherwise you'll be dissociating all the time, and in doing so you'd be disconnected and isolated from your present self, making you feel disconnected and isolated from society as well.

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