INQUIRY INTO PUBLIC TOILETS

Organisation: MHA Design

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Portfolio committee No. 8 – Public Toilets

CUSTOMER SERVICE INQUIRE INTO AND REPORT ON PUBLIC TOILETS

MHA (Mental Health Access) Design Statement in support of inclusive education tailored towards the needs of neurodiverse individuals.

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Points of discussion regarding the **setting** of existing public spaces and **regulatory practices** surrounding the support of Neuro Diverse individuals.

1- Inclusive bathroom design
2- Spatial design in social settings
3- Beyond sensory needs
4- Right not a privilege

The need:

There are infinite variations of brain functionality amongst us all, however the society and daily environment we are asked to function within does not take this into consideration. Individuals living with such variation are referred to as neurodiverse although most of us are more familiar with the diagnoses which fall under this categorisation, autism, attention deficit hyperactivity disorder, dyspraxia, dyslexia, intellectual disabilities, and mental health conditions like anxiety, depression, and PTSD. (Figure 1)

Around 20% of our population is neurodiverse and yet public access is limited to most, if not all, spaces individuals interact within. This can be because our legislations do not consider the extent of cognitive, sensory, and social variation in our communities as our administrators are not obtaining corresponding evaluation and data to reveal such discrepancy's.

Changing the environment:

User access to spaces also varies in terms of preferential needs as parameters must be placed to allow for coexistence and interaction within the community. If physical accessibility is only considered regarding our public spaces without consideration shown towards engagement, segregation and isolation will settle in, a behaviour which ND individuals are very susceptible to. (Figure 16)

Flexibility and adaptability of spaces can help provide options which is what ND individuals require to be able to feel supported within various environments. (Figure 3)

Changing the attitude:

Lack of consideration shown towards diverse needs in our community also results in a reduced or lower economical contribution to society as many ND individuals have a hard time identifying businesses which can support their specific needs. (Figure 2)

MHA proposed plan going forward:

1. Understanding ND individuals have different/conflicting needs which means stimulating environments are not overwhelming for all and there is no 'universal' level of comfort applicable to all. Providing choice in environments or ensuring there is a default low-stimuli with the option of adding higher stimuli available is of utmost importance.

2. Informing users of the space with as much data as possible regarding the environment they are approaching. Allowing for people to make informed decisions is empowering and builds on confidence. An example of this is the provision of maps/written/acoustic information at the entry of various spaces. (Figure 4)

Sensory map of Zurich's head office: providing areas for escape from stimuli, allowing users to navigate space before entering it (knowing what to expect)
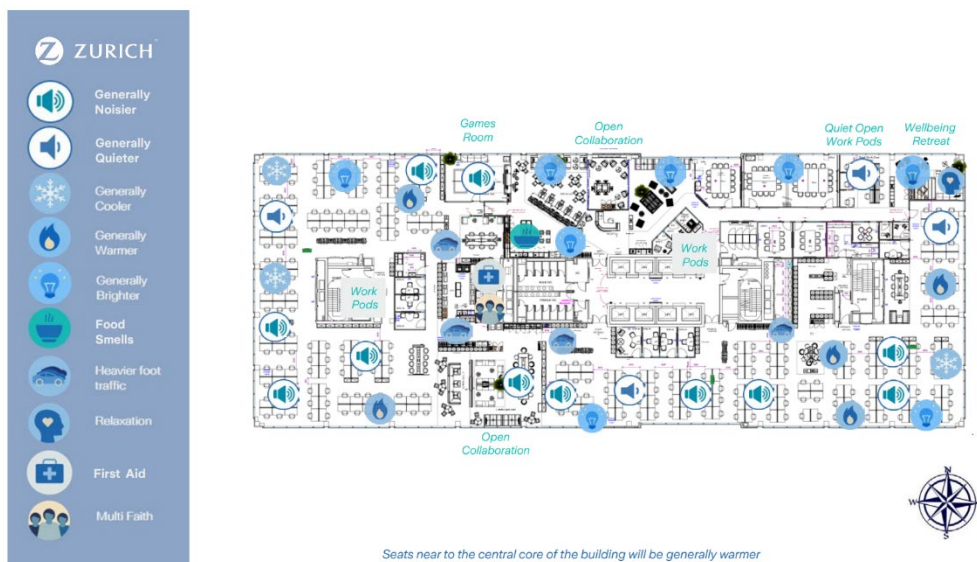
3. Seeking insight from all stakeholders involved in the care and accessibility of an ND individual is very valuable. Co-developing standards with families and care takers will ensure a wide range of needs are met as promptly as possible.

4. Allowing for authorised ND individuals to contribute to data collected regarding public spaces and their accessibility will not only ensure more information is gathered over a short amount of time, but will empower individuals and remind them of their rights in society.

1- **Inclusive bathroom design**

When working towards an inclusive bathroom design, we must first acknowledge the universal right everyone has to comfort, safety and dignity in the accessibility of a public bathroom.

The elements which can be considered consist of but are not limited to (Figure 11-12):

1. comfort
2. cultural considerations
3. health and hygiene
4. privacy
5. specific needs of different user groups
6. toilet access and wait times
7. toilet safety and security

Currently, many designers and builders are resorting to performance solution when proposing design options as existing code is often hard to comply with due to the lack of flexibility and consideration it presents towards a diverse range of individuals in society. This leads to inconsistency which removes the ability users have in preparing themselves prior to approaching a new environment.

Although flexibility and adaptability are important elements when discussing inclusive design, such provisions must be presented within a set of parameters intended to improve inclusivity (gender, mental/physical disability/ cultural etc), reduce red tape, be cost effective and to ensure safety.
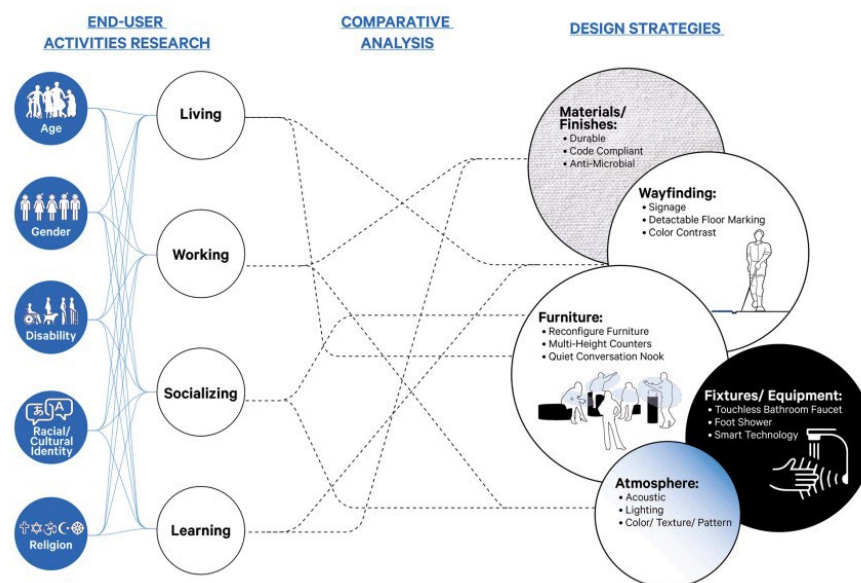
MixDesign methodology diagram

2- Spatial Design in social setting

A certain level of discernment for necessary change can be obtained when working in the disability and social services sector. One of the biggest realisations is the impact our surrounding environment makes upon us all, especially those living with a mental health diagnosis (Figure 6-7)

One factor often missed is the layout and circulation of spaces both internally and externally (Figure 8-10, 13), it can determine if an individual will choose to access their potential or to isolate instead. There are two main categories which can enhance the accessibility of an environment, **compartmentalisation, and transparency**. Both features can promote comfort, safety and efficiency in movement which not only helps the user but also those who may be assisting.

To propose a list of mandatory considerations, MHA recommends:

1) Proper signage (considering all types of communicative abilities),
2) Transition areas (in between zones which offer a moment of relief whilst moving through various spaces), (Figure 17)
3) Acoustic and lighting considerations (ensuring a default standard of low stimuli is offered which can be adjusted to a higher setting if necessary),
4) Consideration shown towards deodorisers (that are not overpowering) and
5) The inclusion of breakout areas (quit zones which provide the user with an escape from stimuli), we can create a far more inclusive public space for all.

3- Beyond Sensory needs

ND individuals are far more than just their diagnoses, sensitivities presented by the neurodiverse community are also not limited to that of sensory needs. Trauma related behaviours are often oversimplified and not considered in depth as it can be difficult to recall past events or it simply cannot be shared broadly. (Figure 5)

There will never be a one design solution which suits all as every user of a space lives with a unique set of life experiences and trauma's which trigger the presentation of different behaviours within the parameters of their diagnosis. Depending on how these behaviours have been responded to, ND individuals can have a better or worse chance at building on their existing capacity and engaging within society.

Because of all these variables, it can be helpful to gain a broad understanding of universal triggers to remove or minimise them. If this is not applicable, controls can be introduced to help reduce the impact made by presented behaviours once a person is triggered. (Figure 14-15)

Specifically talking about the context of a public toilet, design considerations which go beyond sensory needs can consist of but are not limited to:

- Fixtures and fittings (anti-ligature and robust but not institutional)
- Hygiene and maintenance (consistent upkeep of a certain standard)
- Location (distance to certain triggers)
- Privacy
- Safety
- Signage and wayfinding (use of transition spaces)
- Size (inclusive in consideration of all body types)

4- Right not a privilege

It is a human right to be provided with the same level of opportunity as others when occupying a space and engaging with the community. Many are born with differences in brain functionality and yet manage to excel in our society, as their circumstance is perceived and treated as an opportunity rather than a fault. Of course, this requires a strong support system which most do not have access to which is exactly where government can step in to fill in the gap.

Through Adaptable design (Figure 18-19 - spaces which can evolve over time or through the access of different users) a helping hand can be offered to the neurodiverse community, a hand which many may not have the opportunity to access within their inner circle. This is how the greater public can realise the invisible privileges we have daily which in fact reveal what privileges are taken away from others.

There must be a point where we determine if an aid provided is a privilege or a right and currently, we are removing the right of almost 20% of people living in Australia.

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Figure 1

NEUROTYPICAL

The word Neurotypical (NT) is the opposite of Neurodivergent. Neurotypical means being "neurologically typical" - within the typical (average) range for human neurology. This range is of course constantly evolving.

The term originated in the autistic community, as a way to refer to non-autistic people, and is used to describe a person whose neurological development and state are typical, conforming to what most people would perceive as normal. People whose neurological development is atypical are referred to as "neurodivergent".

"Neurotypical" is a dubious construct, as there is nobody who can be considered truly neurotypical. There is no such standard for the human brain.

NEURODIVERGENT

Having an atypical neurological configuration, for example a person who has a developmental disorder or a mental illness. ND is defined as divergence in mental or neurological function from what is considered typical or normal.

Neurodivergence can be innate, acquired or both. Innate ND's consist of but are not limited to ADHD, ASD, Dyspraxia, Tourette Syndrome, Dyslexia. PTSD, Anxiety, Bipolar fall under acquired ND's.

There are more Neurodivergent individuals in our environment than we realise however, most are able to conform to societal expectations and norms which have been outlined by "Neurotypical" individuals. A Neurodiverse society will ensure no individual is required to change just to live a comfortable lifestyle.

Figure 2

REDEFINED

ABSTRACT APPROACH

ABSTRACT APPROACH

The title placed onto a participant depending on their functional capacity displayed Behaviour level of support required and past trauma's.

Every individual has a different set of values, likes/dislikes, necessities abilities and level of support required to sustain a healthy and functional lifestyle. In addition to this, change is a constant variable associated with growth hence no human can every be limited to the dictation of a label or title.

e.g. This is what a home looks like.

e.g. What do you perceive a home to be?

SOCIAL APPROACH

SOCIAL APPROACH

A perception made towards individuals bearing different physical and mental attributes to a norm which has been formulated through an analysis of the average human and societies expectations of what is required for its sustainability.

Society and our surrounding environment must shift and adapt to our needs, wants, likes and dislikes. There is no one way of living which can be deemed correct or appropriate. The range of access and support must be expanded upon to allow participation from the majority of the public rather than a certain percentage.

e.g. Here is a list of goals intended for your growth.

e.g. What capacity would you like to build on?

SYMBOLIC APPROACH

1

SYMBOLIC APPROACH

The degree of support deemed necessary in provision of individuals requiring assistance towards their level of accessibility. A checklist intended to protect the provider rather than a guide used to anticipate for the users needs.

It is very limiting and segregating to navigate a world designed narrowly for neurotypical individuals. The spaced intended for neurodivergent users is also deemed acceptable from the perception of neurotypical. A more diverse conversation must take place to allow for a broader range of opinions to be made regarding our everyday environment.

e.g. Here is a list of support provided.

e.g. How can we adapt the environment to allow for your interests?

Figure 3

2

ENVIRONMENT

Introducing a new environment to an individual can be a very uncomfortable experience as there are many unknown factors in a new space. This lack of knowledge, sudden change of setting and irregularities caused by such transitions can trigger many Behavior's.

To remove ambiguity and discomfort, a transition plan is very important as it allow the individual to adapt in their own time and to express their new needs. This plan can consider:

- Introducing a user to a new space in increments throughout the week/s
- Providing for a user in a new space as per capacity, needs, likes/dislikes
- Allowing a user the opportunity to tailor a space to their liking
- Applying consistent routine and protocols to a new space as per previous living environment

WHAT IS IT

An individual's environment is not limited to the physical space surrounding them as it also incorporates the sensory factors which can be identified through various senses as well as the presence of other users within the space.

WHY IS IT IMPORTANT

The environment is capable of facilitating or discouraging interactions of an individual. An "uncomfortable" space can restrict a user and segregate them from various opportunities.

Similarly a provoking space can motivate negative responses for a user as it is triggering of previous trauma and past encounters of poorly manged Behavior's.

HOW IS IT MANAGED

As every individual has a different past, capacity and need alongside interest, likes and of course dislikes, there is no one space which can be appropriate for us.

For this exact reason, the more adaptable a space is the more appropriately designed it can be towards the users needs.

This adaptability will promote choice and control which is fundamental for independence.

Figure 4

ROUTINE & STRUCTURE

Structure is a great method of establishing stability and removing a sense of anxiety as events taking place in the near or distant future can be anticipated and hence prepared for; predictability reduces anxiety.

An individual may feel a lack of control when introduced to a new space, this may provoke various complex Behavior's.

To remove the chances of such situations taking place, an agreed upon routine and structure between the user and respective carers can be achieved. This schedule will assist with:

- Reminding an individual of their control in the space they reside in
- Allowing for daily tasks and regular meetings to take place without provoking anxiety
- Setting Goals and constantly enhancing quality of life through observation of change in routine over time.

WHAT IS IT

A method of organization in our everyday can be established by a routine. A simple reminder of tasks and re-curring placement of events will overtime create many habits which can benefit a participant in

WHY IS IT IMPORTANT

Routine is a great tool used for the organization of tasks throughout a specific time frame.

It assist in the removal of uncertainty as not only will the participant be aware of upcoming expectations, but also those who are present in the participants day-to-day.

HOW IS IT MANAGED

Daily and weekly structure's can be set up with the assistance of behaviour professionals, family members and support staff however the most important input within the setting of structure is the user themselves.

A routine plan should always incorporate a balanced series of tasks ranging from responsibilities to hobbies to goals etc. This method of structuring should also be constantly updated as per the user's growth and life changes which directly influence their likes and dislikes.
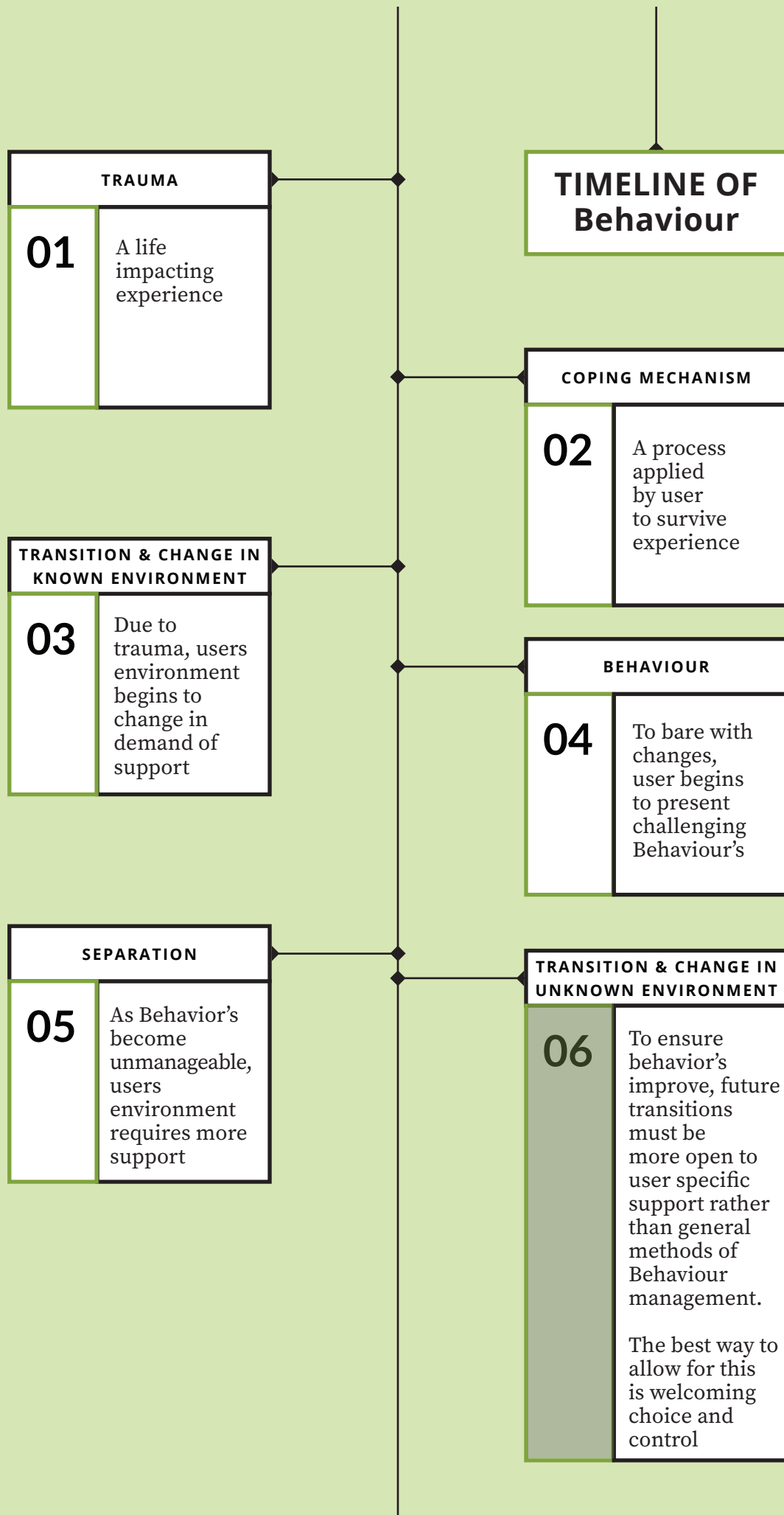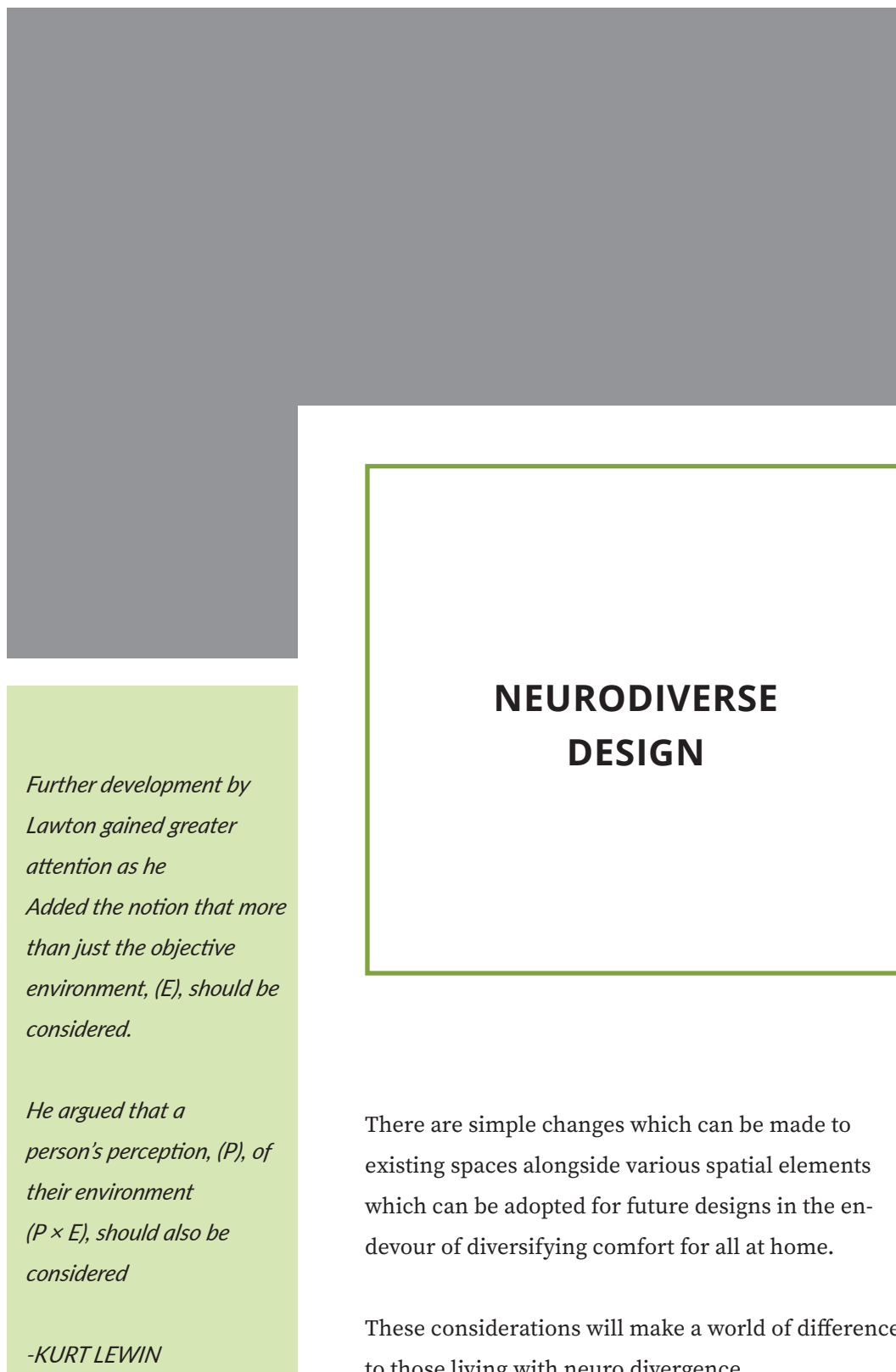
Figure 5

TRAUMA

01 A life impacting experience

TIMELINE OF Behaviour

COPING MECHANISM

02 A process applied by user to survive experience

TRANSITION & CHANGE IN KNOWN ENVIRONMENT

03 Due to trauma, users environment begins to change in demand of support

BEHAVIOUR

04 To bare with changes, user begins to present challenging Behaviour's

SEPARATION

05 As Behavior's become unmanageable, users environment requires more support

TRANSITION & CHANGE IN UNKNOWN ENVIRONMENT

06 To ensure behavior's improve, future transitions must be more open to user specific support rather than general methods of Behaviour management.

The best way to allow for this is welcoming choice and control

3

Figure 6

NEURODIVERSE DESIGN

Further development by Lawton gained greater attention as he Added the notion that more than just the objective environment, (E), should be considered.

He argued that a person's perception, (P), of their environment (P × E), should also be considered

-KURT LEWIN

There are simple changes which can be made to existing spaces alongside various spatial elements which can be adopted for future designs in the endevour of diversifying comfort for all at home.

These considerations will make a world of difference to those living with neuro divergence.

Figure 7

TRANSPARENCY

1 View corridors allow for the participant an opportunity to inspect a space before entering it. This proactive method assists with stress

COMPARTMENTALIZATION

2 Sectioning off different programs within multi-program spaces allows for a smoother approach towards

BREAKOUT ZONES

3 In-built pockets within circulation spaces provide the participant with a chance to retreat at any given moment.

VARIATION IN VERTICALITY

4 Varying the height of different spaces in the house also assists with wayfinding as well as providing opportunity for change when a participant is feeling uncomfortable in one space.

USE OF SYMMETRY

5 Symmetrical design provides calm atmospheric conditions as spaces will appear much more familiar due to receptivity.

VISUAL CONNECTION OUTSIDE

6 Allowing for the participant to understand the fluidity of the space they reside in is of high importance; as they must never feel trapped or "stuck" at home.

Figure 8

LAYOUT

SYMMETRICAL LAYOUT

Floor plans which display symmetrical spatial design, assist participants who encounter heightened sensitivity to spaces which feature vertical, horizontal and diagonal elements. The predictability factor within symmetrical spaces provide a more welcoming and comfortable environment for participants.

Free flowing spaces which naturally guide the user into other areas of a house also support wayfinding and cognitive calculation whilst circulating through different spaces of the house.
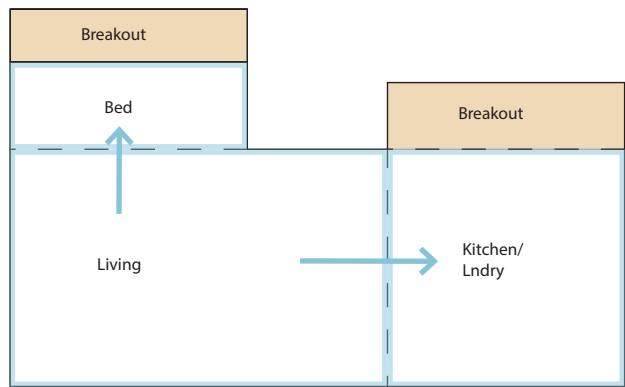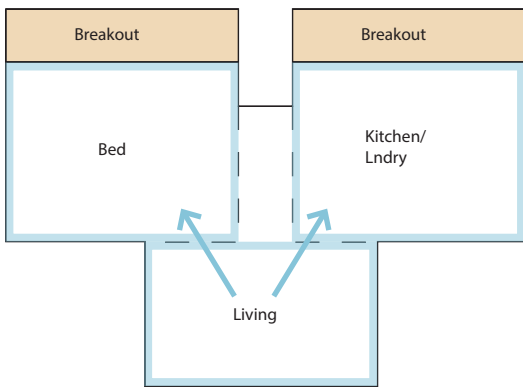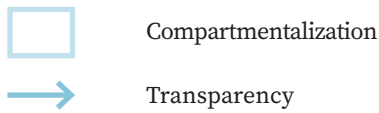
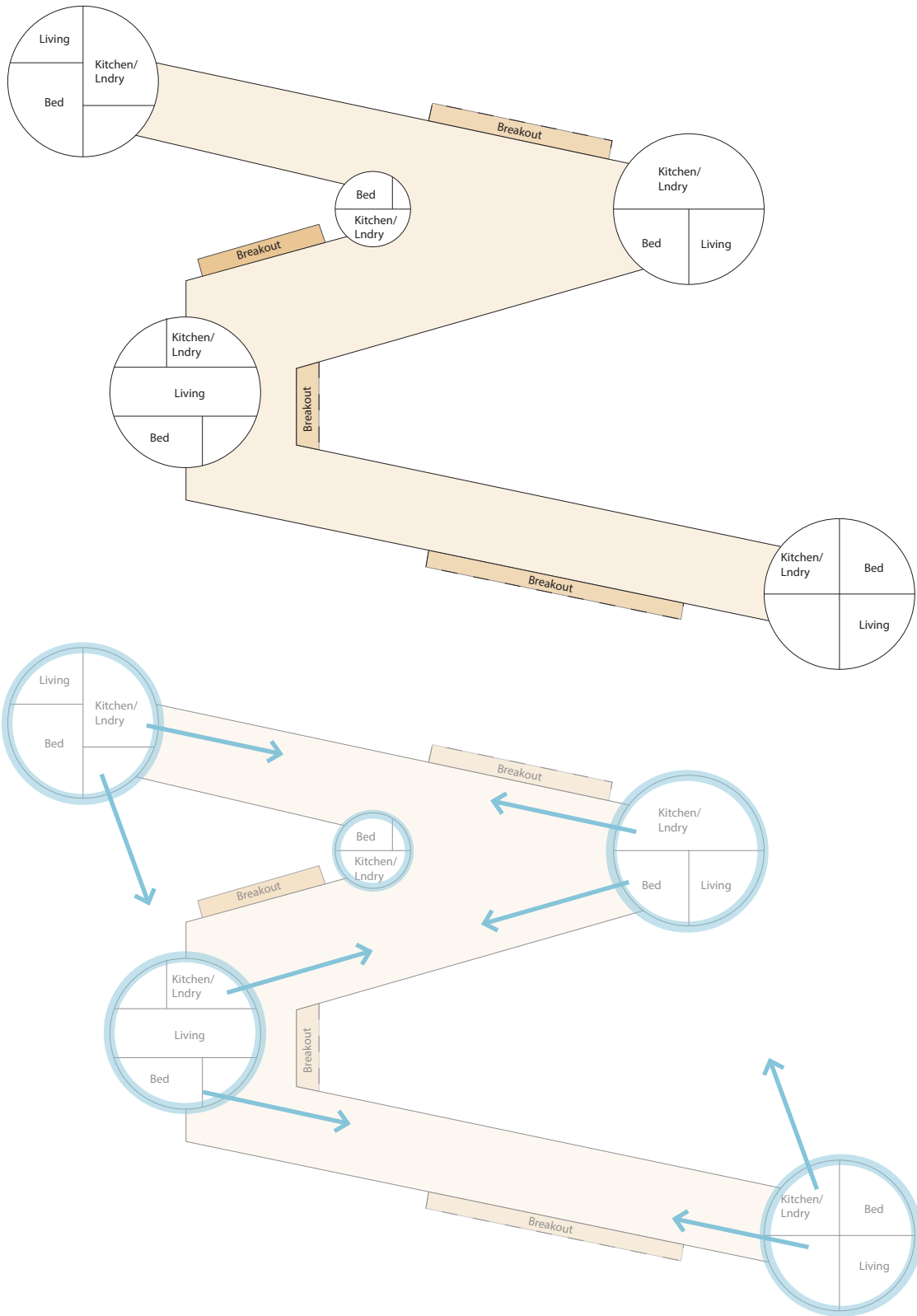Compartmentalization

Transparency
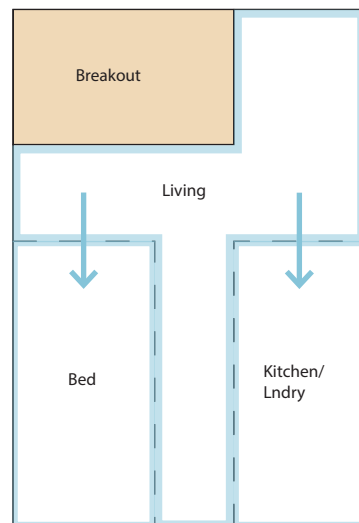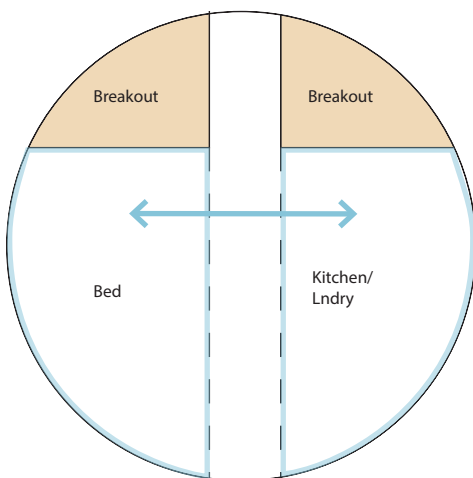
Figure 9

Figure 10

NAVIGATING EXTERNAL AREAS

Breakout areas positioned in the corner of the landscape area, offer privacy in the outdoor space alongside an opportunity to 'get away' and encounter a sense of relief from internal areas. This positioning also assists ND individuals with an awareness of positioning as there is no program behind them.

Placing a social program in the center of the outdoor space also provides an opportunity for socialization and togetherness. This positioning also welcomes transparency in visual access from breakout areas.
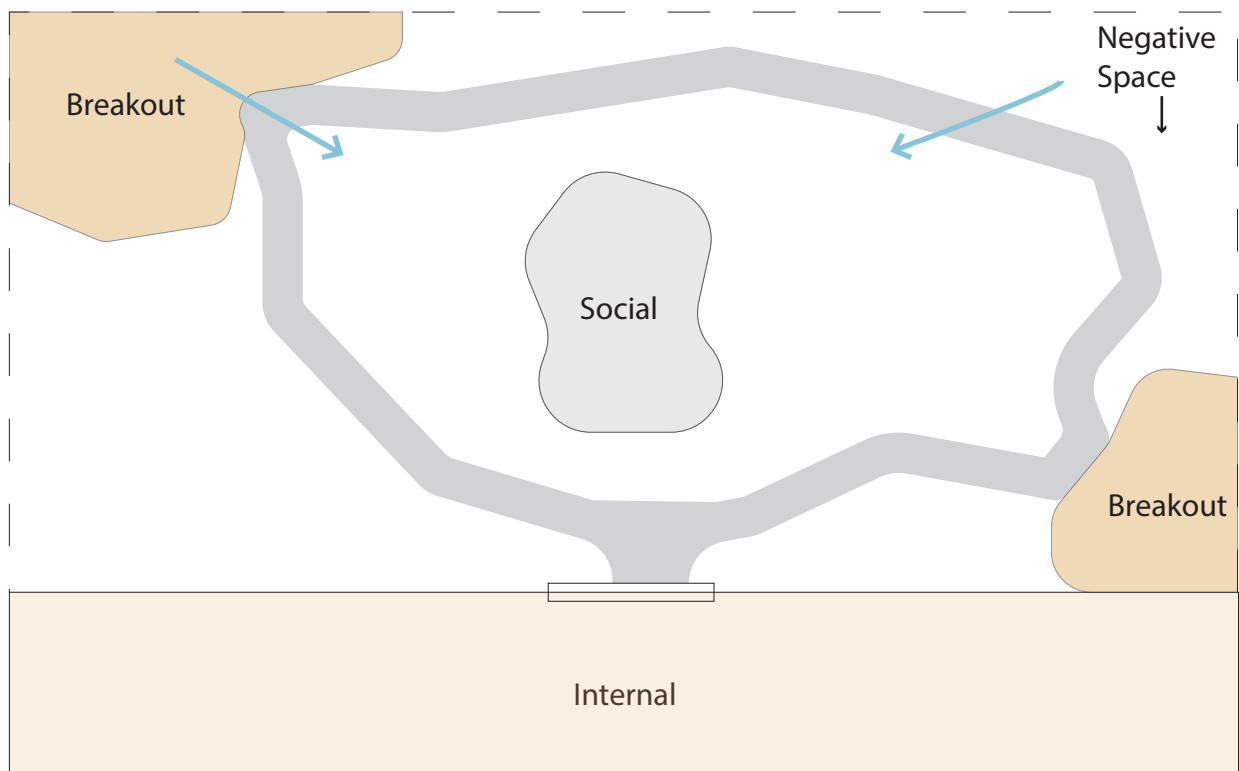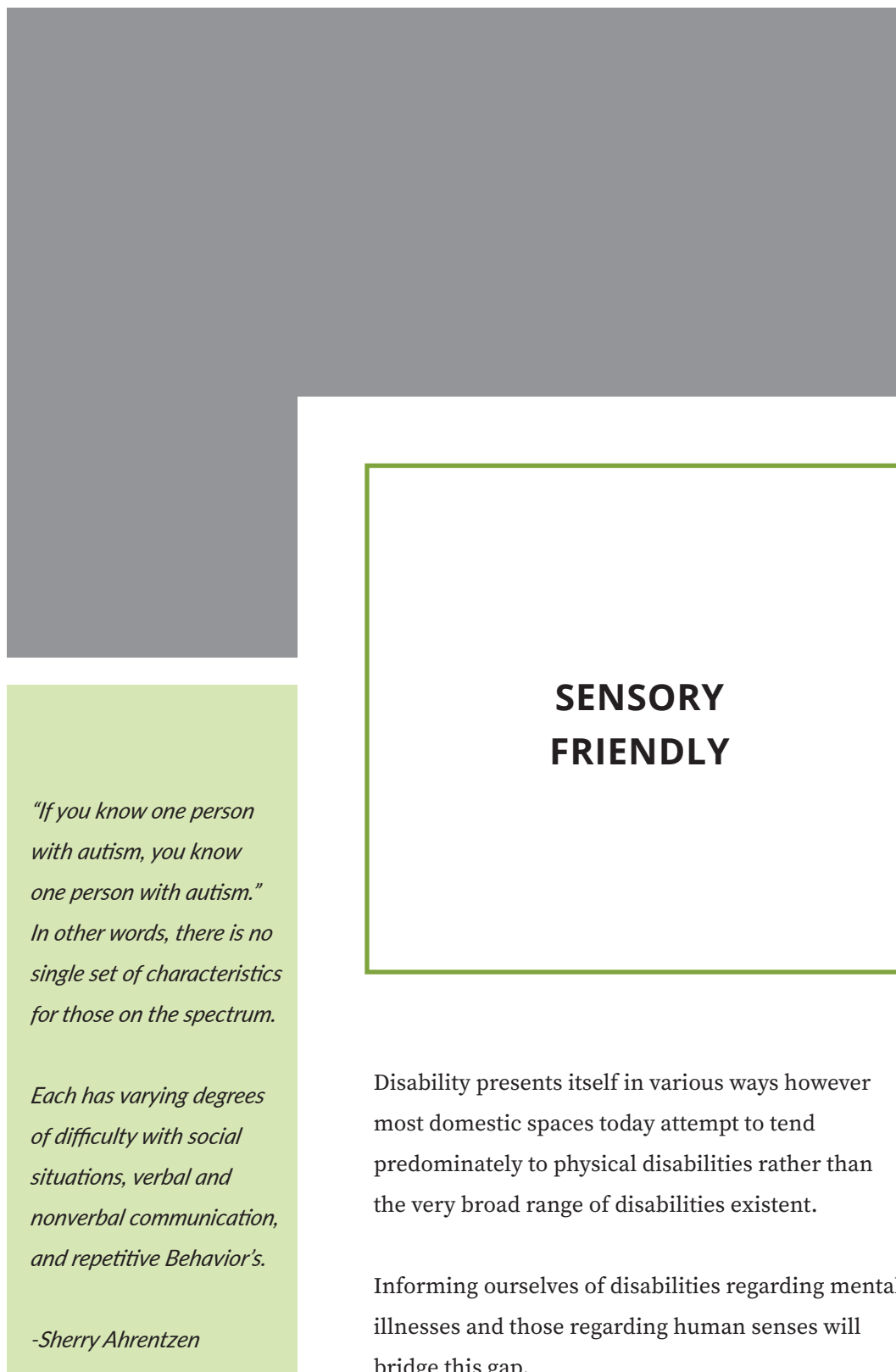
Breakout

Negative
Space

Social

Breakout

Internal

Figure 11

**SENSORY
FRIENDLY**

*"If you know one person
with autism, you know
one person with autism."
In other words, there is no
single set of characteristics
for those on the spectrum.*

*Each has varying degrees
of difficulty with social
situations, verbal and
nonverbal communication,
and repetitive Behavior's.*

-Sherry Ahrentzen

Disability presents itself in various ways however
most domestic spaces today attempt to tend
predominately to physical disabilities rather than
the very broad range of disabilities existent.

Informing ourselves of disabilities regarding mental
illnesses and those regarding human senses will
bridge this gap.

Figure 12

SENSES

Human Senses:
1- Vision
2- Vestibular/Auditory
3- Olfactory
4- Taste
5- Tactile
6- Pain (sensing distress in body)
7- Mechanoreceptors (body's reaction to vibration, pressure etc)
8- Thermoreceptors (identification of hot and cold)
9- Interoceptive (responding to internal body signals)
10- Proprioceptive (awareness of body position and parts)

Senses in between:
1- Body language
2- Social Communication
3- Reminders and memorabilia
4- Habits and Routine

Important factors about senses:
• Receptors
• Stimuli
• Modalities
• Sensory integration and how they trigger bodily responses

What to avoid and what to encourage:
1- Avoid over-stimulation
2- Promote sensory adaptability

Why designing with senses are important:
• Enables for engagement to be intentional and complex
• Encourages senses to evolve and change
• Discover new traits and Behavior's

WHY IS IT IMPORTANT

Every individual has a personal understanding and appreciation of their senses which is why there is such a large spectrum of Behavior's displayed within every environment.

As it is impossible to tend for every instance of discomfort, a generous range of domestic options should be made available. This will allow users to express themselves which will assist with various communication barriers put forth by environmental discomfort.

Allowing for an organic adaption of the environment through the availability of varying provisions, Behaviour management strategies can be further reinforced.

This flexibility and evolving capacity will then increase the chance of a user benefiting and learning from a domestic space through potential continued residency.

HOW TO HELP

Allowing for an ease in adaptation of design within any space will be of great importance as there are endless configurations of layouts and elements in a space which will benefit each user differently.

Ensuring design options tend to all senses so as to allow for the user to customize their specific sensory stimulation as per their needs and comforts. This can vary from the placement of breakout zones to the type of lighting used within the house.

Provision of landscaping and planting opportunities especially within transitional spaces of a house. The natural element of planting will ground and visually settle a user and so providing this opportunity in "trigger" areas can immensely impact the accessibility of the house.

Figure 13

CIRCULATION

Non-transparent circulation space

Circulation through openings (doors)
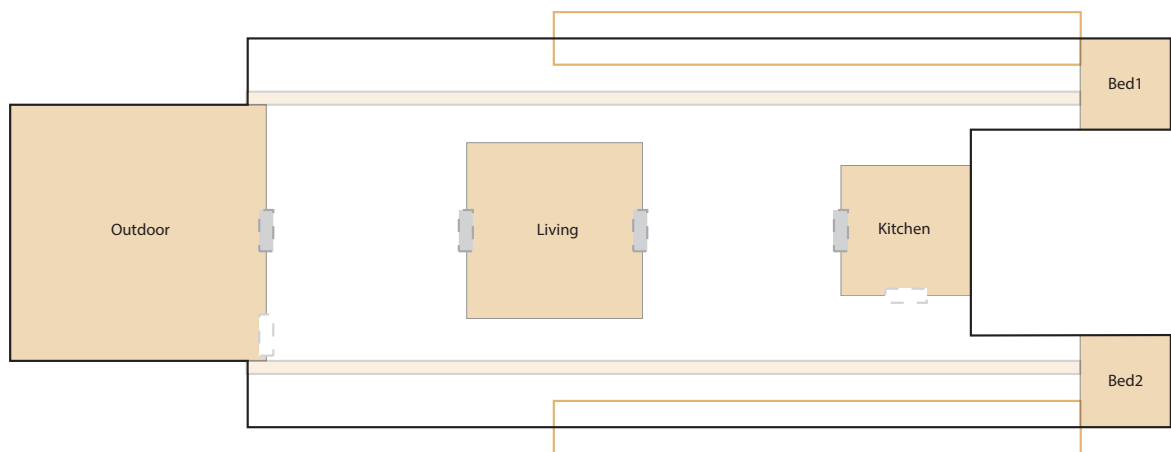Visual Link through openings (windows)

Communal shared space

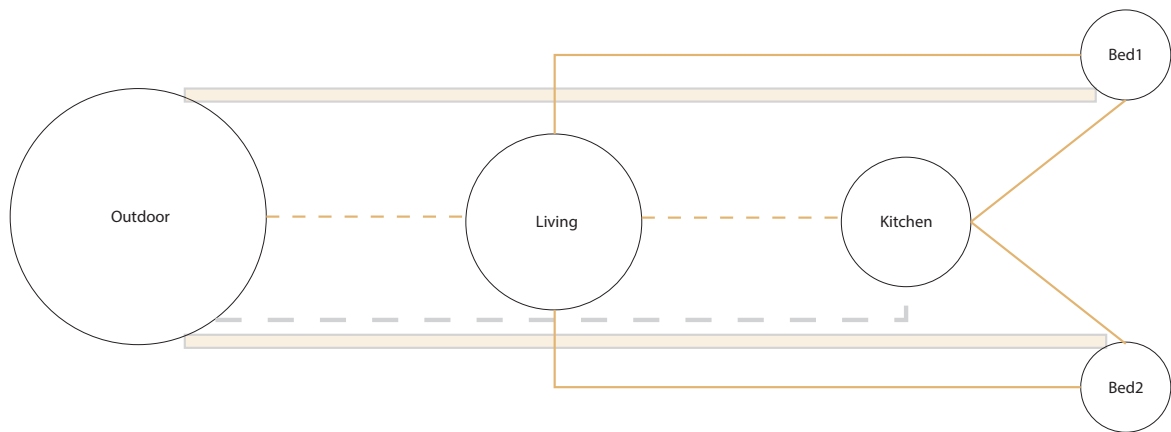Figure 14

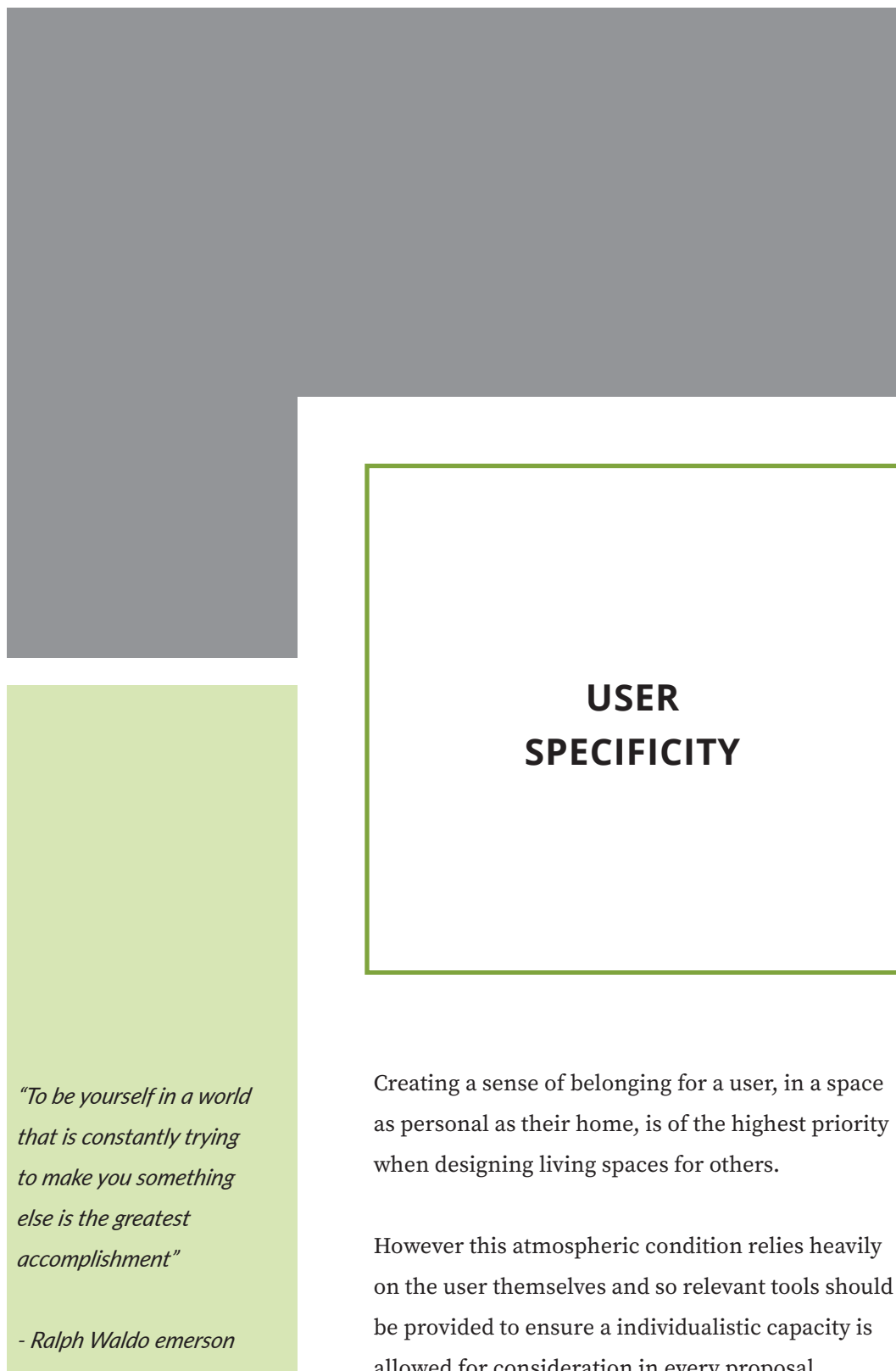# USER SPECIFICITY

"To be yourself in a world that is constantly trying to make you something else is the greatest accomplishment"

- Ralph Waldo emerson

Creating a sense of belonging for a user, in a space as personal as their home, is of the highest priority when designing living spaces for others.

However this atmospheric condition relies heavily on the user themselves and so relevant tools should be provided to ensure a individualistic capacity is allowed for consideration in every proposal.

Figure 15

Understanding Belonging

Place
A context which captures a cognitive identity through diverse social interactions in the past, present and desired future

Sense of Place
A subjective perspective towards an environment through the emotional and Behavioral responses applied and witnessed within a context

Sense of Belonging to the Place
A high level of comfort in self within a context which plays an important role in a user's identity

Elements of Space
Physical

- Location
- Scale
- Texture
- Color
- Smell
- Sound
- Visual Diversity

Perceptual & Cognitive

- Readability
- Memories
- Color attachment
- Vision proportion
- Safety
- Variation

WHY IS IT IMPORTANT

A sense of space and belonging invites creativity and ownership alongside responsibility and hope. These are all motivational factors many require when living in a situation which does not identify with the standard definition of a "home".

Once a sense of place is achieved or merely provoked, an individual can begin tailoring the space to their own liking and comfort. This welcomes confidence and self-awareness as the user will potentially obtain a deeper understanding of their boundaries likes/dislikes/ needs and identity.

HOW TO HELP

It is easy to fall into a habit of inflicting change or projecting a program for a space. Although spatial orientation must be designed into a proposed living space, access and program can remain fairly ambiguous . This ambiguity allows for the user to have options for the growth and expansion of an environment they are to live within.

An individual must have an option to review a space before committing to it's environment. A user must have an overall understanding of a building such as nearby resources and services available.

This initial consultation period will soften the harsh nature of transitioning into a new, unknown and unfamiliar space. If the user is not able to conduct this consultation themselves, those closest to them must participate in the process. A planned introduction to a new space can make the biggest difference when setting goals and tasks for any individual.

Figure 16

PROMOTING INTERACTION

Non-transparent circulation space

Circulation through openings (doors)
Visual Link through openings (windows)

Communal shared space

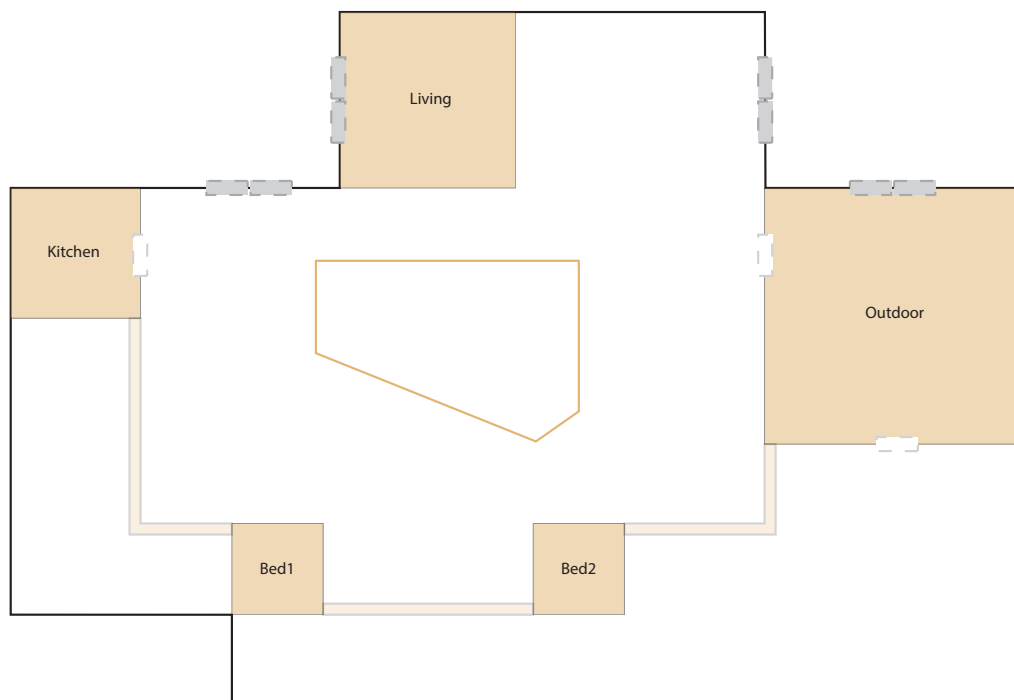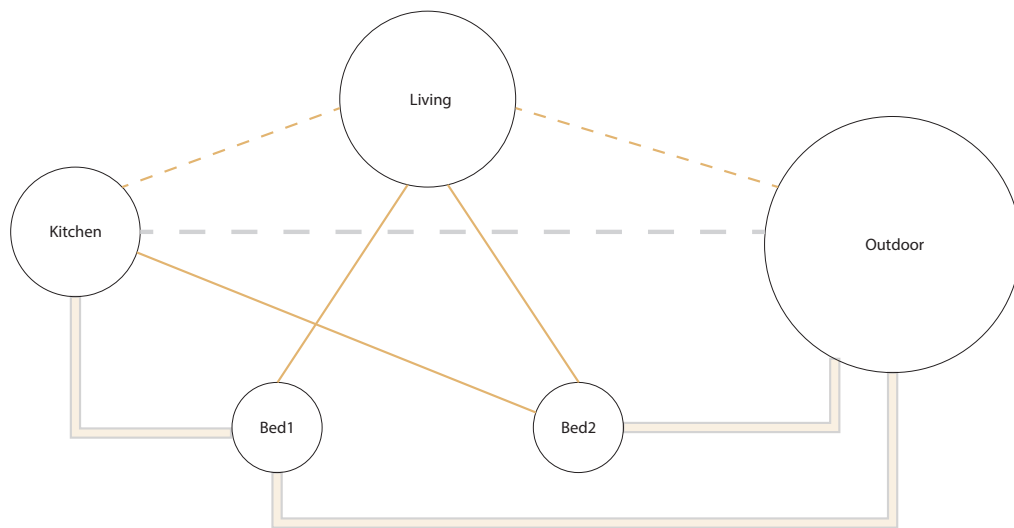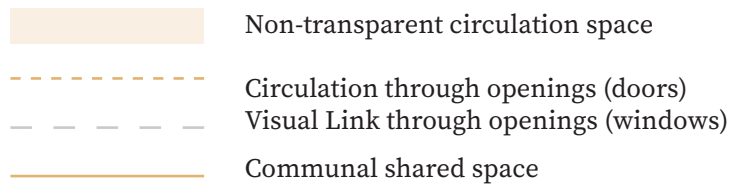# Figure 17

ALLOWING FOR THERAPEUTIC ATMOSPHERE

Non-transparent circulation space

Circulation through openings (doors)

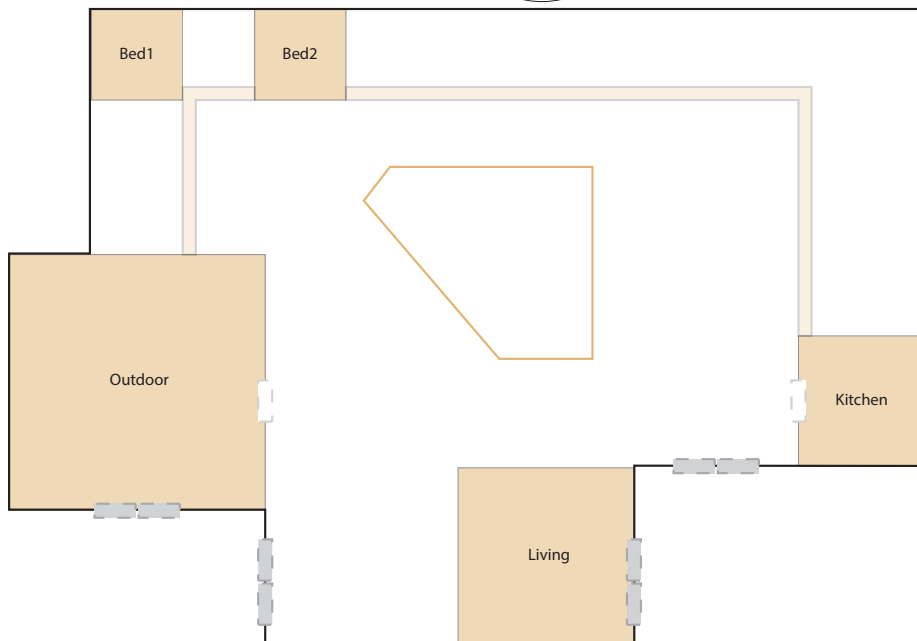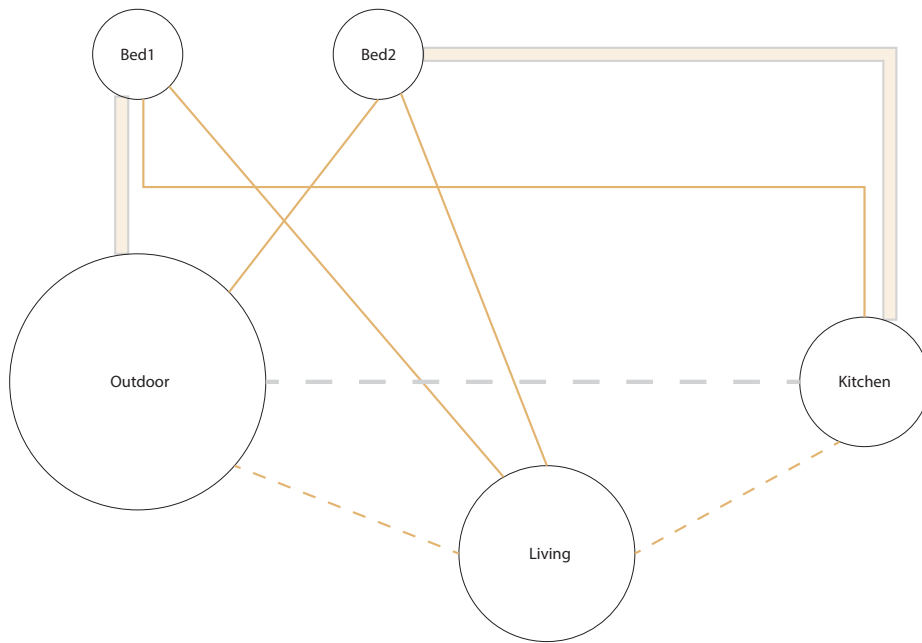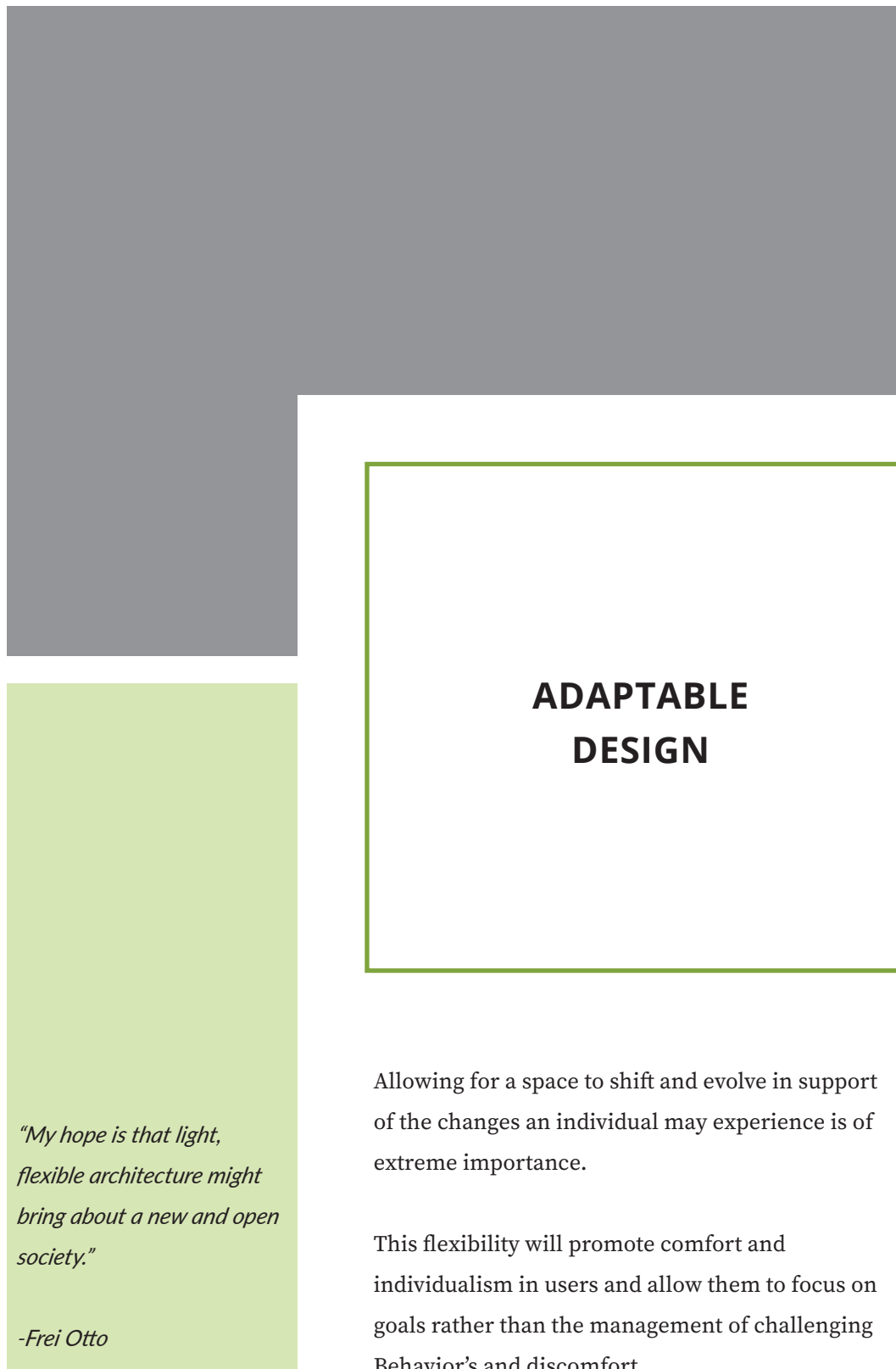Visual Link through openings (windows)

Communal shared space

Figure 18

ADAPTABLE DESIGN

"My hope is that light, flexible architecture might bring about a new and open society."

-Frei Otto

Allowing for a space to shift and evolve in support of the changes an individual may experience is of extreme importance.

This flexibility will promote comfort and individualism in users and allow them to focus on goals rather than the management of challenging Behavior's and discomfort.

Figure 19

STEPS TO TAKE WHEN ADAPTING TO A SPACE

Introduction and Transition

- Expression of photos and design options for house before transition
- Slow transition into new living environment over multiple weeks
- Additional emotional support provided on day of introduction into new space
- Understanding individual's diagnosis and accompanying Behavior's

First month

- Setting boundaries in living environment between communal and private areas
- Understanding comforts, likes and needs of individual in depth
- Establishing some sort of routine to limit discomfort
- Data intake of individual's interaction within space

Second month

- Beginning to discuss transformation of private areas for the promotion of user suitability alongside choice and control
- Transforming overall house as per demands of various routines for all individuals if shared house
- Setting of monthly goals to assist with future changes made to space

Sixth month

- Re-visit space to understand how individual has responded
- Promote conversations regarding additional evolution of space to support individual further

WHY IS IT IMPORTANT

A person can focus better on themselves once they feel supported in their own living environment. This comfort will allow for peace and calmness to shape their everyday.

With peace and calmness, goals can be slowly worked towards, Behavior's can be understood, assisted and improved and a person's ability to grow will be welcomed.

To make sure this environment is allowed for, a space must be able to adapt to its user's needs and likes.

HOW TO HELP

Once an individual is transitioned into a new space of residence, it is important for them to be reminded of the ownership they now have over their space. Introducing boundaries can remove the chances of misunderstandings, expectations and mistakes taking place.

Once a sense of ownership and comfort is established, an individual needs to be provided with additional information regarding their support and more so welcomed to express their needs and wants at all times.

It is important to consider communal spaces as shared areas and to re-establish the importance of a individuals bedroom as it can be user specified more so than common areas in the house.