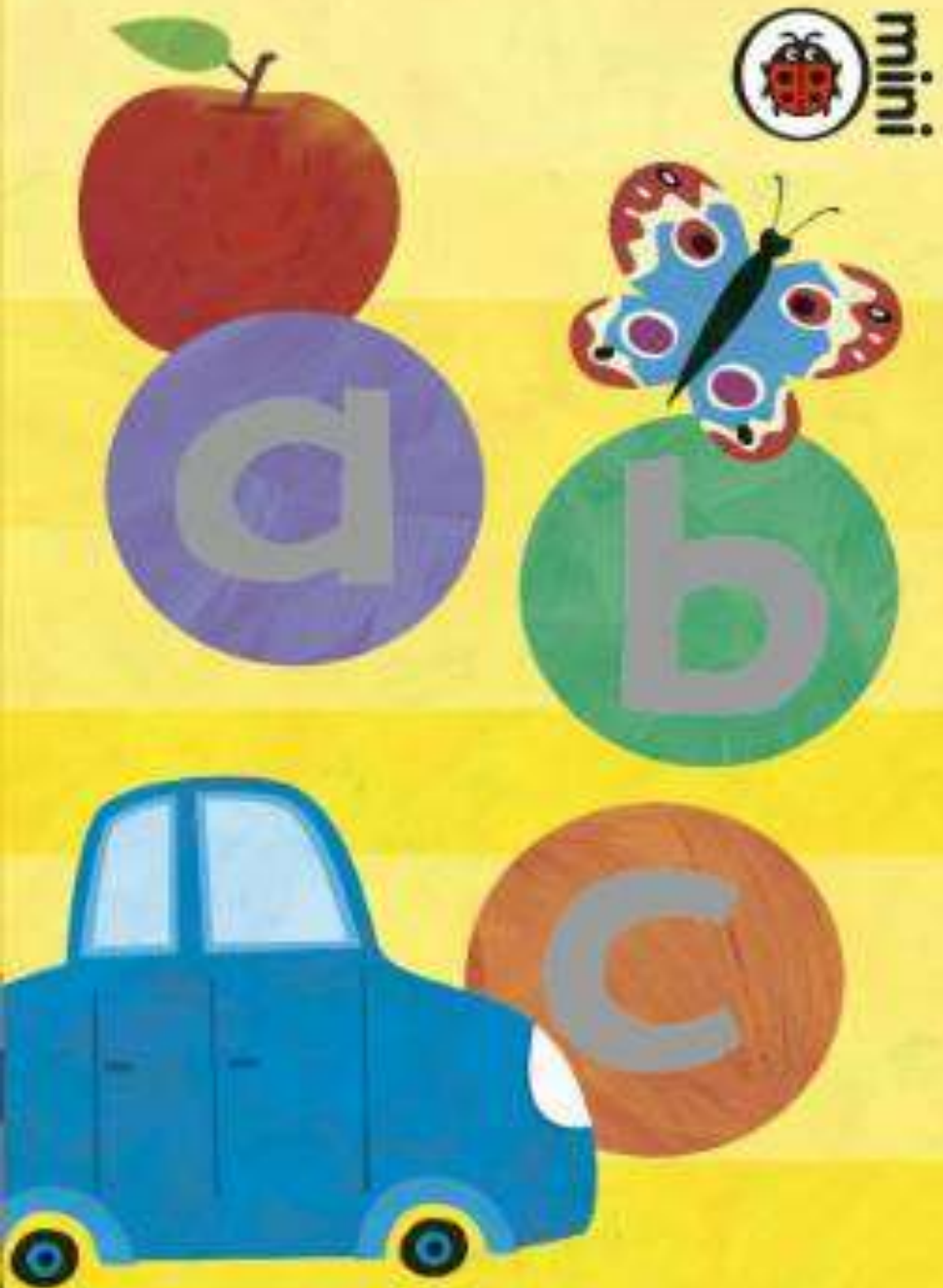


# **TRANSITIONS IN PRACTICE**

## **climate change and everyday life**

Elizabeth Shove, ESRC climate change leadership fellowship





*Beyond  
the  
ABC of  
sustainable  
behaviour*

A

# *is for Attitude*

*Individuals have attitudes.*

*Attitudes towards personal consumption, waste and responsibility need changing*

*Attitudes are changed by persuasion and information.*

*Attitudes drive behaviour.*



apple

**B**

# *is for Behaviour*

*Behaviour is what individuals do.*

*Behaviours need changing.*

*Behaviours are driven by attitudes and prices.*

*People choose how to behave.*



balloon

C

# *is for Choice*

*Choices are made by individuals.*

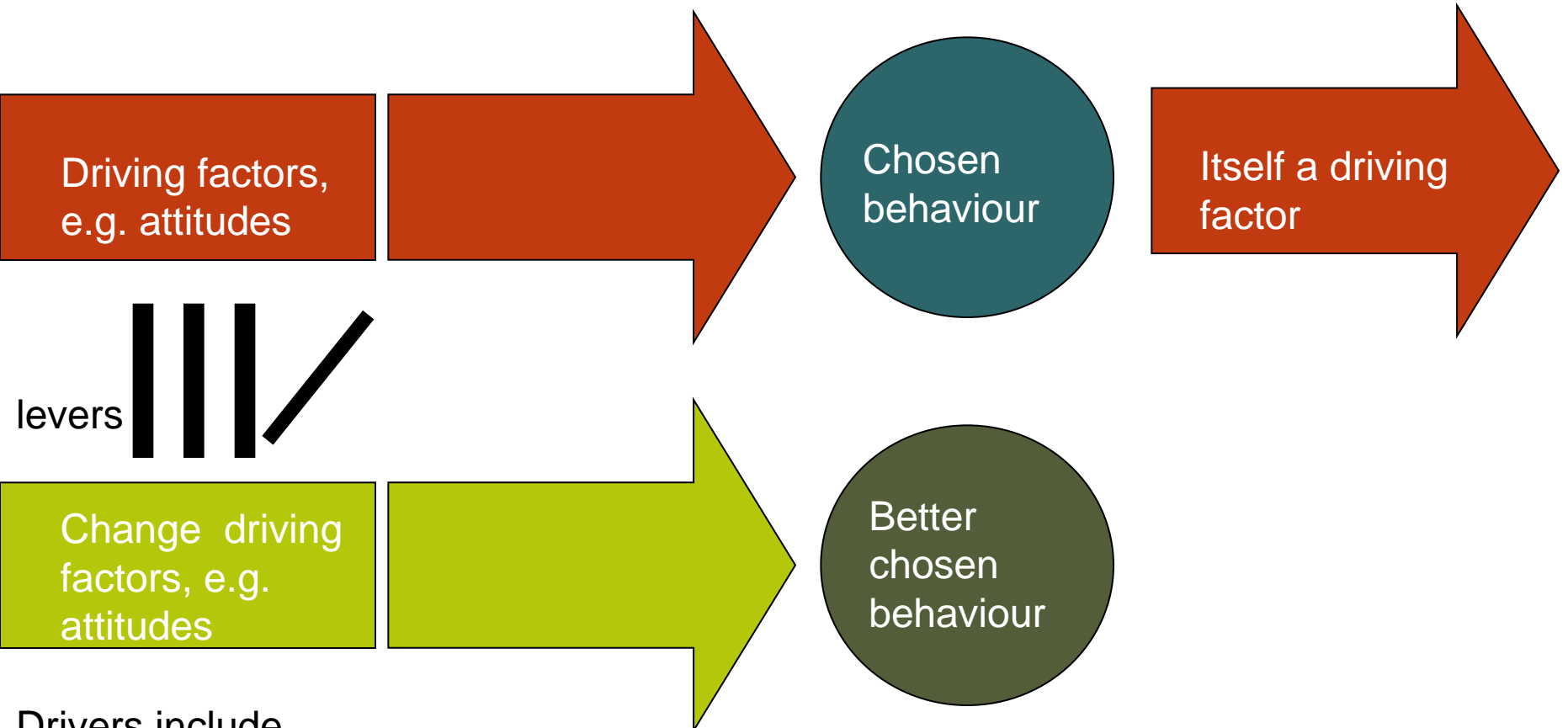
*If individuals chose not to use so much energy, water and other natural resources we'd not be in the fix we are.*

*Policy makers need to encourage individuals to make different choices.*



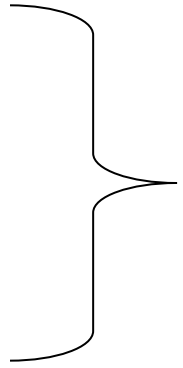
cake

Representation of social change



Drivers include

- Attitudes
- Society
- Economics
- Other people
- Habit



Externalise pretty much anything, including own role



apple

## A FRAMEWORK FOR PRO-ENVIRONMENTAL BEHAVIOURS

Defra January 2008

This report sets out a framework for Defra's work on pro-environmental **behaviour**. It pulls together evidence on public understanding, **attitudes** and behaviours; identifies behaviour goals; and draws conclusions on the potential for **change** across a range of behaviour groups.



balloon

*The headline behaviour goals*

-**Install** insulation -Better energy management -Install microgeneration-**Increase** recycling -**Waste less** (food)-**More responsible** water usage-Use more efficient vehicles -Use car less for short trips -**Avoid unnecessary** flights (short haul)-**Buy** energy efficient products-**Eat** more food that is locally in season -**Adopt lower impact** diet



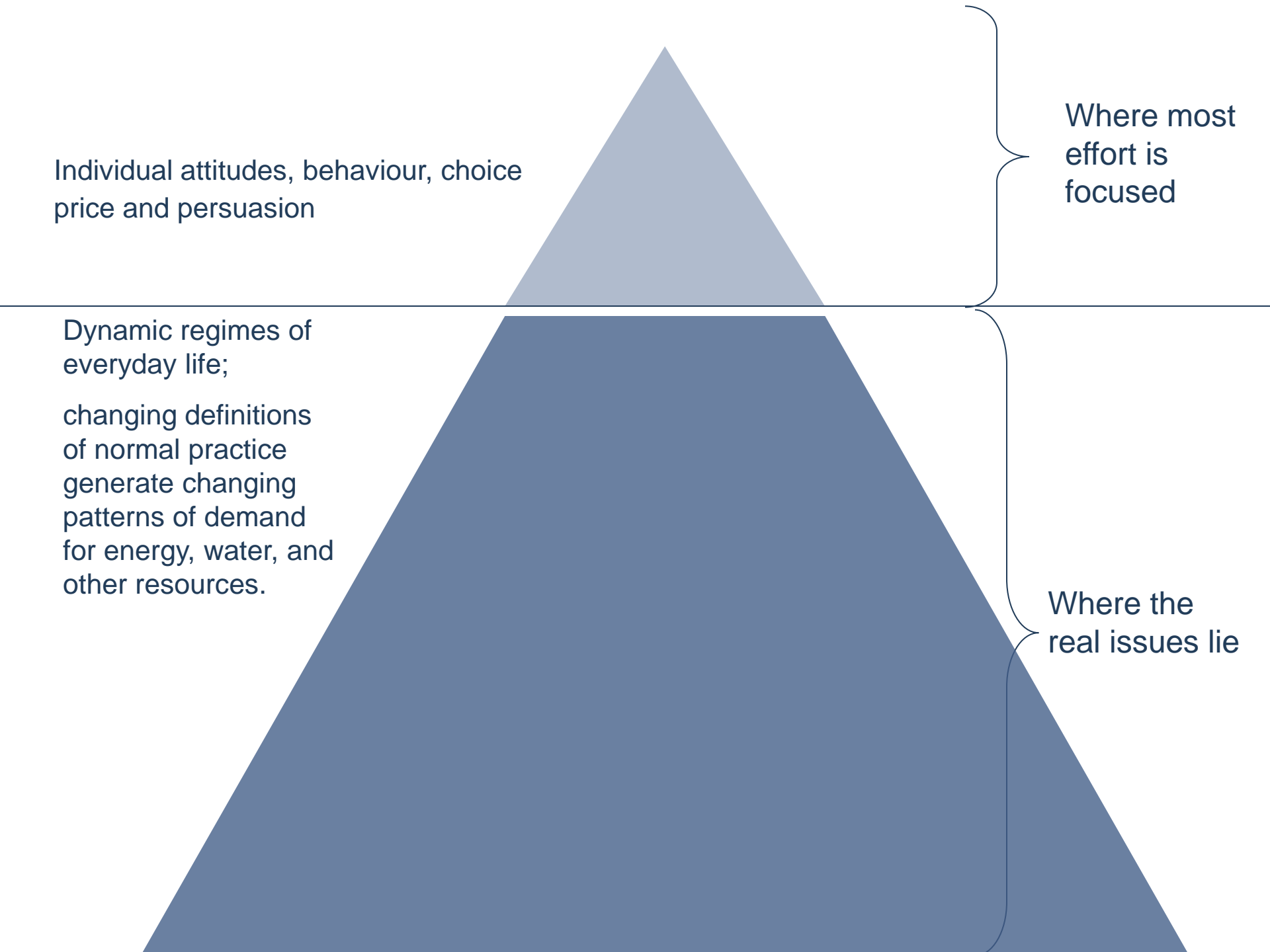
cake

Individual attitudes, behaviour, choice  
price and persuasion

Where most  
effort is  
focused

Dynamic regimes of  
everyday life;  
changing definitions  
of normal practice  
generate changing  
patterns of demand  
for energy, water, and  
other resources.

Where the  
real issues lie





# Relevant resources in social theory

consumption, material  
culture, actor network  
theory, technology  
studies, cultural  
theory, theories of  
practice, histories of  
sociotechnical  
change, transitions,  
innovation studies.....



Ideas adopted in climate change policy  
(business and government)

# Theories of practice

Shared, social

Endogenous dynamics

Specific cultural and material histories

Reproductive, generative

# Theories of behaviour

Individual choice

External drivers

Common base in belief

Causal

# Daily showering

Changing integration of material infrastructures, procedure and image

# Watering the garden

Resources-services; diversity

# Freezing food

Multiple embedding

# Being comfortable

Deliberate intervention to challenge 22 degrees C.

# Explaining daily showering

bathing as a *social activity*

*porous skin*, fear of plague, need a week to recover.

controlled bathing as *medicinal* intervention

*social status*, thrill, mineral waters, hydro-therapy sleep, circulation.

sanitary science; *cleanliness* and godliness, civilisation, discipline, germ theory.

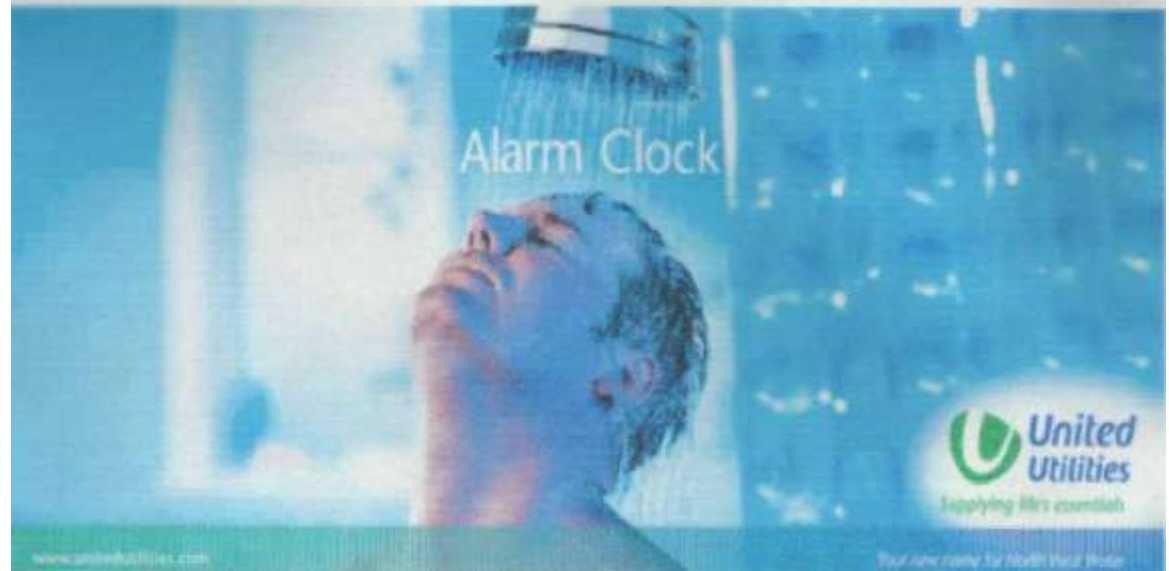
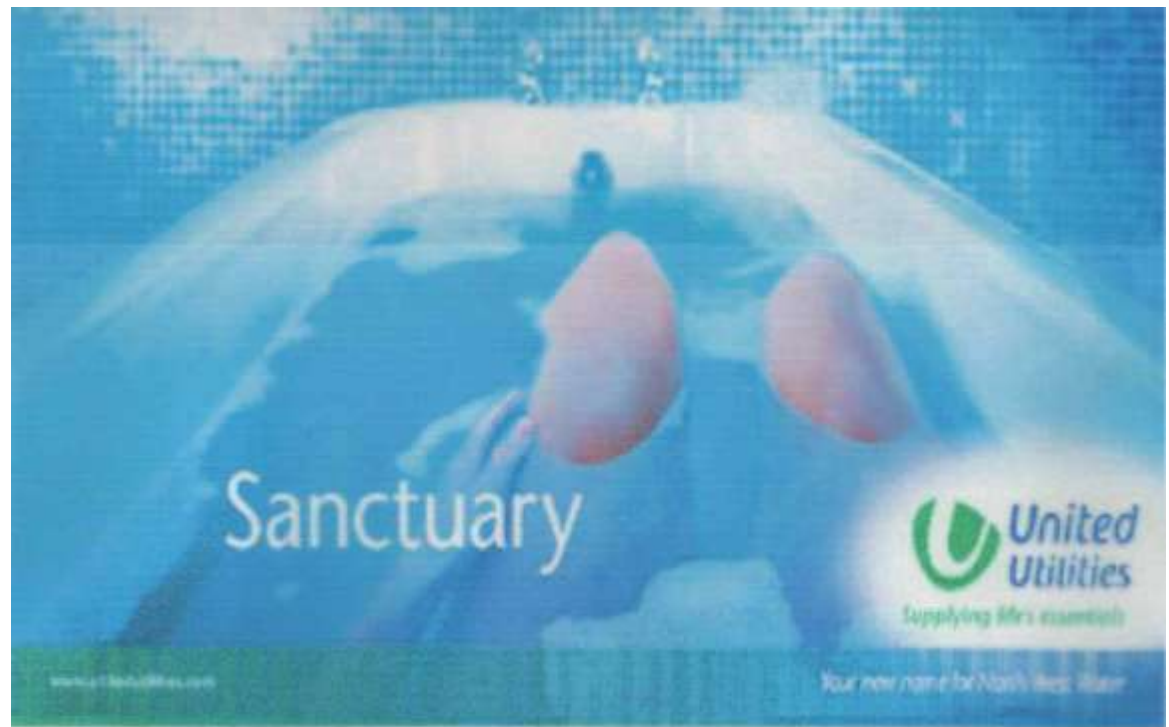
USA, 48 litres of water per capita per day for personal hygiene (91% showering)

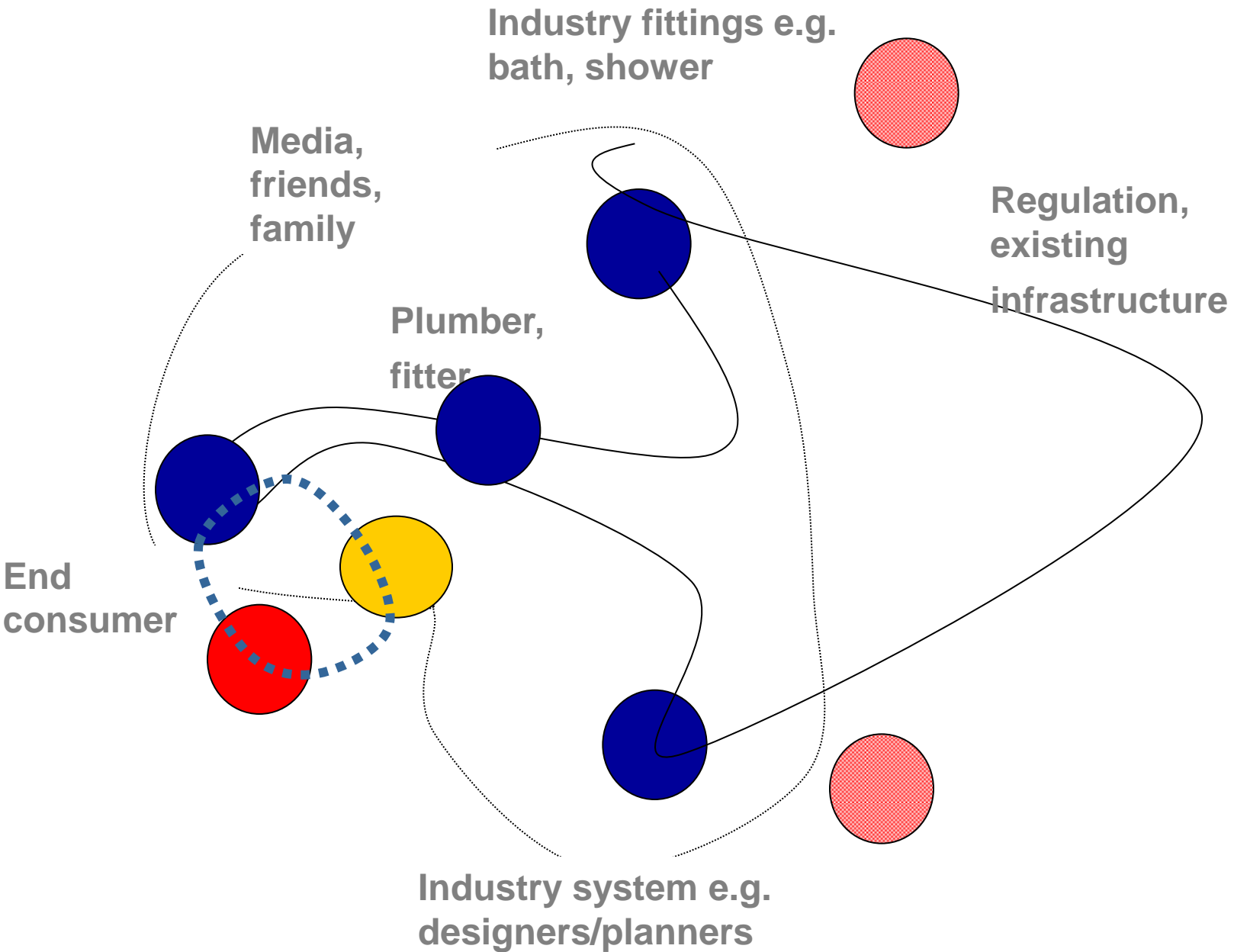
UK, 27 litres of water pc pd for personal hygiene (36% showering) – *freshness*.



**Household infrastructure**

# Contemporary images





Links between industry structure and innovation in practice





1 productive

UK, 2006, hosepipe ban and garden life



3 convenient



2 playground



4 living room



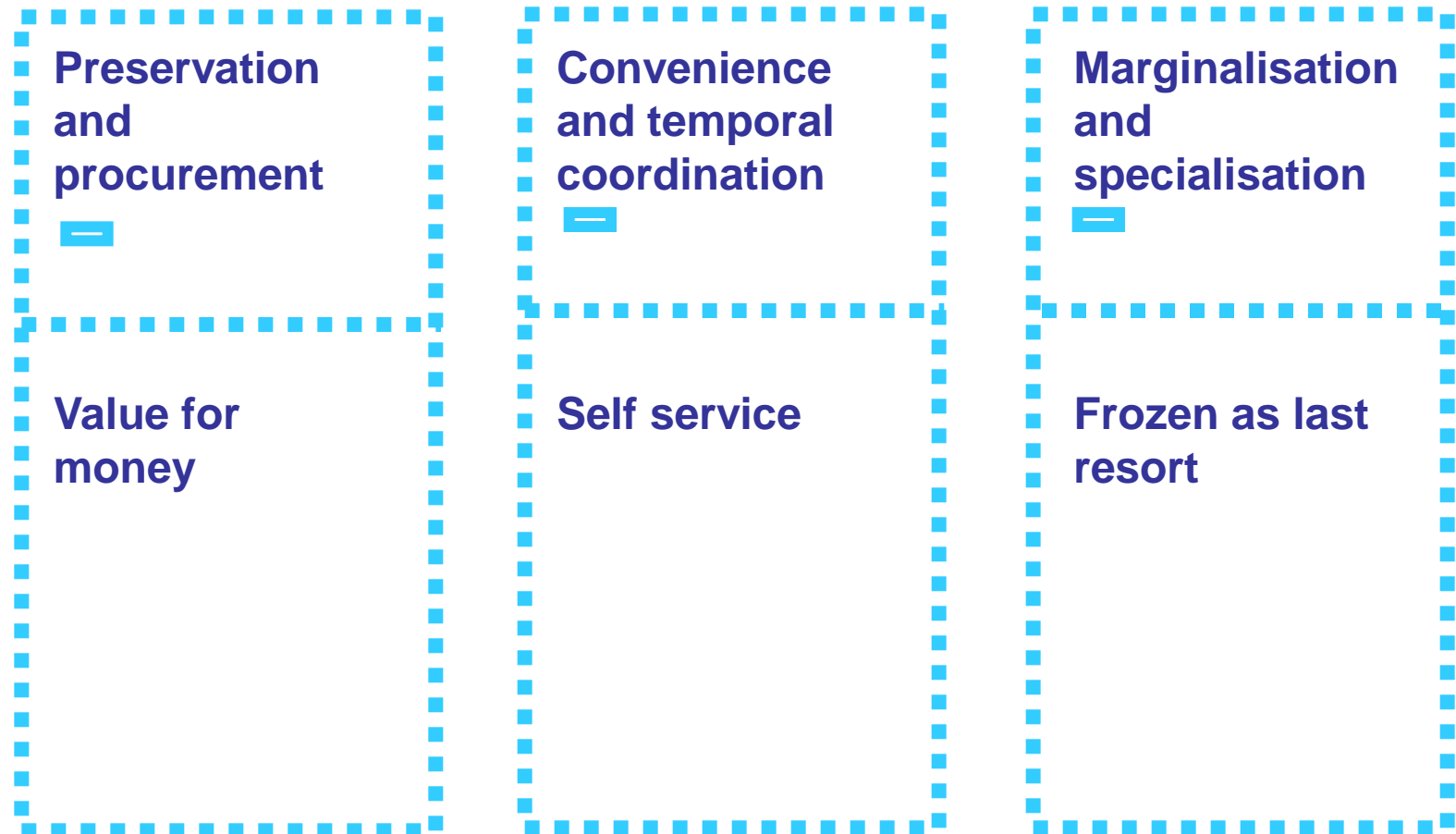
# Contemporary diversity

<b>Orientation to garden life</b>	<b>Layout/material organisation</b>	<b>Social role &amp; organisation</b>	<b>Watering obligation</b>
<b>Productive 1</b>	Well established, with zones for plants, lawn, vegetables, etc.	Keen gardeners, hive of activity, hobbies, cultivation, etc.	Intensive watering, but expertise to rig up water butts, etc.
<b>Playground 2</b>	Usually lawn for games	Given over to children for play, not a place to grow roses, etc.	Marginal, the grass is dead anyway
<b>Convenient 3</b>	Simple layout, plants and hardy shrubs that fend for themselves	Garden used only occasionally, low maintenance, a burden	Minimal effort, hosepipe ban excuse not to bother
<b>Living room 4</b>	Zones for eating; lighting, heating	Space for social interaction, sitting, dining	Sufficient to maintain the view



# Framing freezers

An established appliance: the 'need' is now for more freezers, larger freezers and more types of frozen space: we discover co-existing, sticky links between **freezing, food and family**



How come  
22  
degrees C?

physical  
parameters and  
cultural  
concerns

sea breeze  
or mountain air

what climate  
to provide?

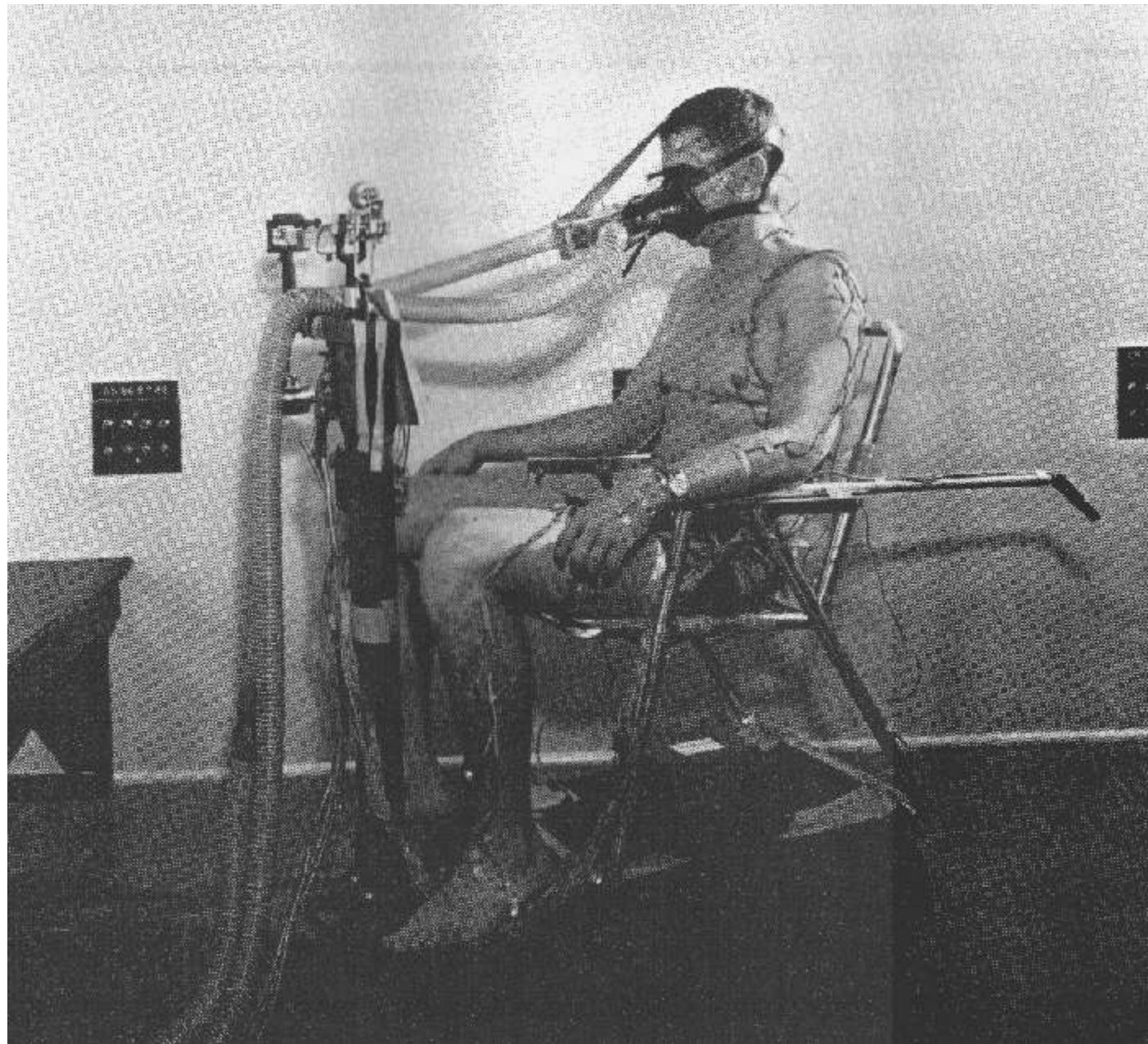
*Controlled* ... IN ONE HARNESS ...  
THE SIX "CLIMATIC FACTORS"  
OF TRUE AIR CONDITIONING



MINNEAPOLIS HONEYWELL CONTROLLERS, VALVES, RELAYS, THERMOSTATS AND OTHER UNITS PROVIDED FOR SIMULTANEOUS CONTROL



Defining  
comfort







*Professor Fanger in his "Doctor-dress" at a reception at DTU, June 14, 2001*

## **Standardising comfort, sweat and smell: the clo and the olf**

The standard amount of insulation required to keep a resting person warm in a windless room at 70 °F (21.1°C) is equal to one **Clo**.

Units were chosen so that 1 clo would be roughly the insulating value afforded by a man's underwear and a lightweight suit, or "a heavy top coat alone."

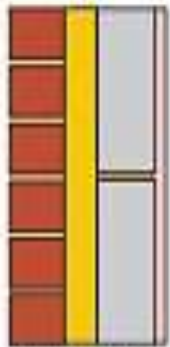
The **Olf** is a unit used to measure the scent emission of people and objects.

One olf is defined as the scent emission of an "average person", a sitting adult that takes an average of 0.7 baths per day and whose skin has a total area of 1.8 square metres; the scent emission of an object or person is measured by trained personnel comparing it to normed scents.

***Standardising science also matters for ventilation rates and energy consumption.***

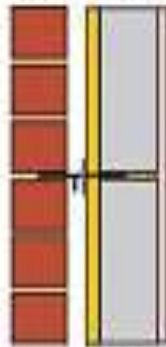


filled cavity



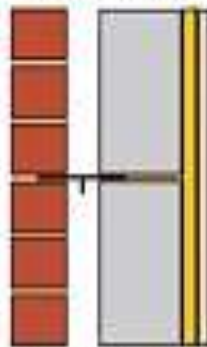
50mm cavity batts  
100mm aerated block  
13mm lightweight plaster

partial fill

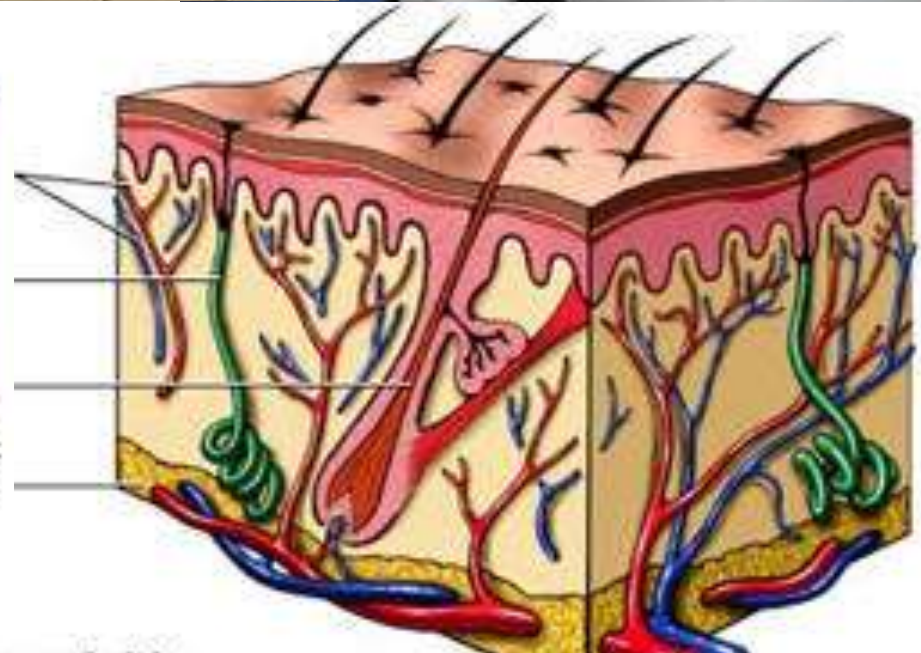


25mm cavity boards  
100mm aerated block  
13mm lightweight plaster

clear cavity



125mm aerated block  
25mm thermal board





The reproduction of  
comfort involves  
integrations of:

Clothing

Sweating

Building fabric and technology

Ideas about the human body

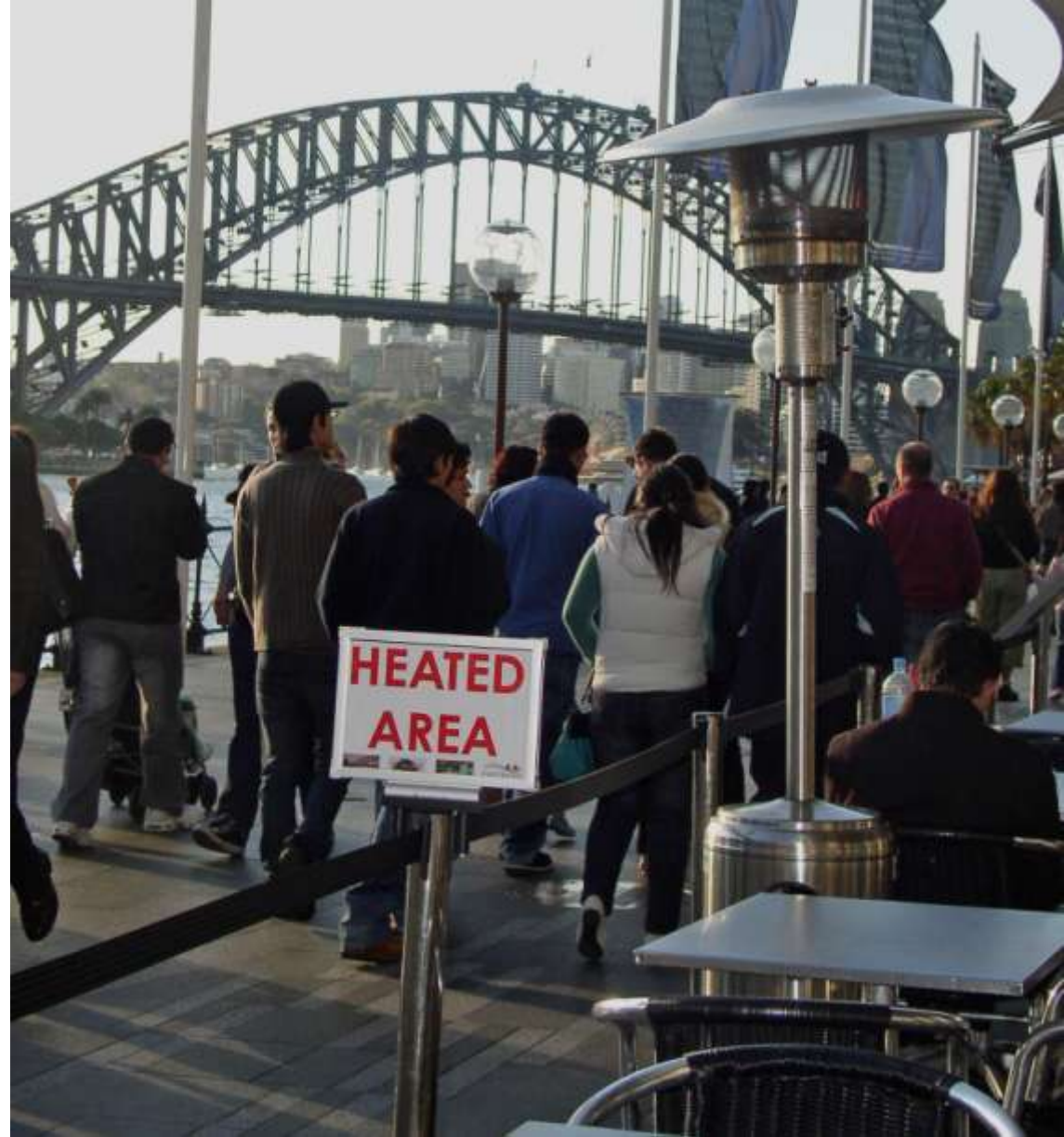
Seasonality

Regulation

Scientific research

Corporate interests

If a building is set, regularly at, say, 22 °C ... [and] ...If enough buildings are controlled at this temperature, it becomes a norm for that society at that period of its history, and anything different is regarded as 'uncomfortable' (Humphreys 1995: 10)



Seasonality and daily life

Changing ideas and conventions of comfort: space, body, building?



6 to 30 degrees C; 20 to 28 degrees C; 22 degrees C.



スーツ

COOLBIZ



28℃

私たちはチーム・マイナス8%の一員として  
地球温暖化防止を推進するため、  
消費時の室温を28℃にしています。  
5月では、28℃で快適に仕事をするため  
スーツからCool Bizへ衣替えしています。



セイコーインスツル株式会社  
E-4-0177001

セイコーインスツル グループ





# ordinary consumption

Convention, routine, dynamics of practice,  
sociotechnical structuring of options -  
services not resources; systems of practice  
injunctions not choices

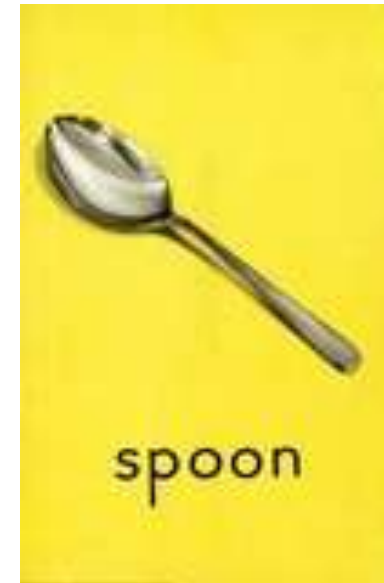
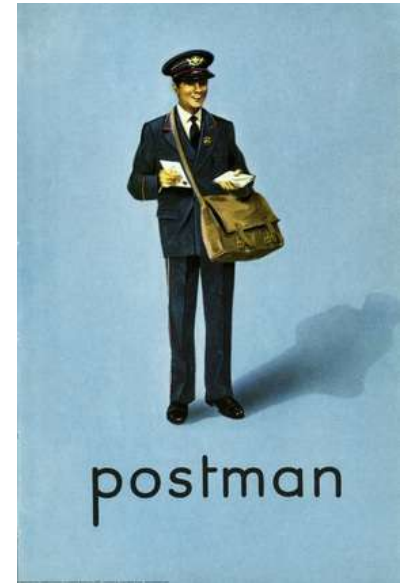
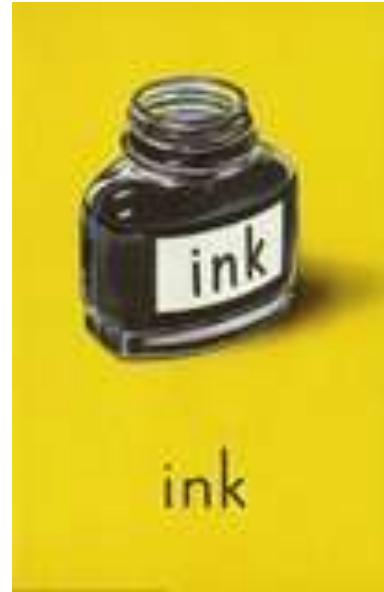
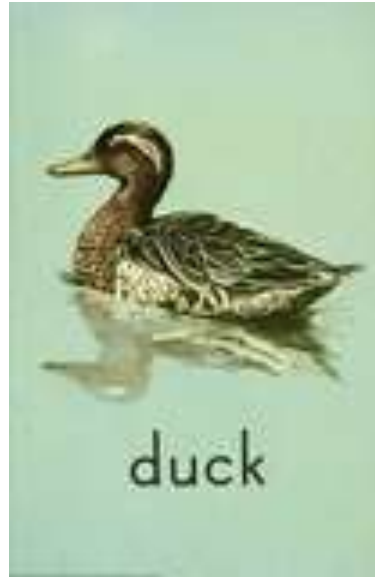
Where the  
real  
challenges lie

Individual belief, attitude, behaviour, information, economics,  
persuasion, labelling, reflexive decision-making about  
resources

Where most  
effort has  
focused

# green consumption

*Requires an  
extended  
vocabulary*





D

*is for dynamics and  
demand*



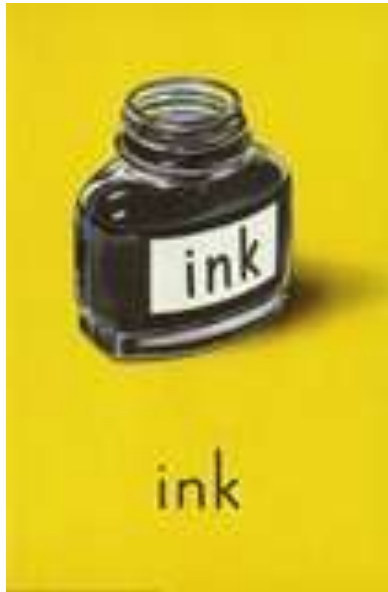
duck

*Demand is an outcome of practice.*

*Practices are dynamic, changing all  
the time, emergent, systemic.*



*is for infrastructure and institution*



*Practices are embedded in, and are reproductive of material and cultural infrastructures and institutions.*

*Though often invisible in policy debate, these are key sites of order and transformation.*

*p*

## *is for practice*

*Practices exist beyond specific performances;*

*they consist of interconnected sets of norms, conventions, understandings, embodied know-how, states of emotion, arrays of material things;*

*they are made and transformed in and through moments of performance – doing, washing, eating, travelling, etc.*



postman



*r*

*is for routine and regime*

*Most environmentally significant consumption is routine, inconspicuous and habitual, e.g. washing, eating, travelling, etc.*

*Routines change, but not through price and persuasion.*

*For regimes of practice, see systems*



rabbit

**S**

*is for systems and services*

*Practices intersect to form bundles, complexes and regimes. These have different systemic qualities.*



spoon

*Services like comfort, cleanliness and convenience are relevant units of demand (not resources as such).*

*t*

*is for transitions,  
tipping points and  
transformations*

*Practices and systems of practice  
are not stable.*

*Transition and transformation is  
normal.*

*For policy, the challenge is to  
understand transitions in practice.*



table