

Presented by

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# Comfort, fashion, home and sustainability: How (/not) to live your life in a jumper

Presentation for Sustainable fashion forum, University of Lincoln

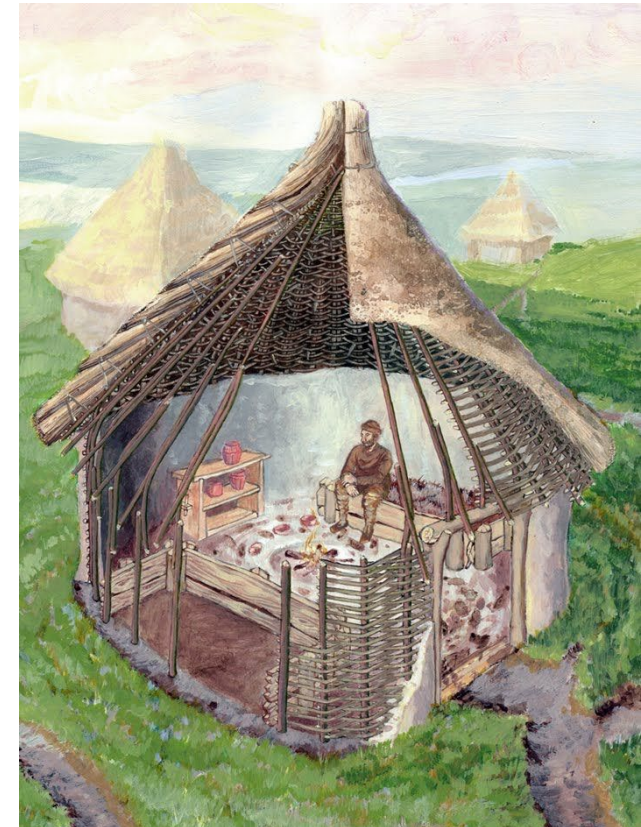
# A BRIEF HISTORY OF COMFORT AND HOME

- The image and spatial features of the domestic space have been shaped and reshaped by cultural, social and technical means, and the search for 'home comfort' has played a major role in this process
- The form of houses was primarily the consequence of a whole range of sociocultural factors which had then been complimented and modified by other forces such as climate, technology and economics.



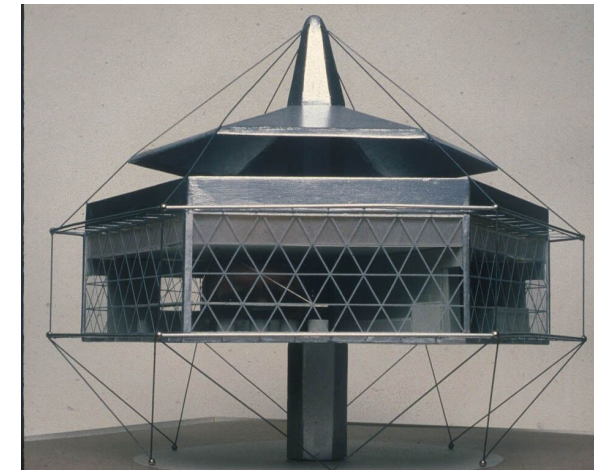
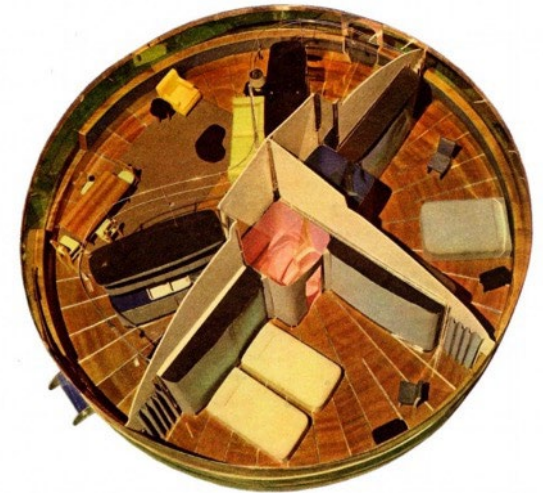
# A BRIEF HISTORY OF COMFORT AND HOME

- Fixed hearths in the centre of a dwelling have been found in houses at Corinth dated as early as 2500 BC. The interior was also more centralised, with human activities concentrated around the centre of the dwelling.
- Facing an increasing demand for multistorey buildings, the inconvenience of a central fireplace limited the long-held tradition of a centralised arrangement of living space in dwellings. The focal point moved, with the location of the fireplace, to the sidewalls during the late 15th century.



# A BRIEF HISTORY OF COMFORT AND HOME

- Buckminster Fuller's Dymaxion houses exhibited in 1930 and 1945 demonstrated a united central core containing the service system and structural elements.
- The core contained hot water storage, heating devices and ventilation ducts as well as stairs, and there was the option for an elevator.
- To an extent, the form of the building interestingly resembled the central hearth dwelling from 2500 BC.



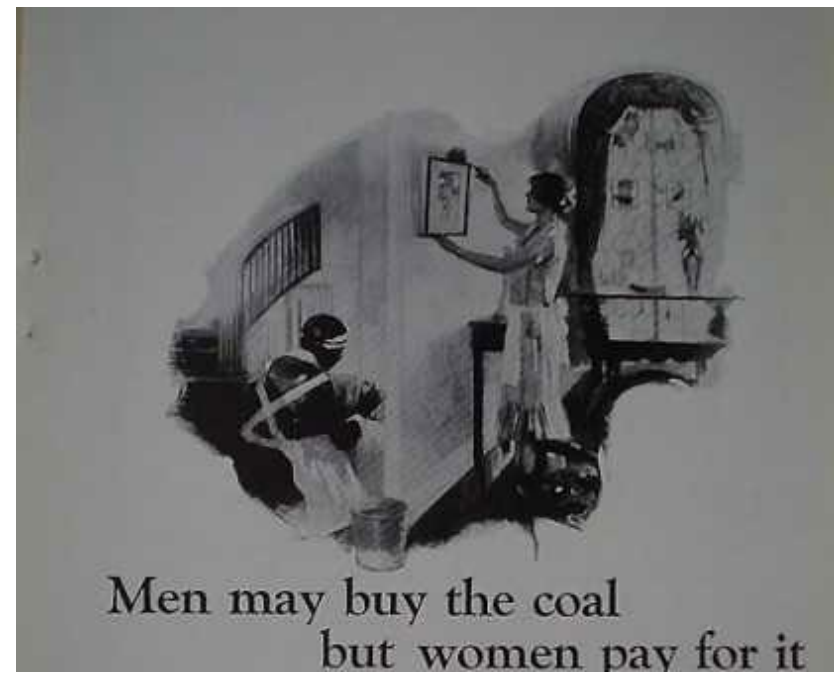


# COMFORT: A SOCIAL CONSTRUCTION

- Cooper (1998) believed that air conditioning transformed the idea of 'comfort' into a form of commodity that could be advertised.
- The values of social comfort that air conditioning introduced to users' ideology altered their perceptions and expectations of what constituted comfort, along with a sense of control of the external environment (Ackermann, 2002).







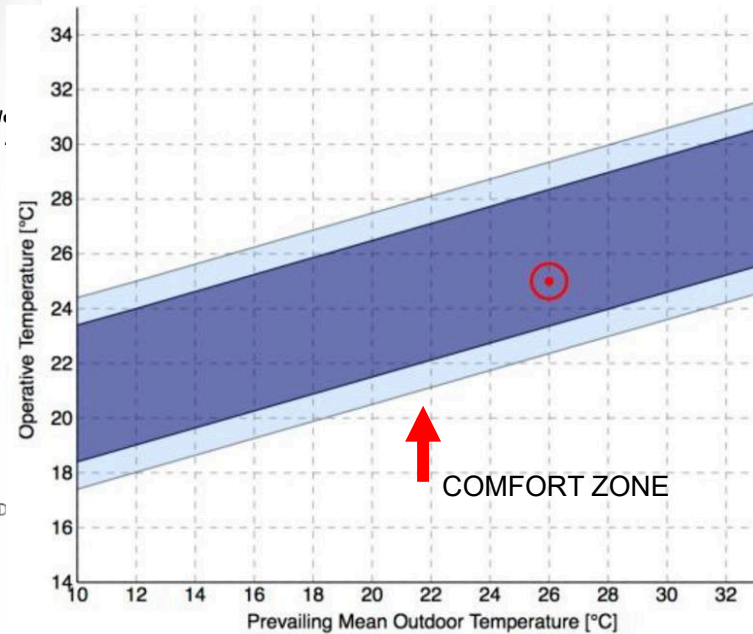
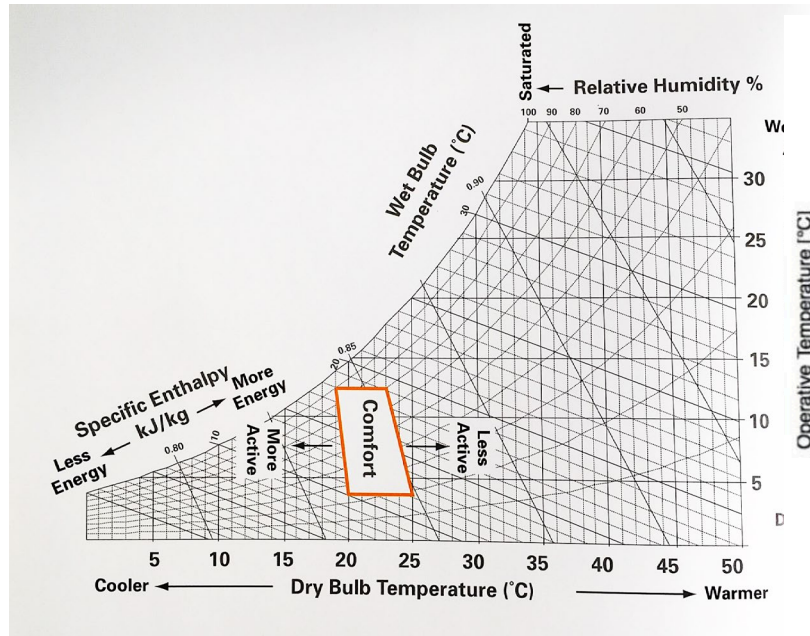


# COMFORT AND FASHION

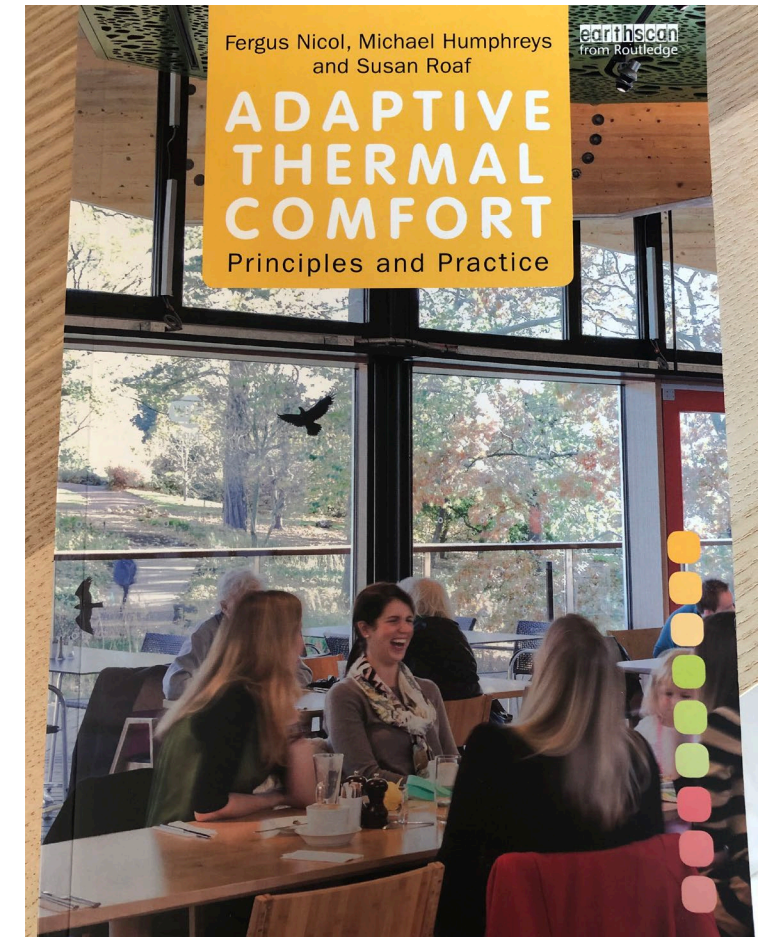
To an extent, maintain a narrow range of environmental condition indoors is a strategy to enforce a specific dress code. But the consequence of this is high energy demand to service the built environment.



# PARADIGM SHIFT IN THE CONCEPT OF COMFORT



- Behavioural adaptation
- Psychological adaption
- Pysiological adaption





# THE CHANGING STYLE OF HOME

As a consequence of the power of air conditioning, various features of passive design were compromised. It has been suggested that air conditioning facilitated the removal of eaves or window recesses, traditionally used for shading, partly in order to balance the cost of the air conditioning system itself (Shove, 2003).

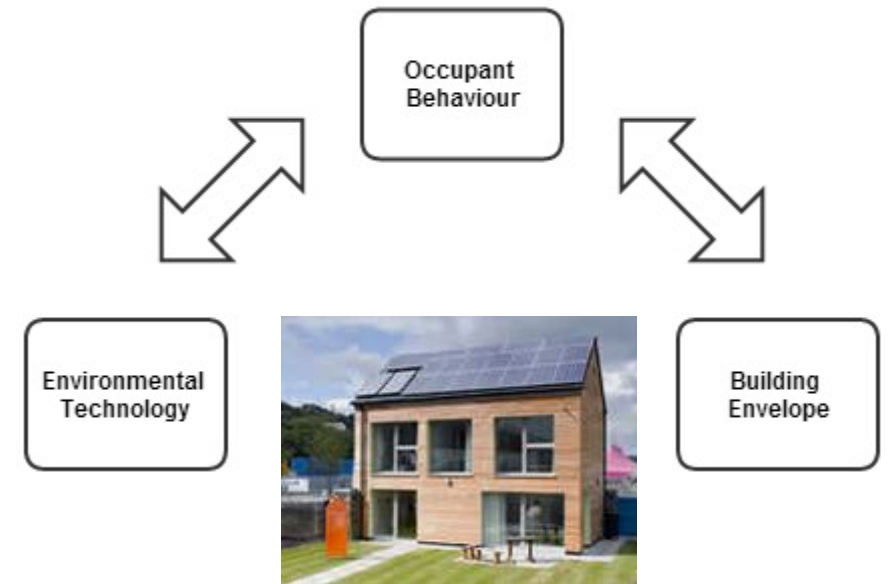


# PASSIVHAUS

- What is Passivhaus?

Passive House is a German building standard that focuses purely on energy efficiency, whilst providing comfortable environment at the same time.

It is highly insulated, airtight, and theoretically requires no active heating. It only employs an efficient mechanical ventilation and heat recovery system

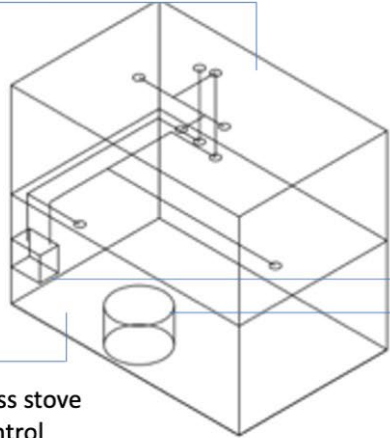




# COMFORT IN PASSIVHAUS



Solar thermal hot water system  
and control



Thermal water tank  
And control



Bio-mass stove  
and control

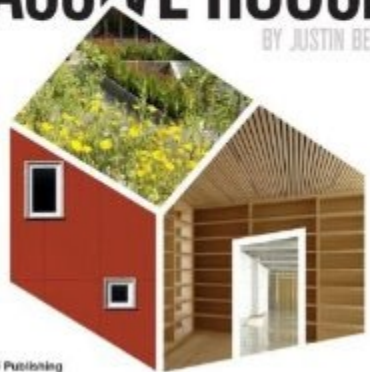


MVHR and control



# BUILDING FOR THE FUTURE AN INTRODUCTION TO PASSIVE HOUSE

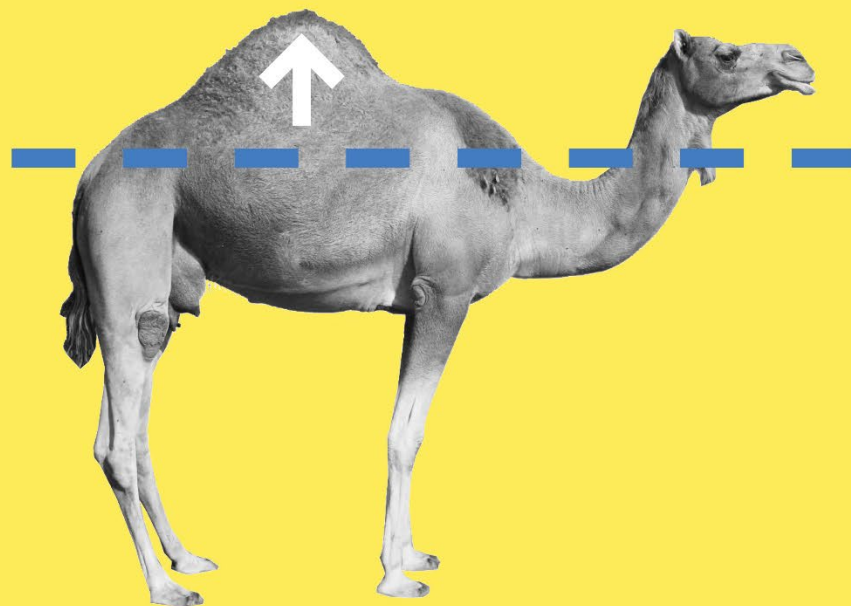
BY JUSTIN BERE



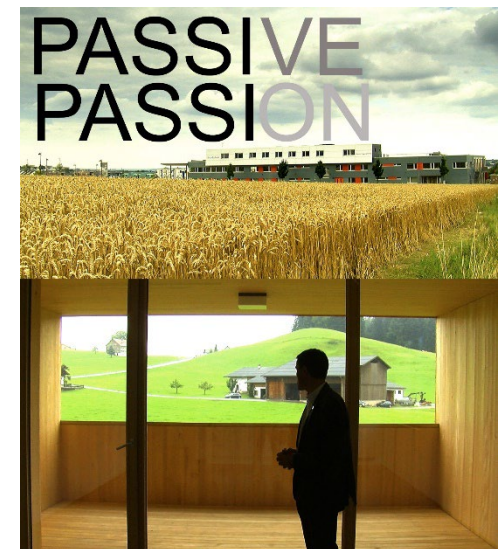
Future families live in  
passive houses



*I visited a Passivhaus*



# PART TIME PASSIVE



a film by Charlie Hoxie

Official Selection  
New York Architecture  
& Design Film Festival  
2011





10 Case studies

16 Households

8 detached, single family houses

8 multi family semi-detached or terraced houses

Floor area from 65 sq.m to 297 sq.m

Occupation date no more than 3 years

Questionnaire survey, interview, site visit, architectural analysis



# COMFORT IN PASSIVHAUS

A new norm that denotes a more 'sociable lifestyle' and comfortable home environment that overrides the image of woolly jumpers and a roaring fire.

don't even think of putting on a jumper, always  
just put t-shirts on

For those that doesn't have additional heating, behavioural adaptation is needed

And I kind of thought that was the sort of image maybe, that a Passivhaus has, is that actually yes you can live in it and it's beautifully insulated but because there's no heating as such, that you live your life in a jumper.



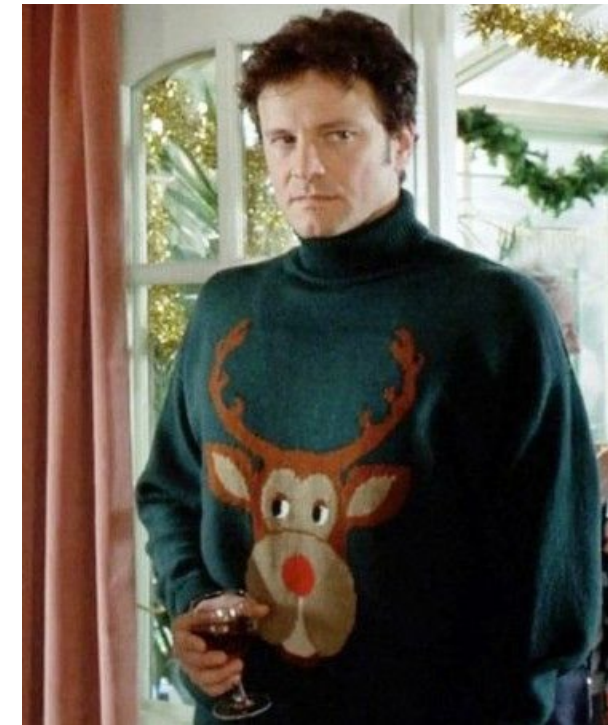
# SOME REFLECTIONS

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- Comfort is a socially constructed, 'fashionable' concept. It is connected with cultural ideas such as dress code, etiquette, or what was considered a civilised life.
- Sustainability is also a 'fashionable' concept, the current discourse of achieving 'energy efficiency' rather than 'energy reduction' could lead to more energy demand.
- Passivhaus is in fashion. However, without behaviour adaptation, Passivhaus is at risk of becoming another model of controlled environment with a narrow range of comfort, where you never have to live your life in a jumper.
- But...

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- But...could fashion also be the answer to these questions? If jumpers are the new style, if personal adaptation is more fashionable than controlling the environment, could we have a more sustainable energy demand?





# CONSTRUCTING FASHION FOR DEMAND REDUCTION



An outcome from the DEMAND project is a colourful overall to be worn indoors.


Reduces indoor heating bills in the UK by around 60%.  
(Shove, 2024)

Can this be the new fashion?

# SHAPEing Net Zero Consortium



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