



● **NEURO**DIVERSITY & THE SILVER SURFERS

PRESENTED BY RICHARD MAZUCH & LYNN LINDLEY

NOVEMBER 8TH, 2022

Who are we?

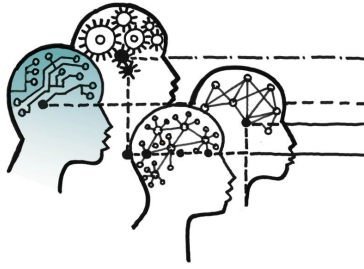


Richard Mazuch
Director of Design
Research and Innovation



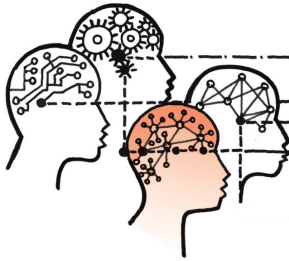
Lynn Lindley
Studio Associate Director
Interior Designer

Q1



What do we understand by Neurodiversity?

Q2



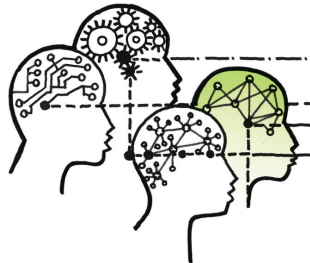
What does it Impact, what are the neuro challenges of daily living?

Q3



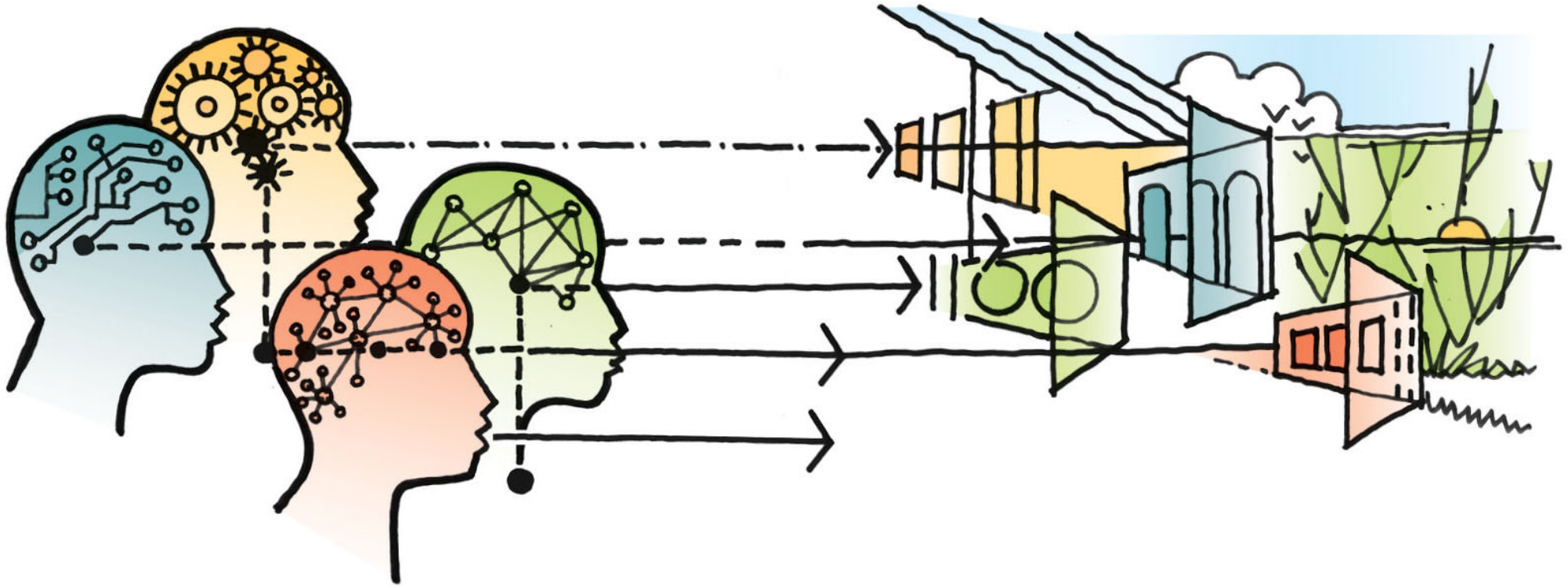
How can we design spaces to be more inclusive and how can spaces be choreographed to better promote health, wellbeing and wellness?

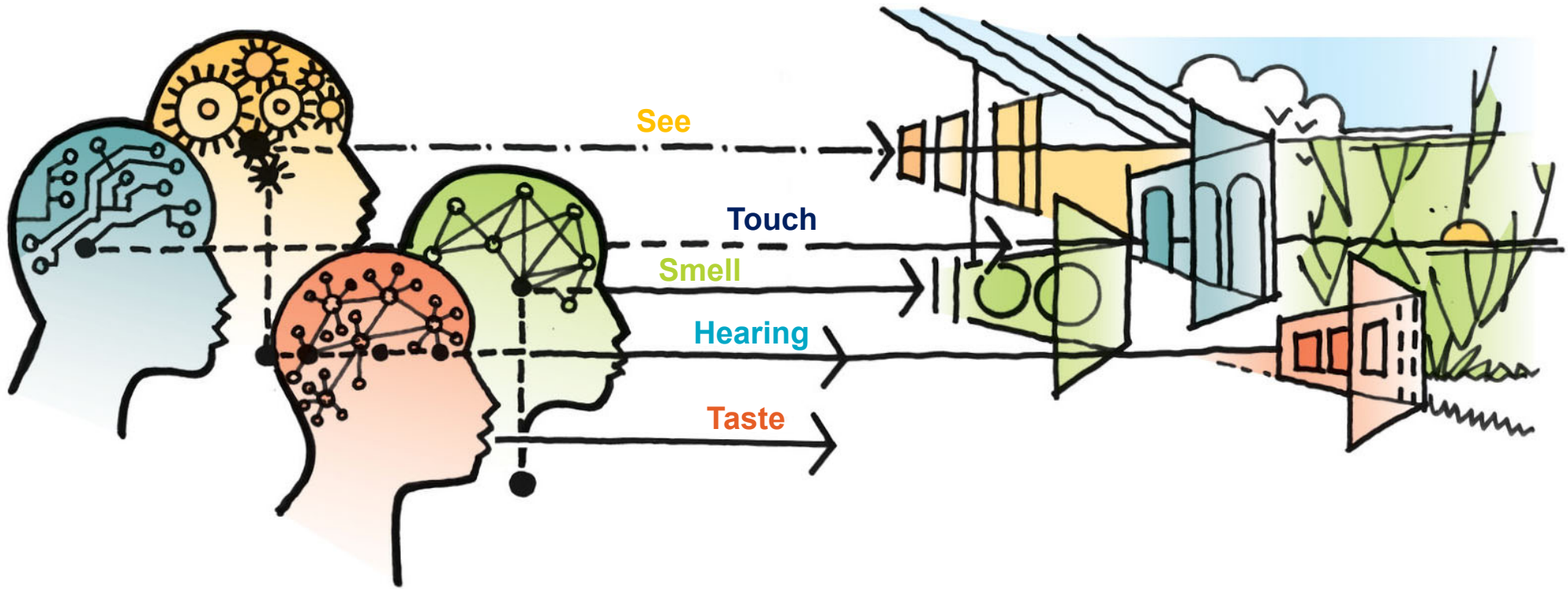
Q4



What is its future Impact on design?

**What do we understand by
Neurodiversity?**





What is Neurodiversity?

"When I was asked this question a couple of months ago, the first thing I did was engage the left hand side of my brain, which is logical, so I could try to understand the question, then I engaged the right side - which is the creative side - to come up with a sketch"

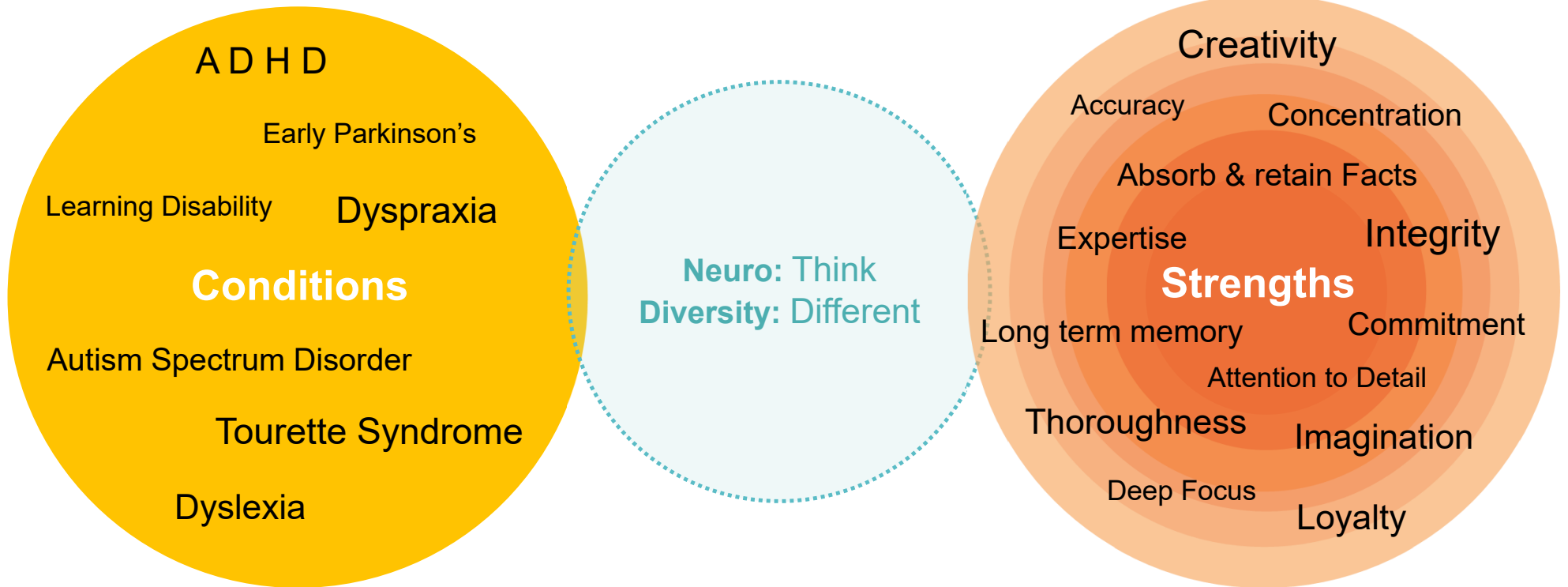
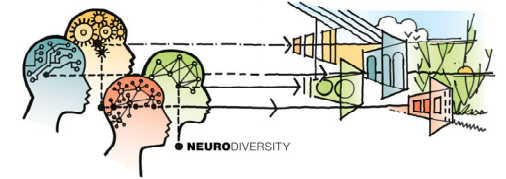


Material Source Seminar: *Designing for Neurodiversity* 20.10.2022



"To create this, both the left and right hand sides of my brain had to dialogue to ask: what does our neural landscape look like? Richard Mazuch, Director of Design Research and Innovation, Arcadis IBI Group"

We are only now beginning to acknowledge neurodiverse conditions. Many older people were never diagnosed as children and / or never received appropriate services. It is estimated that around 1 in 7 people (more than 15% of people in the UK) are neurodivergent.





“The best minds often come from the rich, divergent spectrum we find ourselves on



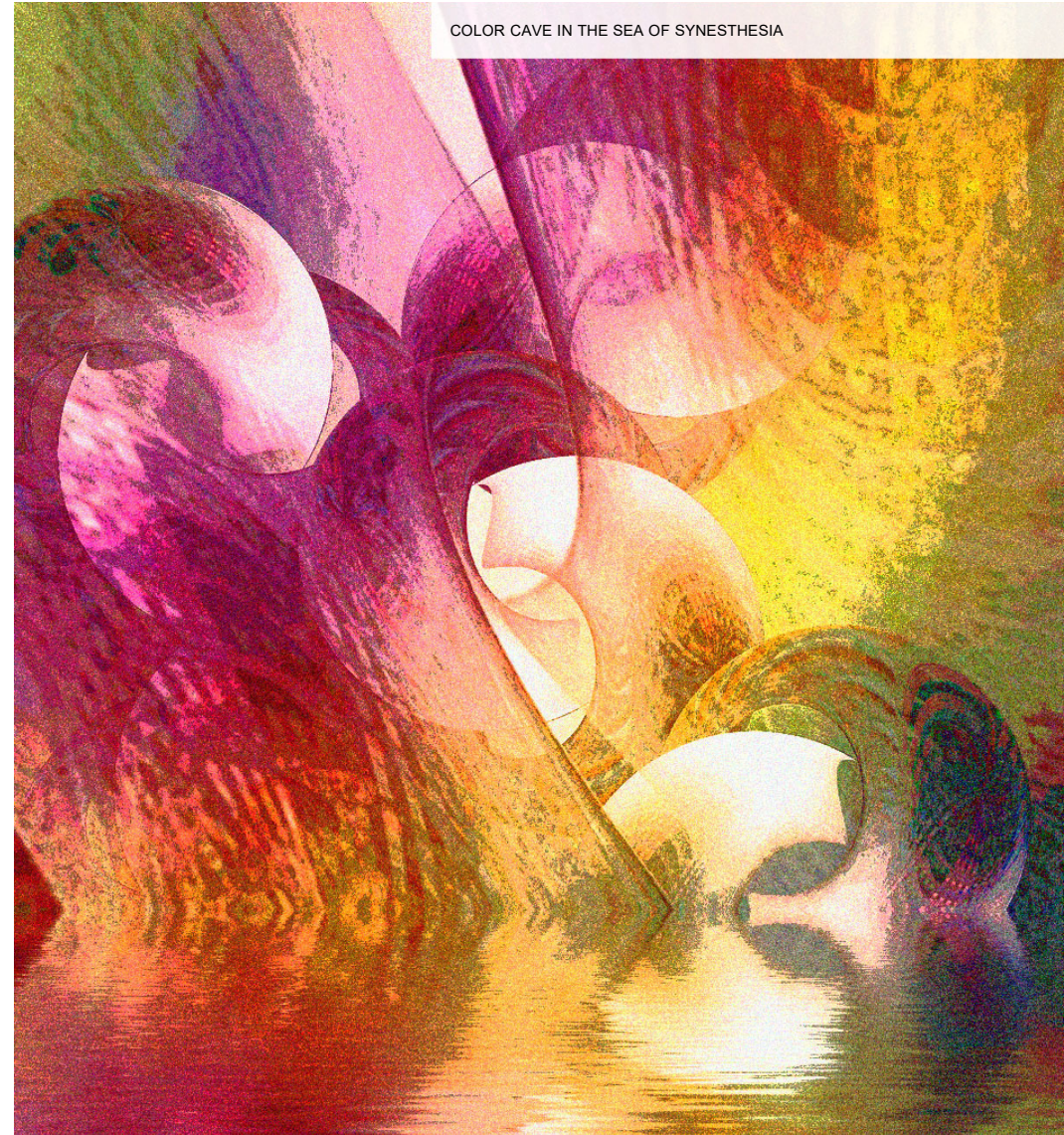
Stephen Wiltshire

What are the neuro challenges of daily living?

What does our neural landscape look like? **Do you see what I see?**

We all think in different ways. Architects are often ocular centric, so everything we do is about design, pattern and aesthetics.

There are layers on top of this in terms of what I can hear, feel, smell and taste and these layers influence our experience of a space.



Sensory Scales

Understanding the impact the environment has on us.

Time

Perception of time and memory recall are affected by age-related neurological changes. A carefully designed environment can provide a connection to seasonal changes and reinforce the diurnal cycle to recalibrate the circadian clock.



Smell

Memory of smell lingers on longer than that of visual images or sounds. Floral and fruit fragrances have been proven to lower blood pressure, slow respiration, relax muscles and increase alertness.



Taste

The sense of taste diminishes with age and is affected by drugs, poor nutrition, tooth decay and disease. Offering "taste sensations" helps restore the pleasure associated with food.



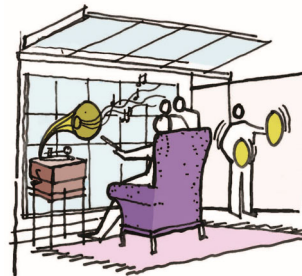
Touch

Sensitivity diminishes with age as the dermis loses softness and elasticity. A varied choice of textures can provide stimulus and soothing comfort.



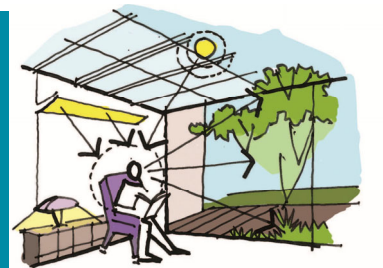
Sound

Deterioration of hearing interferes with one's ability to think. Good sound insulation and absorption prevent competing noises and allow enjoyment of pleasant sounds, which are proven to be analgesic and to lower blood pressure and heart rate.



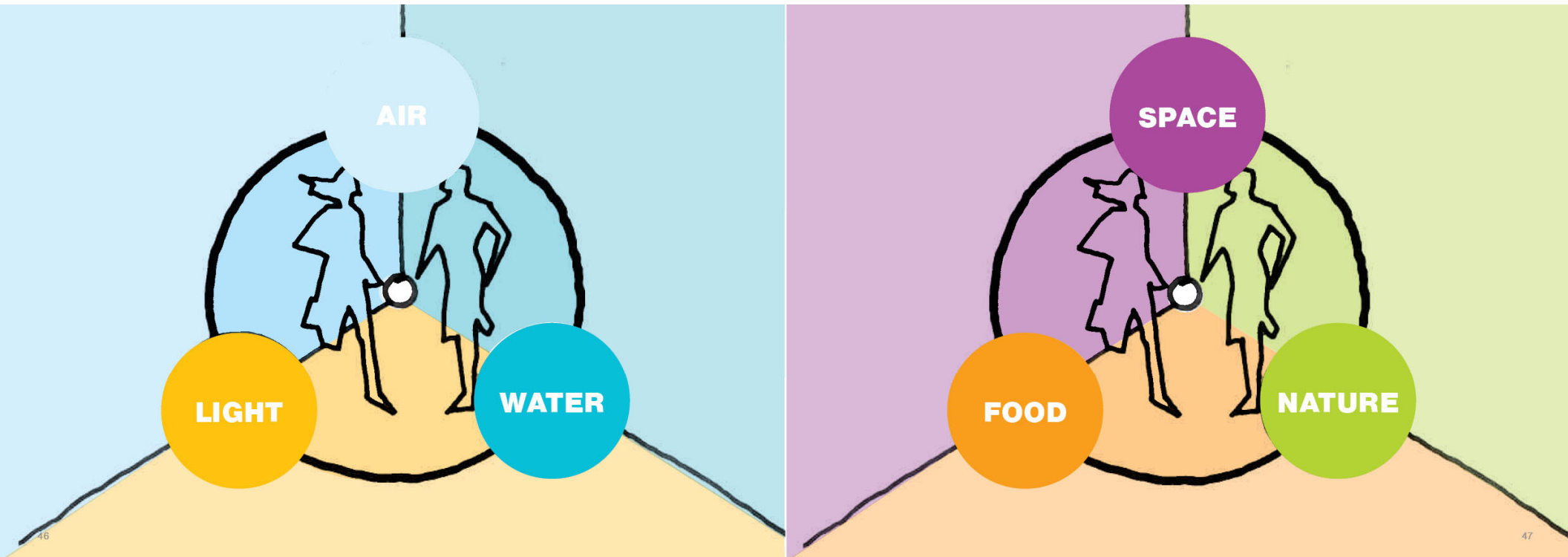
Sight

Good artificial lighting and natural daylight have a positive effect on elderly peoples' ability to see and focus on objects, distinguish colours, judge distances and compensate for the effects of shadowing.



How can we design spaces to be more inclusive and how can spaces be choreographed to better promote health, wellbeing and wellness?

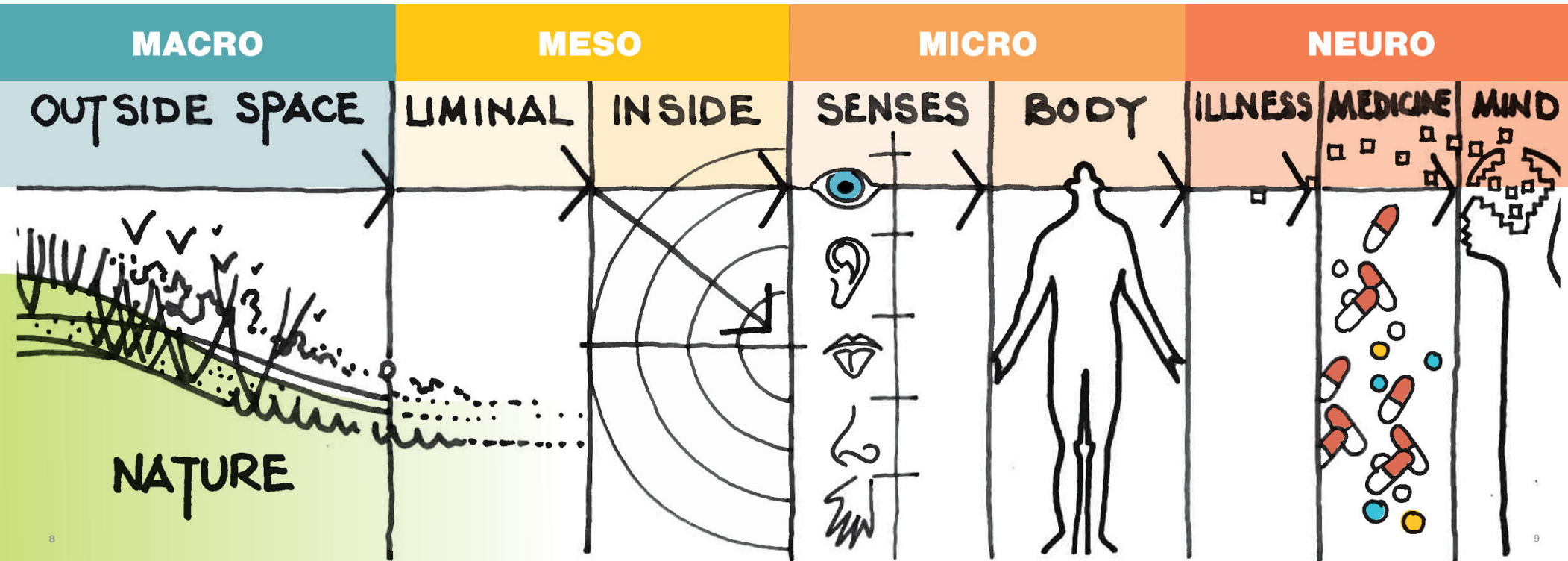
Our vital dialogue with our immediate environment.



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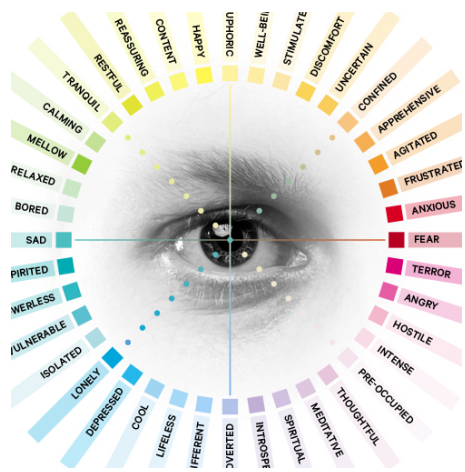
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Macro/Meso/Micro/Neuro

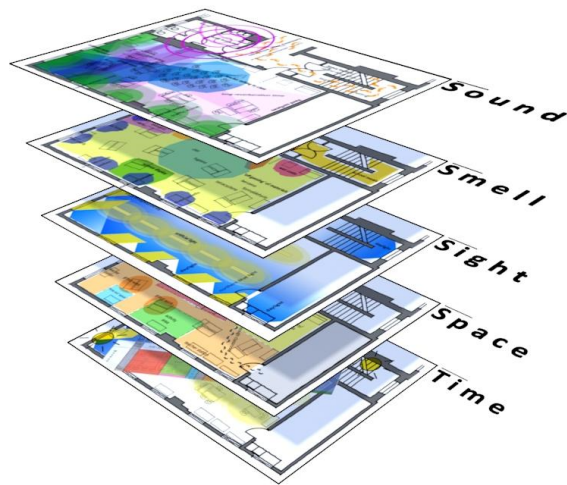


Sensory Design Tools

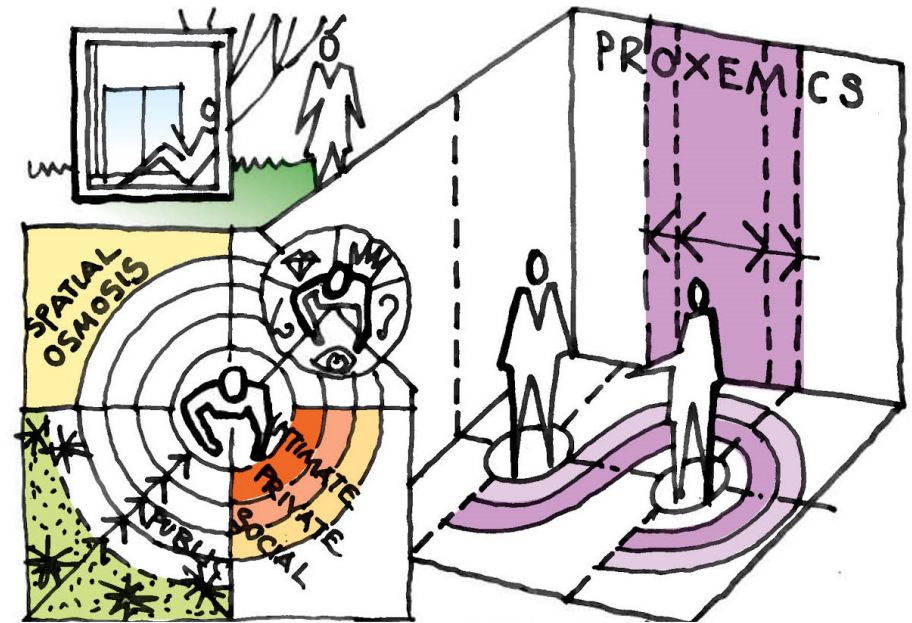
Emotional Mapping



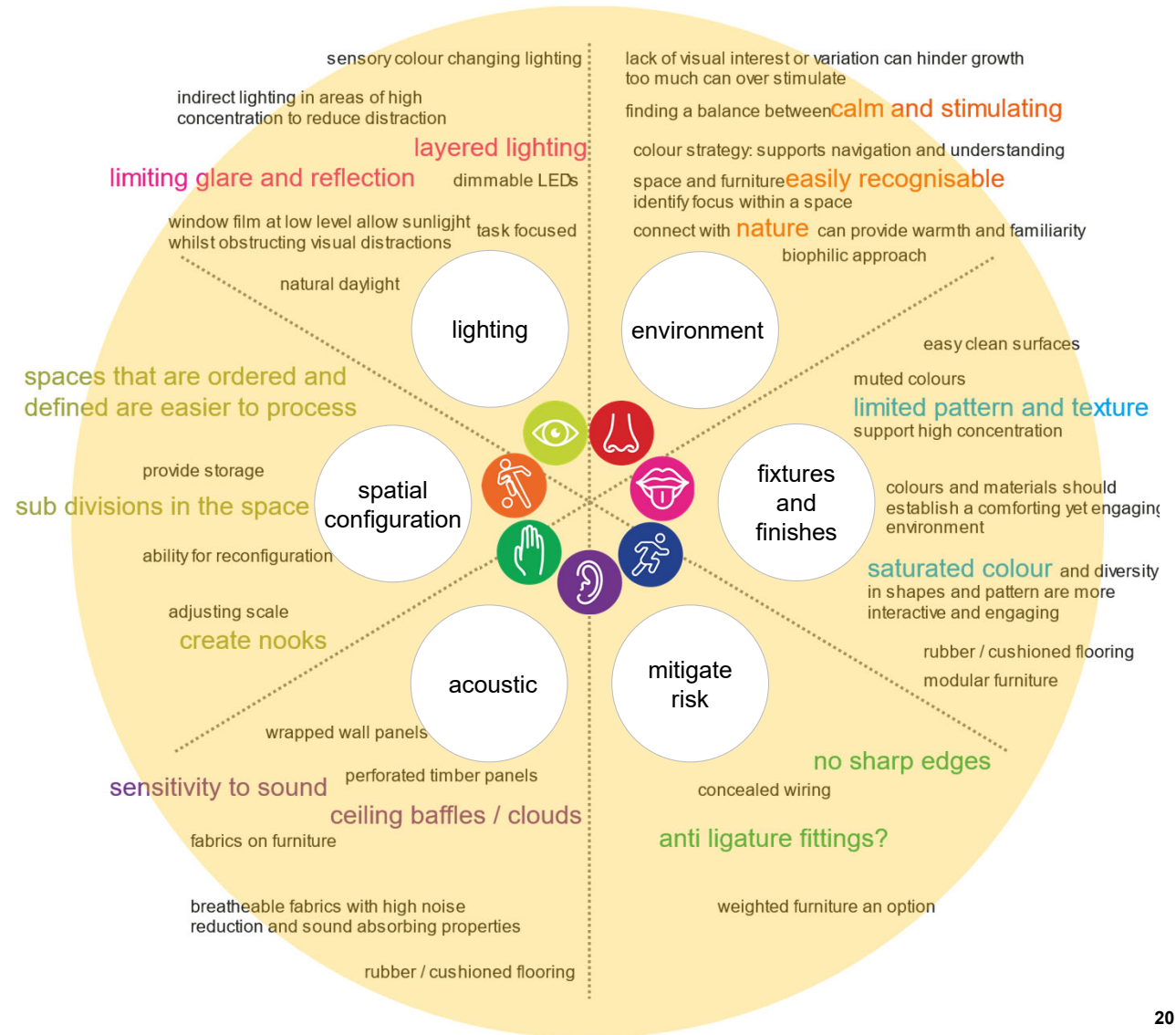
Sensory plans



Proxemics



Curating the optimum environments



What is its future Impact on design?

What is its future Impact on design?

- Embrace the differences and learn from them
- Create inclusive spaces which celebrate neurodiversity and support everyone's health and wellbeing
- Adaptability and flexibility are key
- Wearable technologies VR Metaverse, choreographing your own environment
- Create natural environments

"For every £1 that is spent at the design concept stage, if you then have to make adaptations at the user and occupancy stage, it will cost £10,000"

Kate Field, Global Head Health, Safety and Well-being, BSI Group





Thank You!

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 ARCADIS | IBI GROUP