

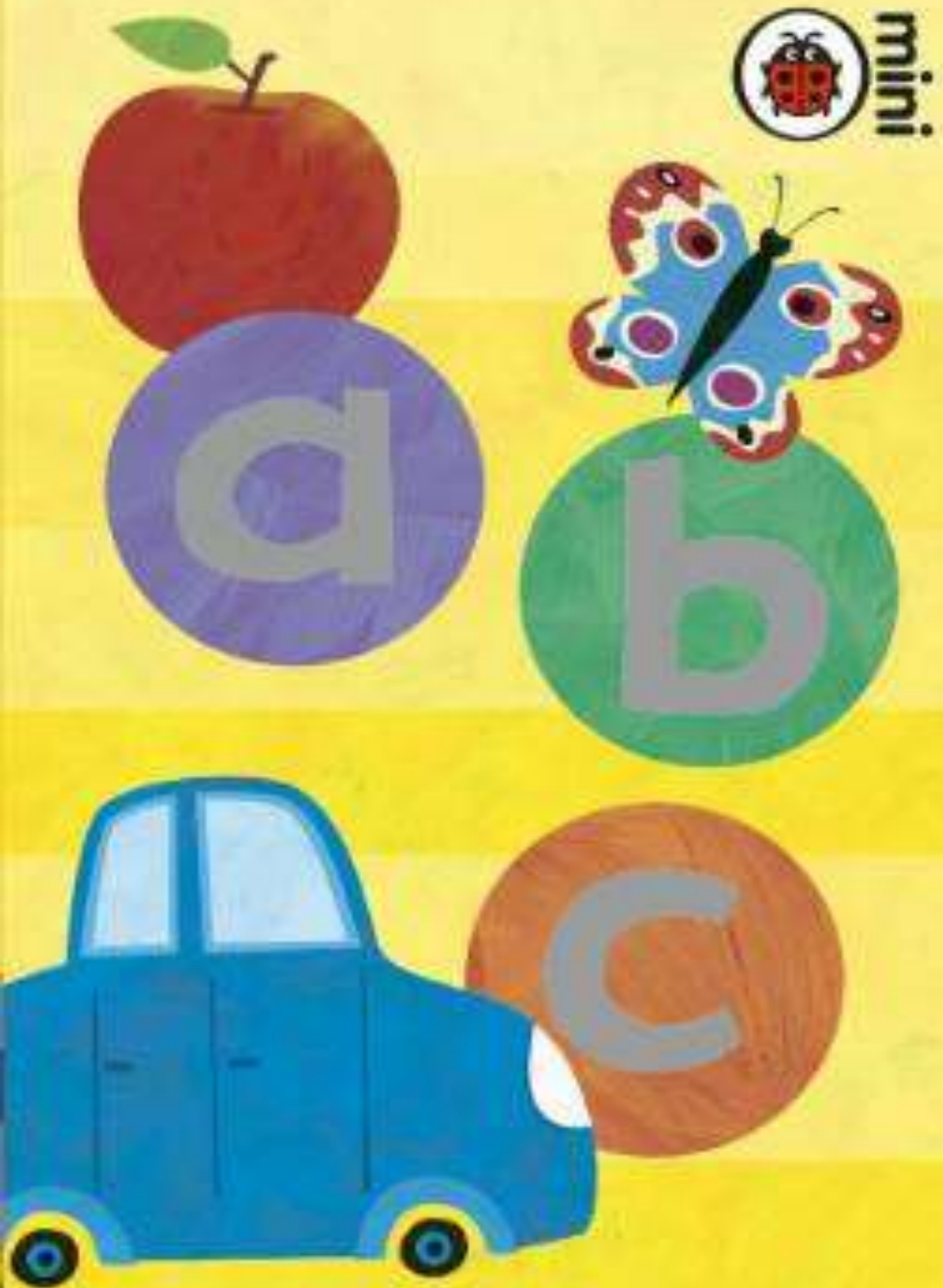
Behaviour Technology Practice

TRANSITIONS IN PRACTICE **climate change and everyday life**

Elizabeth Shove, ESRC climate change leadership fellowship
Lancaster University



Sustainable domestic
technologies: transitions
in consumption and
practice



the
ABC
of energy
efficiency
and
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 we'd not be in the fix we are.

Policy makers need to encourage individuals to make different choices.





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

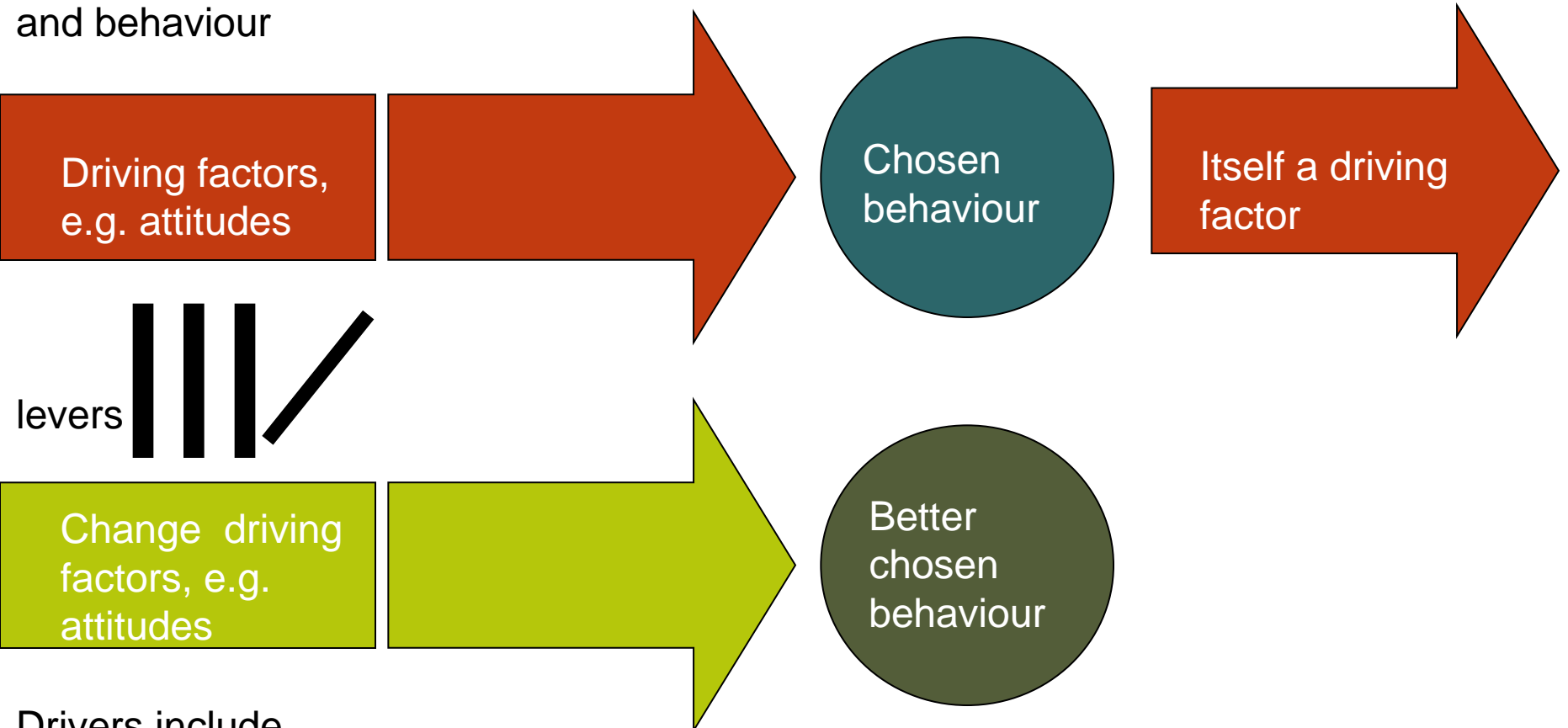
The headline behaviour goals

-**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

Representation of energy efficiency and behaviour



Driving factors, e.g. attitudes

Chosen behaviour

Itself a driving factor

levers

Change driving factors, e.g. attitudes

Better chosen behaviour

Drivers include

Attitudes

Society

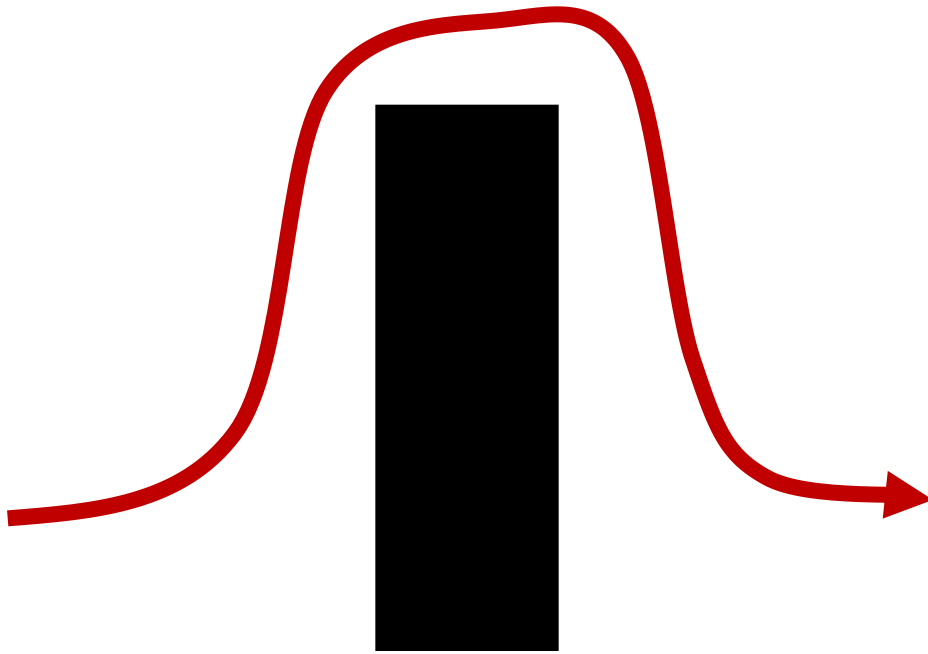
Economics

Other people

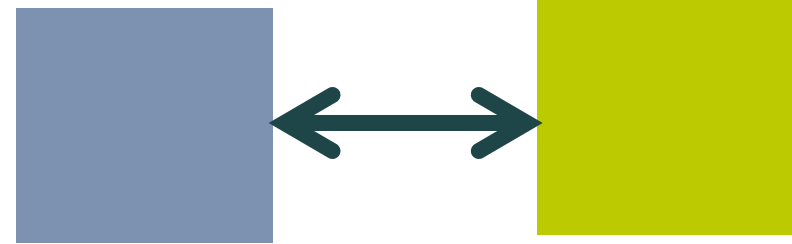
Habit

Externalise pretty much anything, including own role

Drivers can also be barriers



Assume change unless blocked by barriers. Barriers include pretty much anything



Assume attitude-behaviour association and then worry about the gap: efficiency not adopted

Gaps and barriers

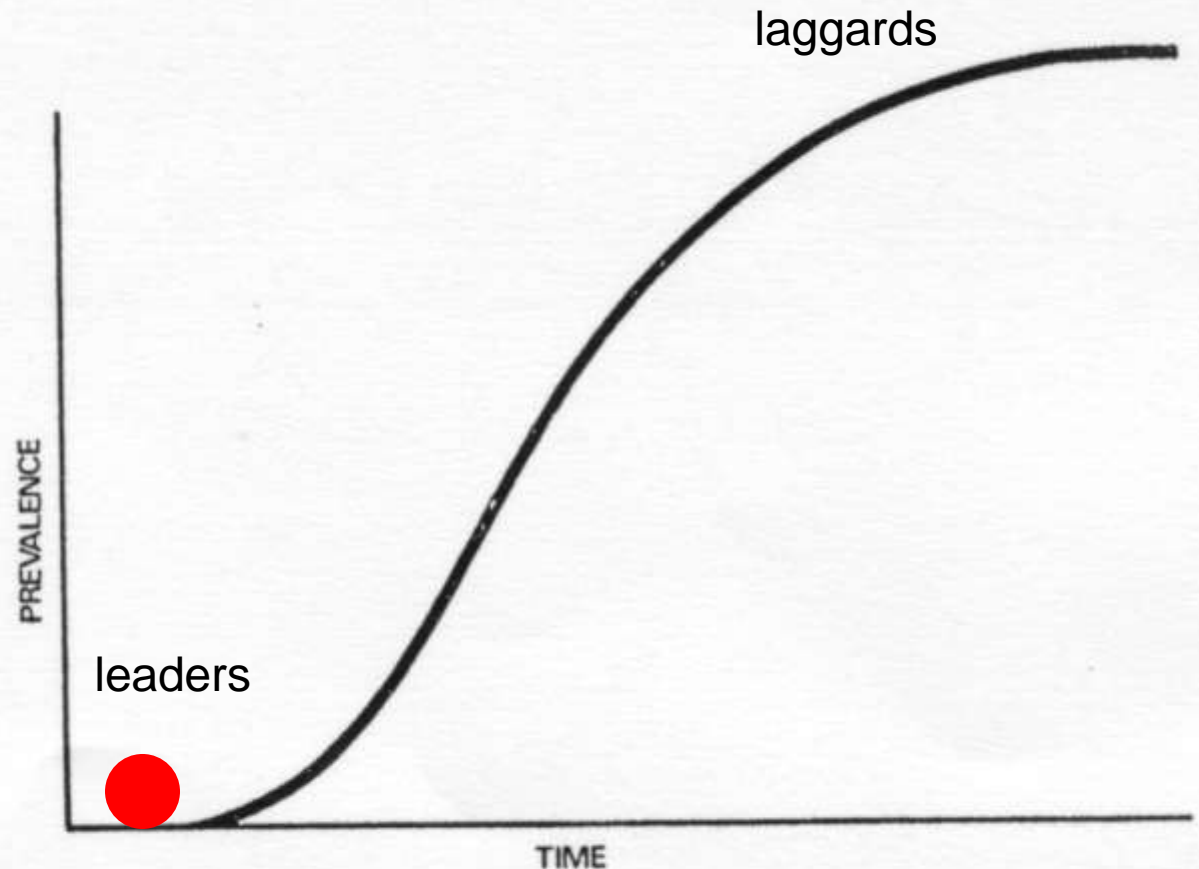
Behaviour and the adoption of energy efficient technology

Drivers, attitudes, price, persuasion affect the rate of diffusion and adoption.

BUT...
From science and technology studies, the 'it' doesn't stay still

'innofusion'
'context-object'
'failure'

FIGURE 1

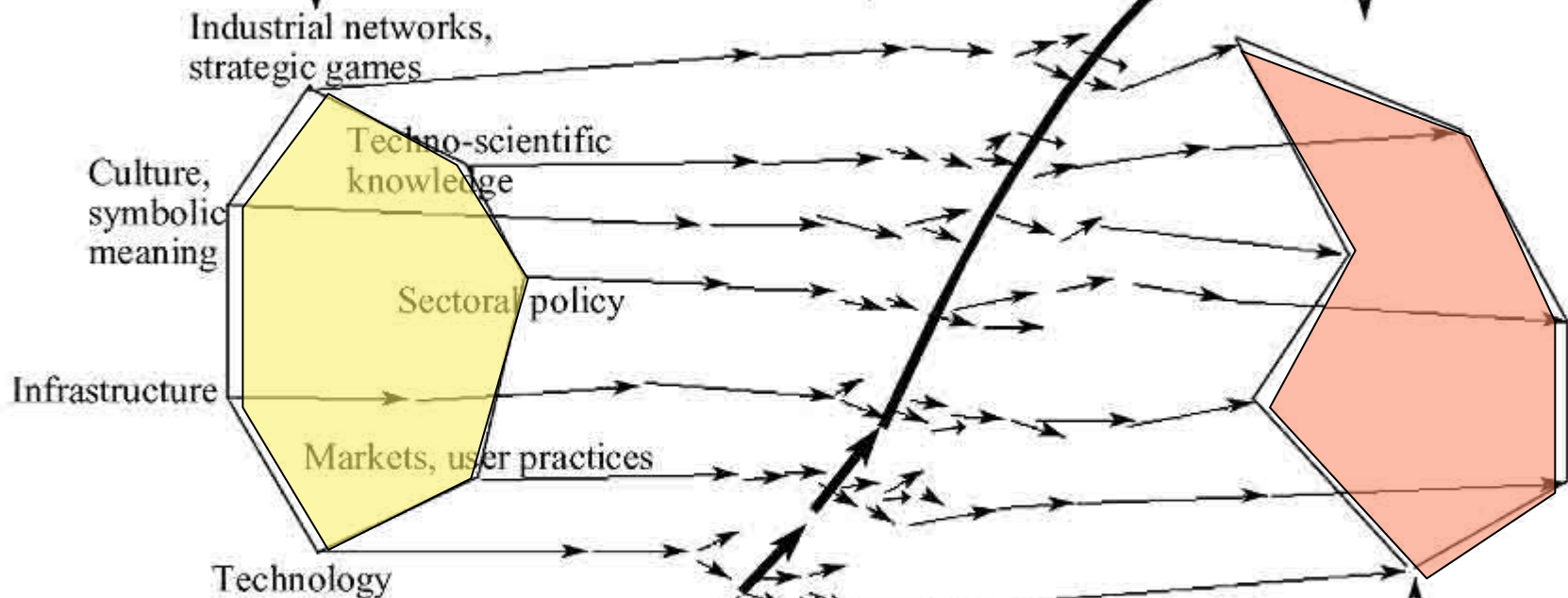


The S-curve of adoption of an innovation
E. M. Rogers, diffusion of innovation

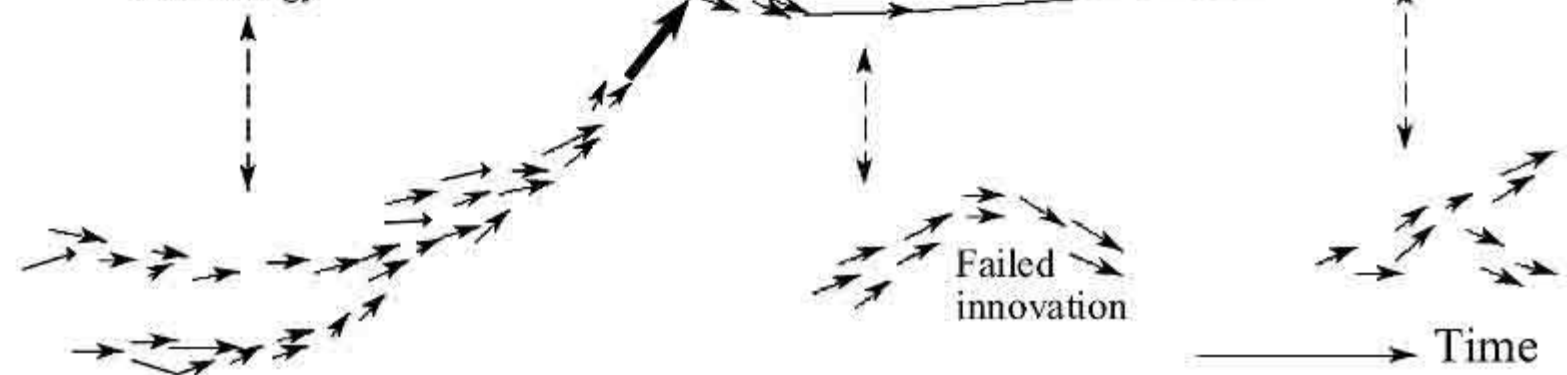
Landscape developments



Socio-technical regimes



Technological niches




Geels 2002: note no place for 'behaviour'

DOMINANT APPROACH

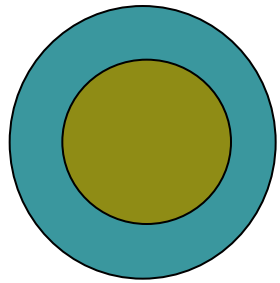
Behaviour
Attitudes
Choice

Technology
Diffusion
Barriers
Misuse



Adoption
Acceptance
Price
Persuasion

- △ Separate technology and behaviour
- △ Individualise 'behaviour' – choice and attitude
- △ No history, no existing infrastructure
- △ Context as a driving factor



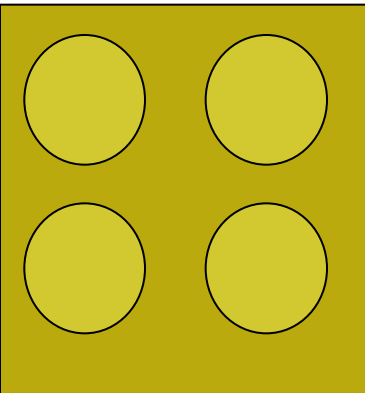
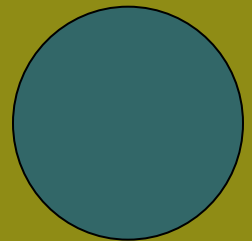
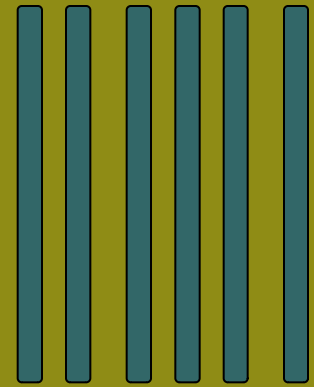
Kitchens and bathrooms

What do people do in the kitchen and the bathroom, how is this changing and with what consequence for sustainability?

Sites in which technologies, conventions and injunctions co-evolve.

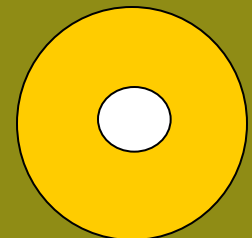
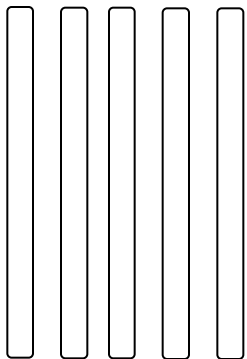
Sites of innovation in practice.

Hot spots of water, energy and resource consumption



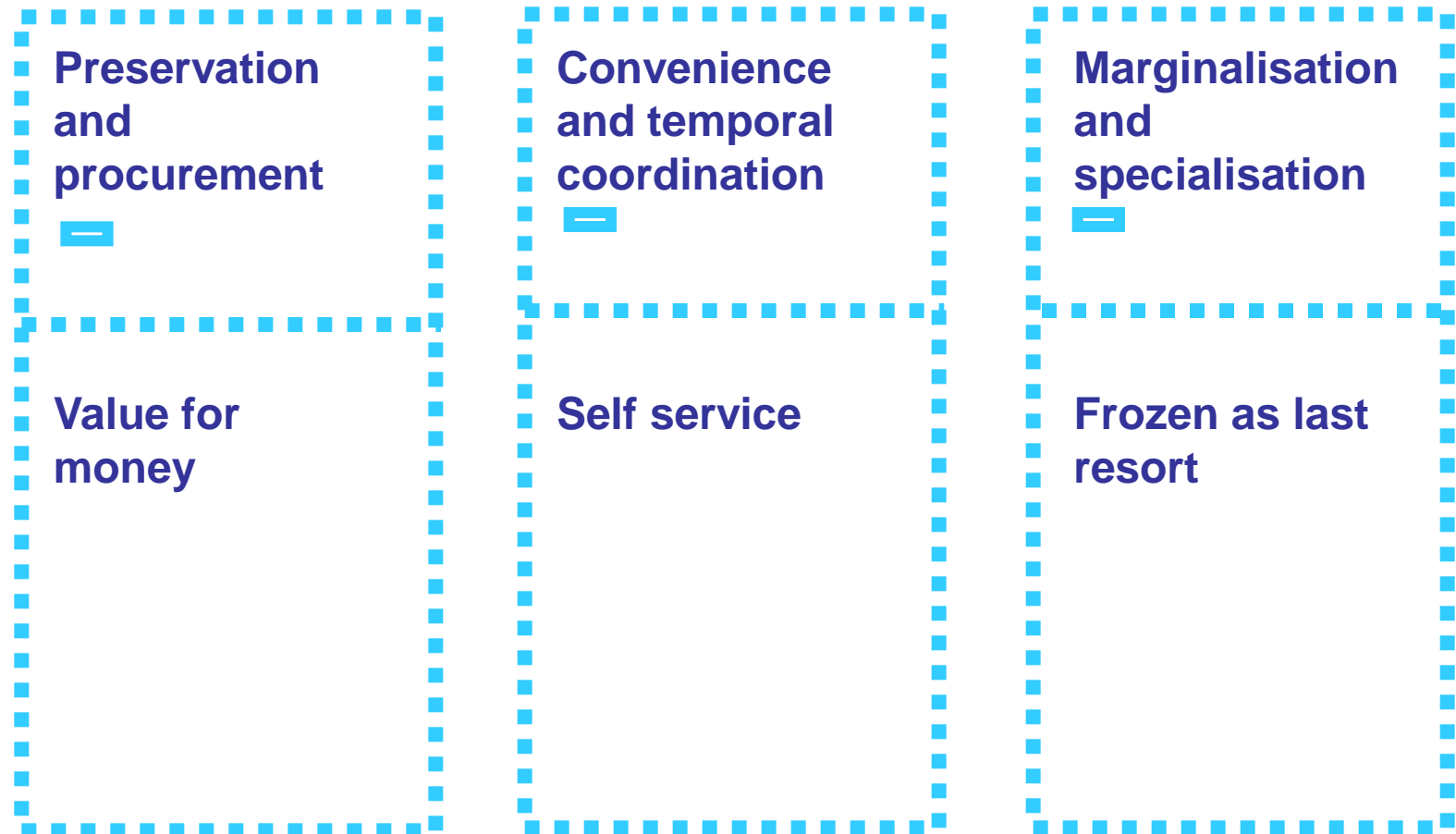
Martin Hand
Sociology, Queens University, Ontario
Elizabeth Shove
Sociology, Lancaster

Dale Southerton
Sociology, Manchester
Alan Warde
Sociology Manchester



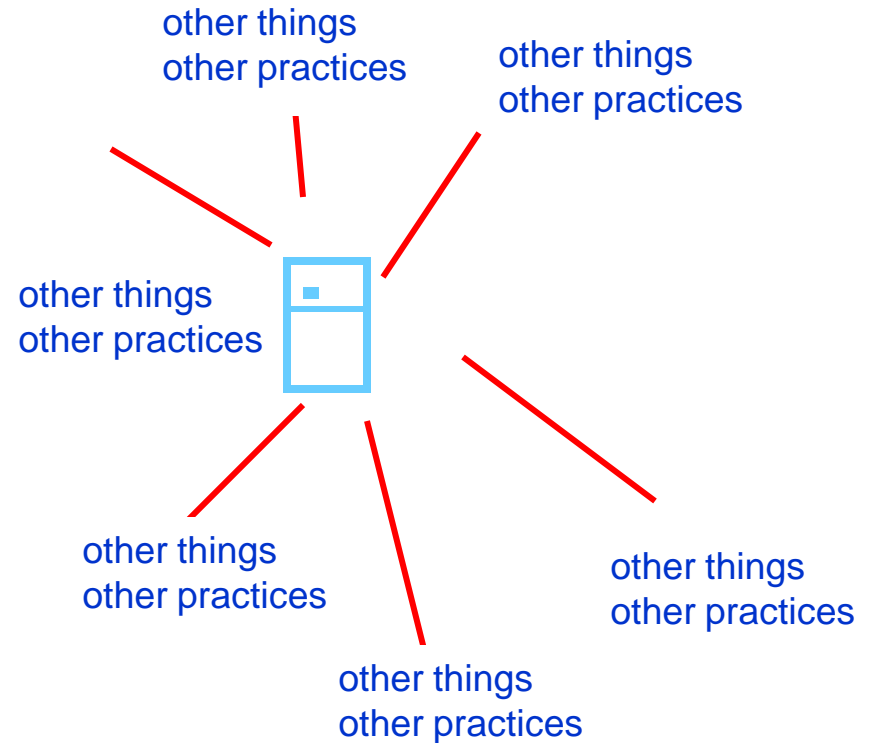
Framing freezers

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**



Freezer Lessons

- 1. Material objects as part of a system**
- 2. The 'object' changes as the system changes**
- 3. Design and consumption are implicated in the reproduction and transformation of everyday life**



Assembling everyday life

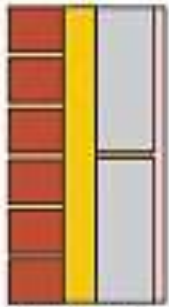
Suites of technology and practice



meta concepts of injunction, normality, having and doing, practices and systems of practice

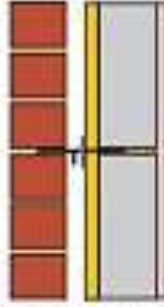


filled cavity



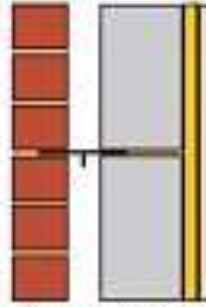
50mm cavity batts
100mm aerated block
13mm lightweight plaster

partial fill

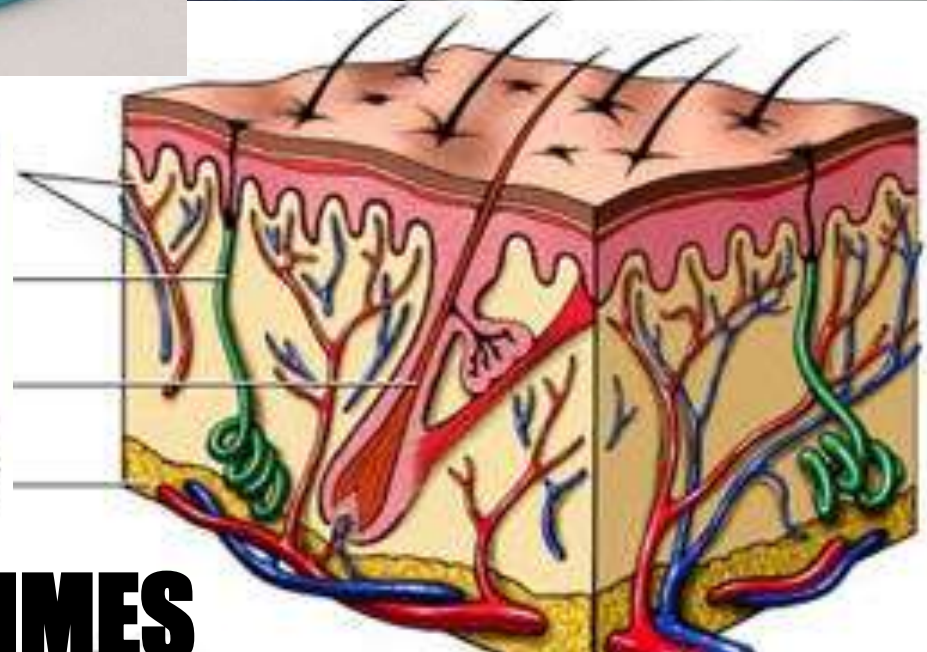


25mm cavity boards
100mm aerated block
13mm lightweight plaster

clear cavity



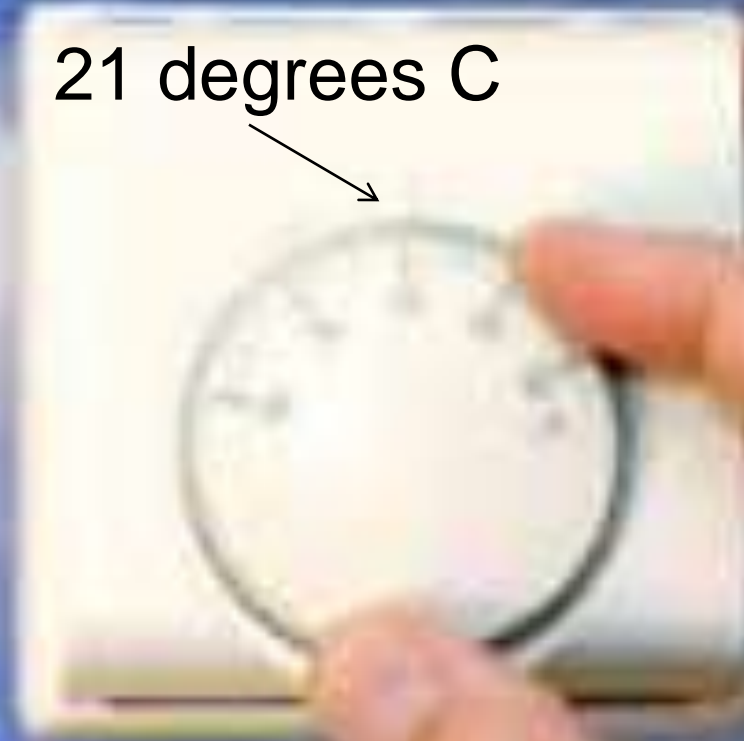
125mm aerated block
25mm thermal board



HEATING & COOLING REGIMES

Technology and practice

21 degrees C



Technology and practice

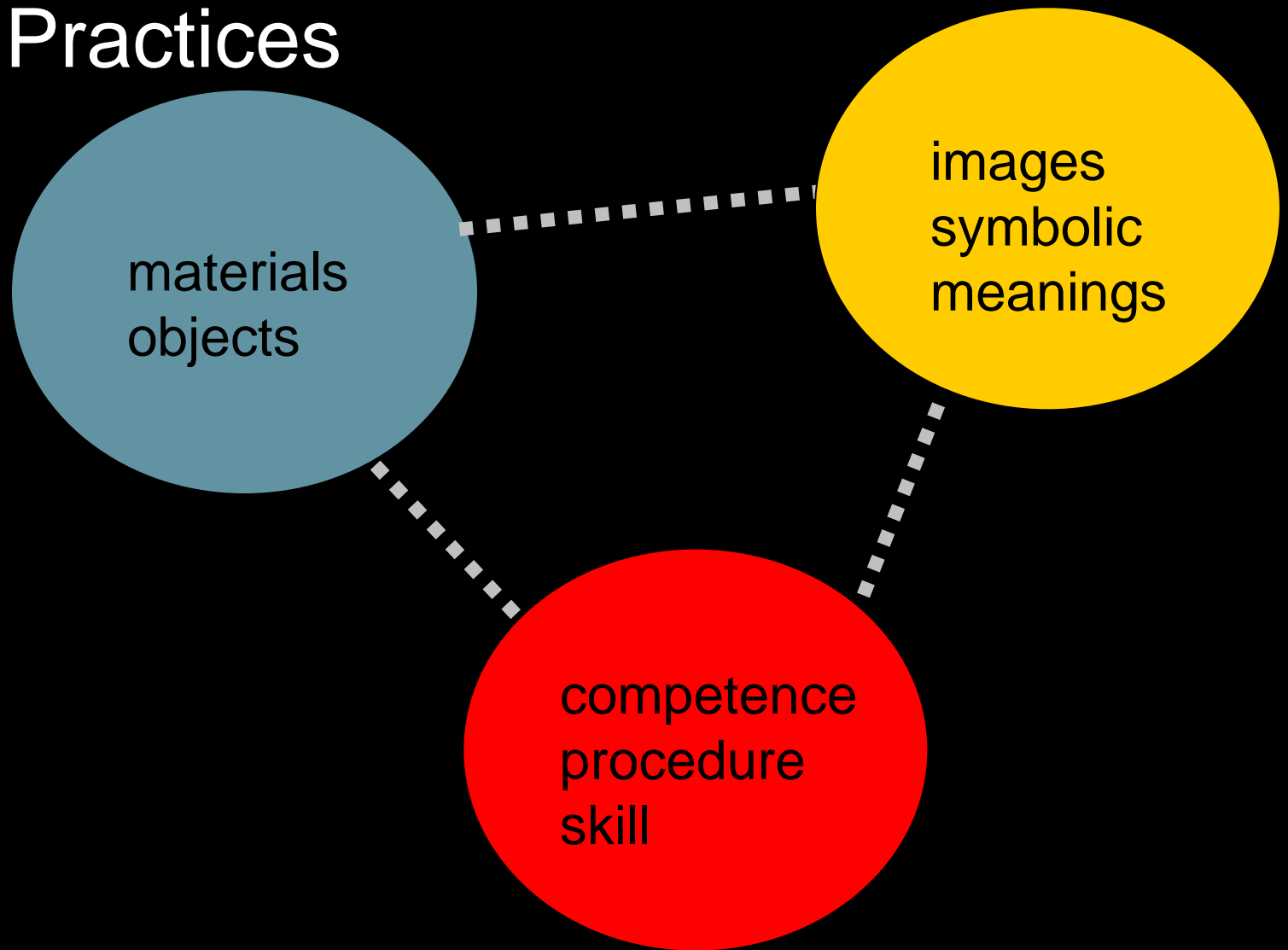


Changing ideas and conventions of comfort



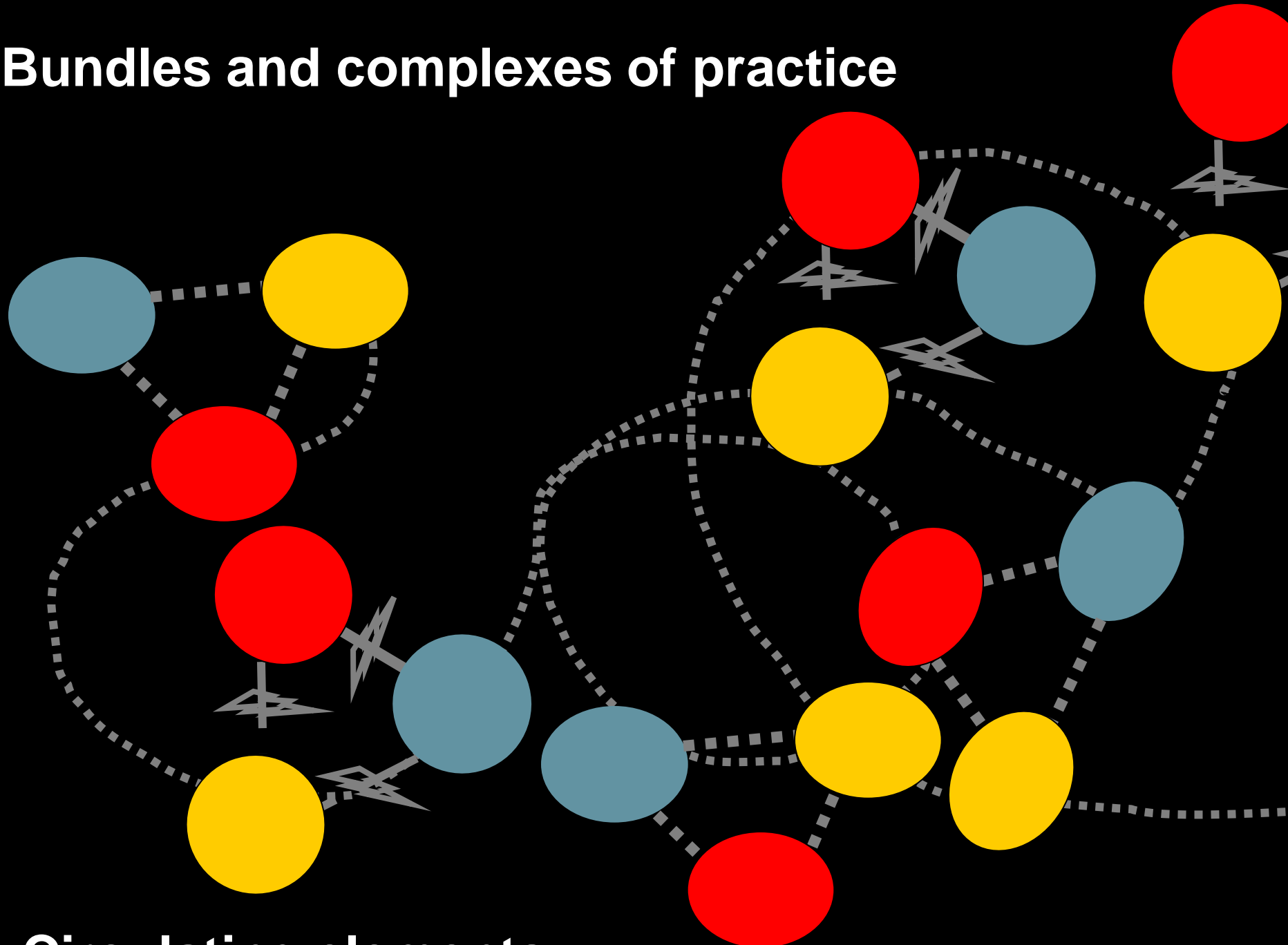
6 to 30 degrees C; 20 to 28 degrees C; 22 degrees C.

Social Practices



Practices are made, sustained and reproduced through processes of making and breaking links between **elements**

Bundles and complexes of practice



Circulating elements

Theories of practice

Shared, social

Endogenous dynamics

Specific cultural and material histories

Reproductive, generative

Theories of consumer behaviour

Individual choice

External drivers

Common base in belief

Causal

Theories of practice

Technology is part of practice

Endogenous dynamics

Specific cultural and material histories

Reproductive, generative

Theories of consumer behaviour

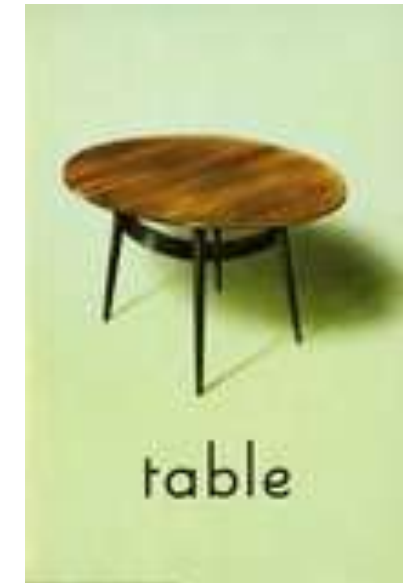
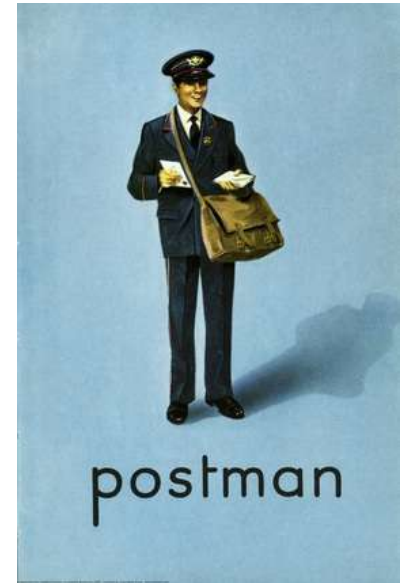
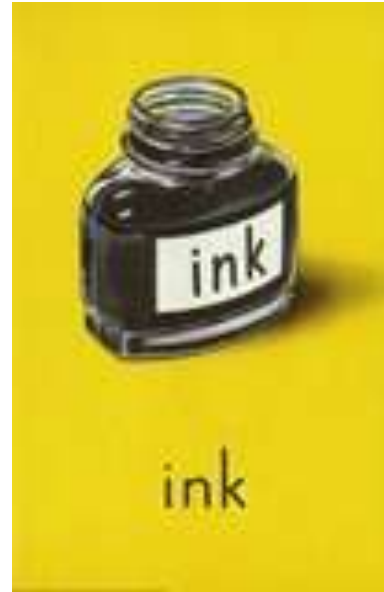
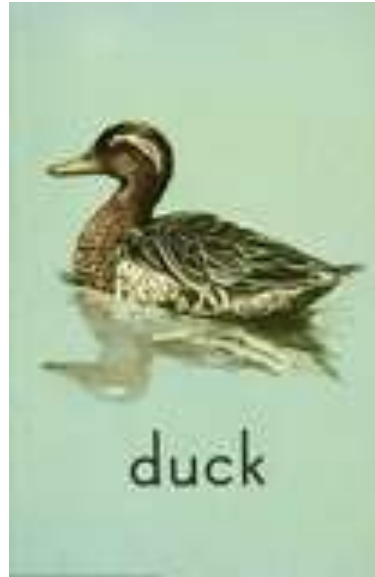
Technology is autonomous

Linear process of diffusion

Adoption in isolation

Needs and desires external

*Requires an
extended
vocabulary*





D

is for dynamics and demand



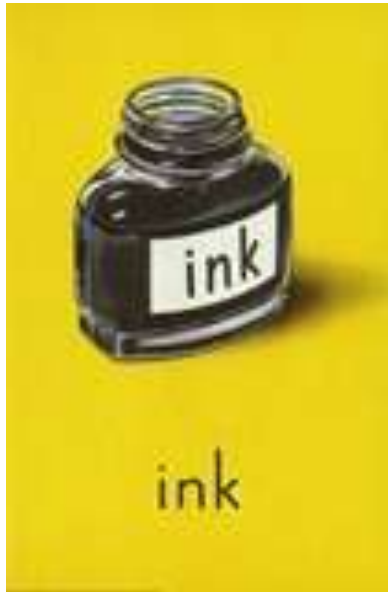
duck

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 – heating, cooling, washing, eating, travelling, etc.



postman



r

is for routine and regime

Most energy consumption is routine, inconspicuous and habitual.

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.*



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....

How do sustainable practices take hold?

How do unsustainable ones persist and die?

How do the elements of sustainable practices travel?

How do practices circulate, diffuse and shrink?



Ideas adopted in climate change policy
(business and government)