

Learning Environments Inclusive Design

designing for
mind + body

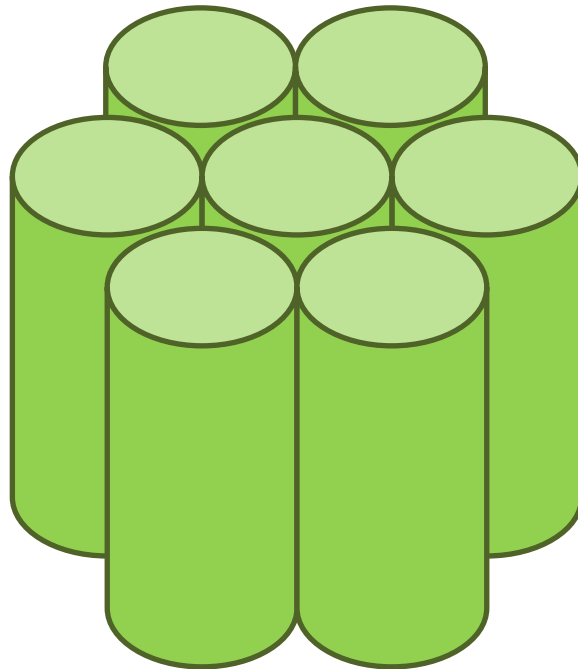
steve maslin RIBA NRAC FSI
Director building user design

are
our starting points and environments
disabling *or* enabling



universities and colleges

systems or silos?



advance by **uniformity** or **diversity**?

a tale of two sons...



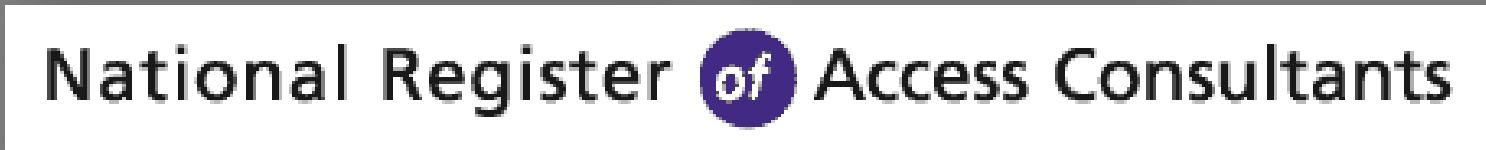
the “other one”...



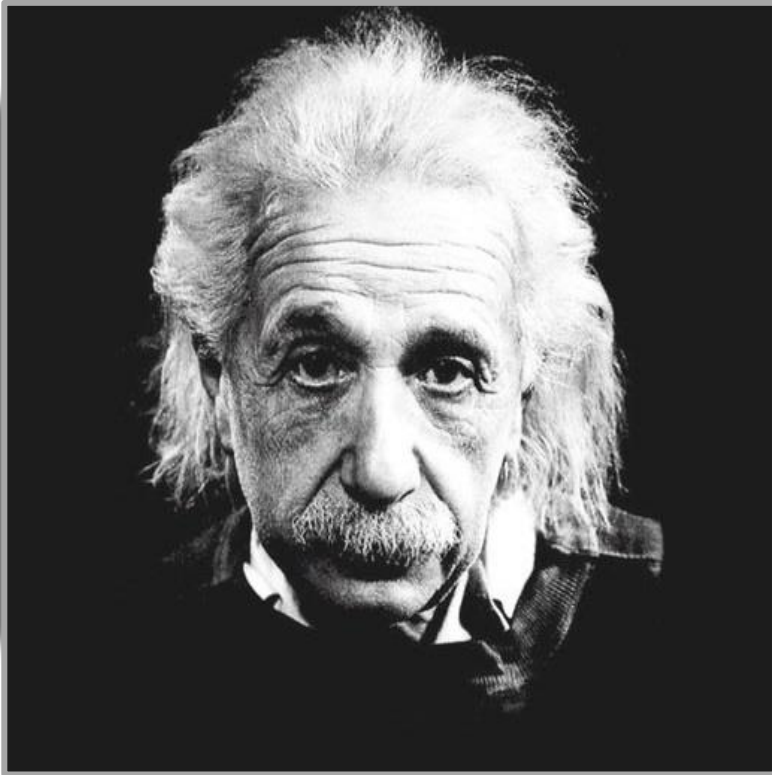
BSI

BRE

building user design



and others...



“needs envelope”:



Need:

1. Neurological
2. Visual
3. Hearing
4. Mobility
5. Metabolism



Michael Clinton
Research Director
Schumacher Institute



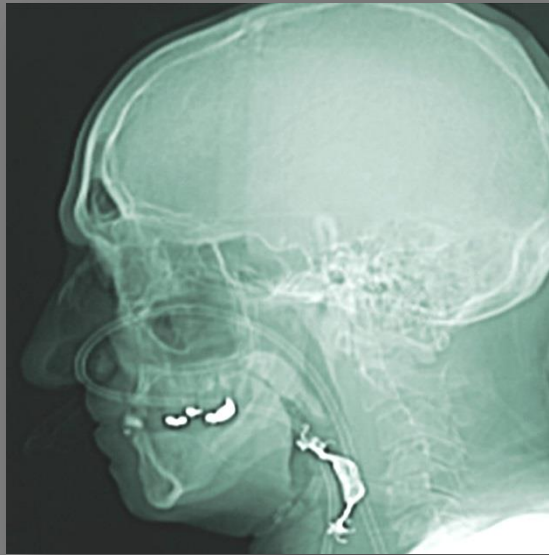
Design:

1. Logistics
2. Legibility
3. Clarity
4. Psychology
5. Ergonomics

a logistics and legibility example



focus: for good work



design for
the mind

another logistics and legibility example



neurological needs: who?



- **everyone:** broad, universal, circumstantial and progressive aspects of moving through:
 - childhood
 - adolescence
 - adulthood
 - old age
- **including:**
 - learning styles,
 - personality types,
 - temperaments etc

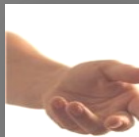
these needs *include*:



- people with **congenital experiences**, such as:
 - **communication / processing differences**
(Asperger's/autism, dyslexia, dyspraxia etc)
 - learning difficulties (mild to severe/complex)
 - cerebral palsy / early brain injury, tumour, infection



- people with **latterly acquired experiences**, such as:
 - mental health conditions
 - degenerative conditions (dementia, Parkinson's, MS)
 - brain injury, stroke, tumour or infection



- **supportive persons**: within home, community and work

statistics

0.4 % of UK population **self-harm** - one of the highest rates in Europe

❖ **1% or more of the British population may have autism**

1.5% of the British population have **dementia**

2.2% of English population are estimated to have a **learning disability**

❖ **4% of British population severely dyslexic –10% are dyslexic**

10% of children have a **mental health problem** at any one time

20% of **older people** affected by depression

❖ **25% of us experience mental health problem in a year**

90% of prisoners have a **mental disorder!** - only **10%** have no disorder

Mixed anxiety and depression most common **mental disorder** in Britain

❖ **52% of population assume disabilities are physical**

8% of disabled people use wheelchairs. Most impairments are not visible

<http://www.autism.org.uk/about-autism/myths-facts-and-statistics/statistics-how-many-people-have-autism-spectrum-disorders.aspx>

<http://www.alzheimersresearchuk.org/dementia-statistics/>

<http://www.learningdisabilities.org.uk/help-information/Learning-Disability-Statistics/>

<http://www.bdadyslexia.org.uk/about-us.html>

<http://www.mentalhealth.org.uk/help-information/mental-health-statistics/>

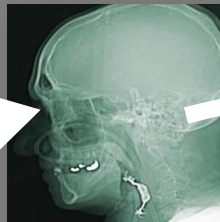
http://www.efds.co.uk/resources/facts_and_statistics

sensory integration significance

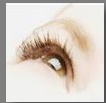
“sensory integration...the ability to organize sensory information for use in perception and... synthesis of sensory data that enables man to interact effectively with the environment”

Dr A. Jean Ayres 1971

signal > register > modulate > integrate > adaptive response



senses?



colloquial term

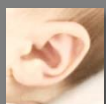
tech. term

context

1. sight

visual

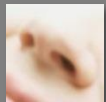
eyes



2. hearing

auditory

ears



3. smell

olfactory

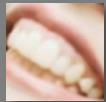
nose



4. touch

tactile

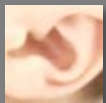
skin



5. taste

gustatory

mouth



6. balance

vestibular

inner ear



7. positioning

proprioception

body

thresholds and reactions

high

seeker

bystander

and

low

sensor

avoider

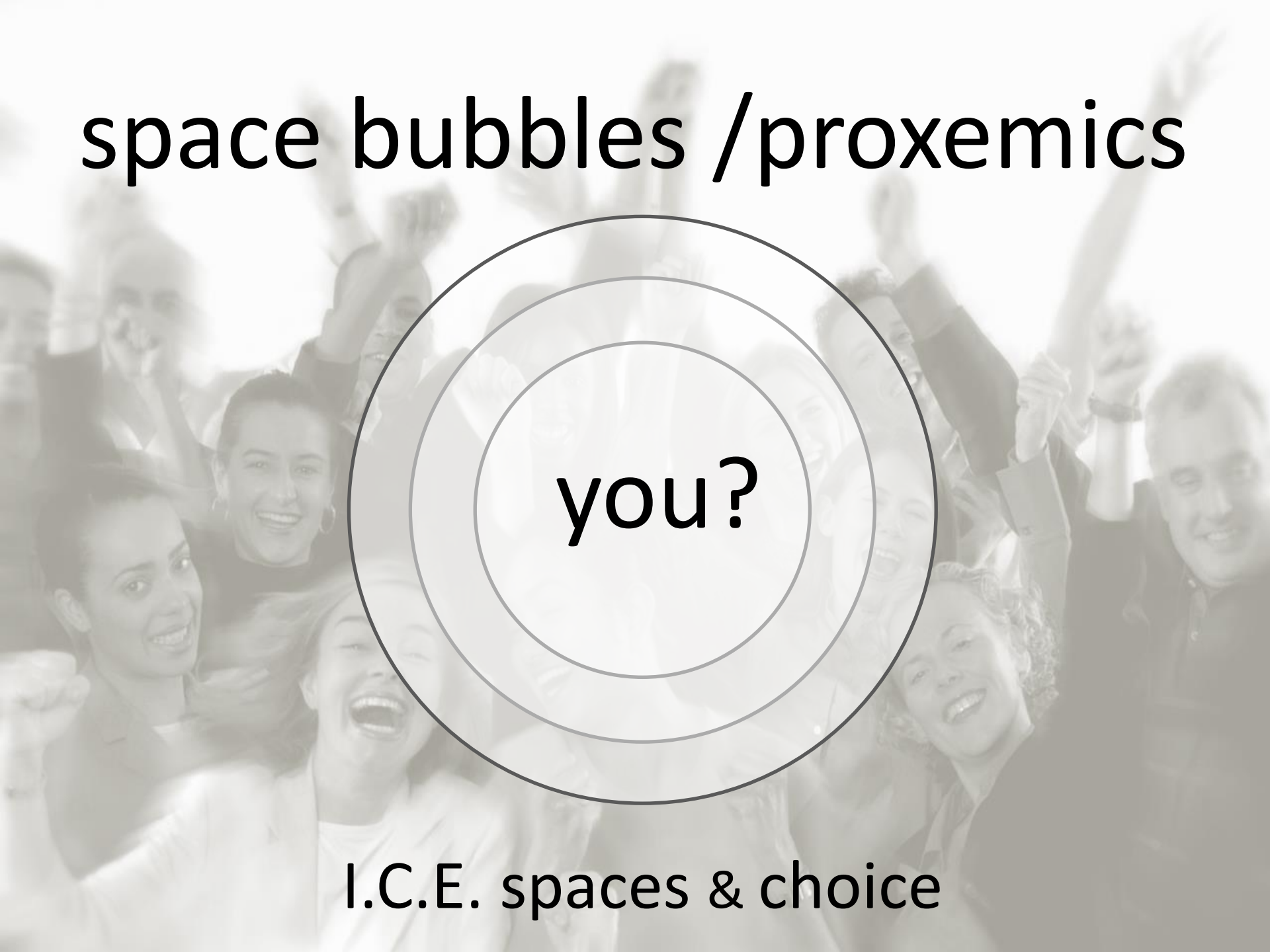
Reference
Dr Winnie Dunn

active

and

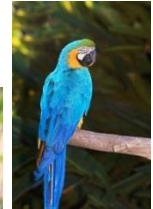
passive

space bubbles / proxemics



you?

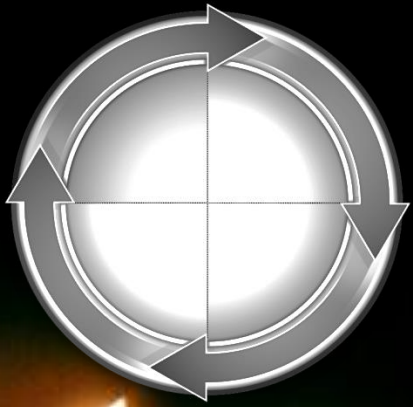
I.C.E. spaces & choice



I.C.E. spaces & choice

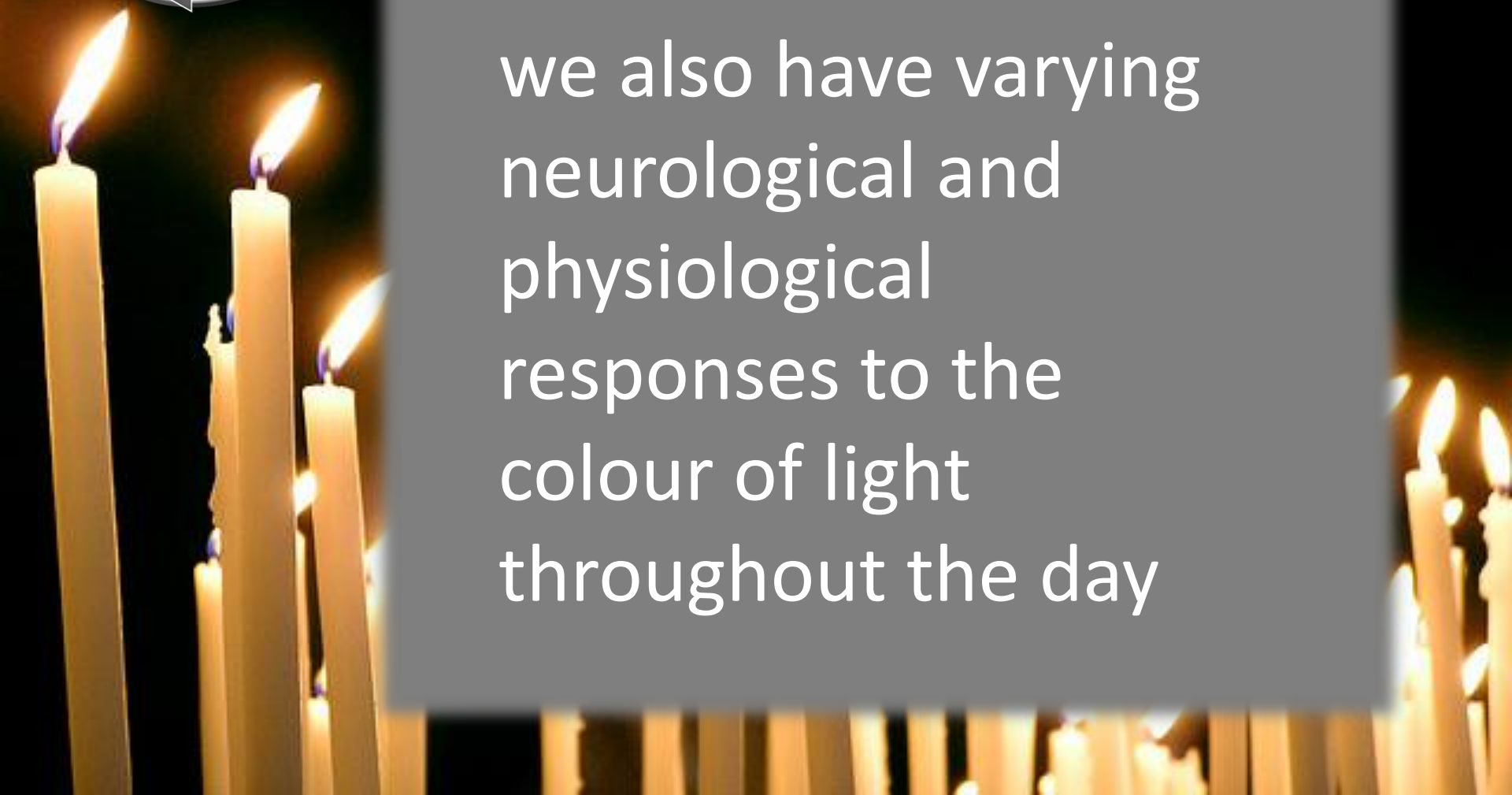
for some their work / study place is starting to feel like this...





circadian rhythms

we also have varying neurological and physiological responses to the colour of light throughout the day



visual mapping



... how would you feel?...



if someone cleared your desk?

design for operability



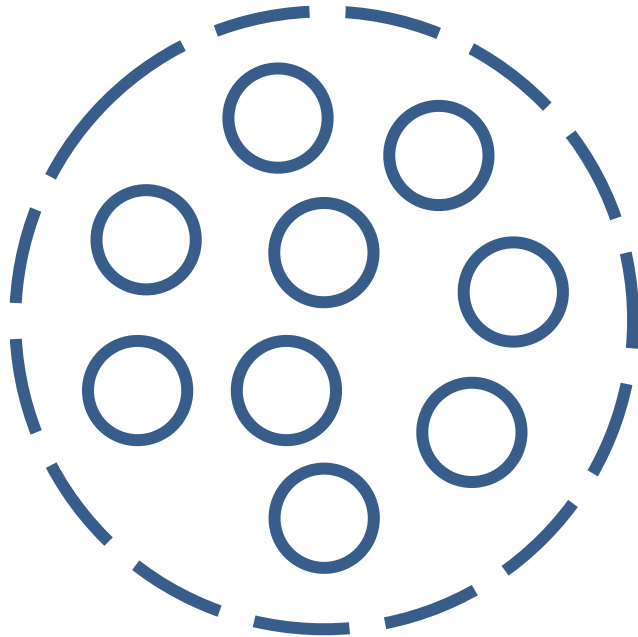
there's a need for *service design*
around people

design - information – management

what are the problems?

Campus Level

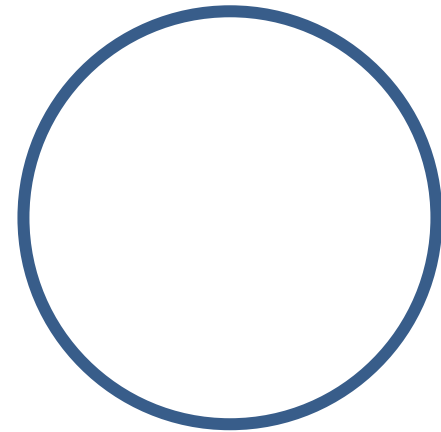
(mobility critical)



Scatter Gun

Building Level

(mind critical)

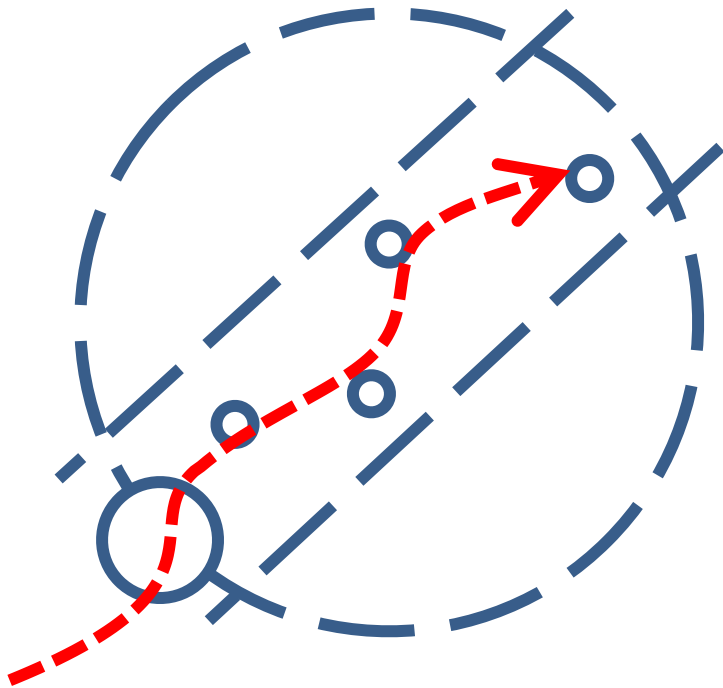


Open Plan

what could a strategy look like?

Campus Level

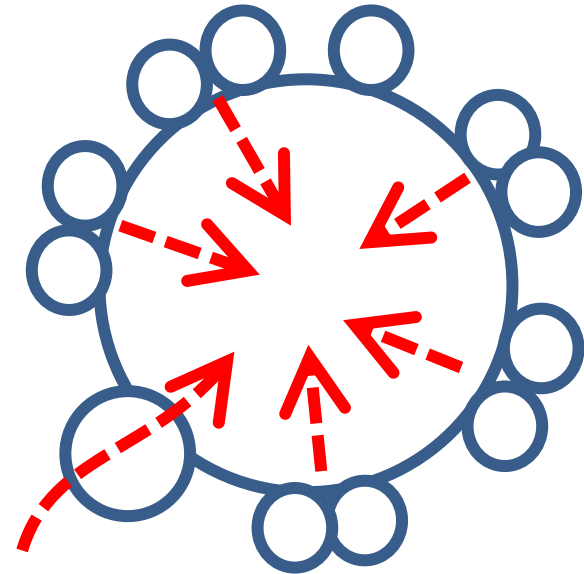
(mobility critical)



“Bridgehead” hub and good logistics to satellites

Building Level

(mind critical)



Collaborative and personal space on (and off) campus

SEE...ing sustainability?



Social... Economic.. Environmental

are we in danger of creating socially and economically dysfunctional environments?

“
I wish
buildings
could
speak
to those
who use
them . . . ”

Dear building user

Thank you for your evocatively inscribed plea! Though I speak in hushed tones, I believe that you, the user, would know what I “a proposed building” were saying if I were designed to clearly enable your wellbeing, participation, enjoyment, journey, navigation, reach and connectivity within a sustainably conceived and managed environment. ***I also believe I would speak more than a token “green language” because by including you, I would be more socially and economically sustainable - as well as environmentally sustainable...***

opportunities

...what does  have to offer?

training,

review & analysis

engagement & research

advice & briefing

design collaboration

contact: stevemaslin.bud@gmail.com

Any Questions

