

Ipswich Building Preservation Trust

Annual General Meeting 27/10/22

Guest Lecturer – Dr Alison Pooley (A core team member and research fellow of the Suffolk Sustainability Institute at the University of Suffolk)

‘Suffolk Sustainability Institute: collaboration, research and potential futures’

Dr Pooley began by outlining her career and engagement with alternative technologies. She brings expertise as an architect and housing officer to bear on our broken housing market and the challenges of spiralling energy costs and long-term eco emergency. She outlined a range of institutions and groups with whom the university is liaising. A particular interest for Alison is the way in which communities can be housed in almshouse style developments which provide a strong sense of place and foster the idea of a community with shared concerns for the environment. Her own specialism within the team is for the built environment.

The university has built a digital ‘Smart House’ (DiSH) at Martlesham on the Adastral site which incorporates a range of different possibilities – these include a timber frame, lime render, and hemp-lime infill. The building is likely to be the first of a number of prototypes. Sensors enable the data to be analysed to assess the efficacy of materials and their response to different climate conditions, including both extremes of temperature. The materials are also assessed in terms of their embodied carbon. The project has enabled pressing questions to be considered. How could a smart house adapt to the changing needs of residents? What should a kitchen look like which does not require regular re-fits? What will ensure good air quality? Can we design a kettle which requires boiling only once a day? How can local electricity generation contribute? The choices and activities of the residents is of course central: as Dr Pooley pointed out ‘Buildings don’t use energy: people do.’

The Smart House generated lots of comments and questions. It is possible to arrange visits to the house, but members pointed out that if the house could be re-sited to the university on the waterfront the potential for viewing and dissemination of the ideas would be spectacularly enhanced.

The next part of the presentation noted the scale of fuel poverty which is defined as those who spend more than 10% of their household income on fuel. Some 14.5% of Suffolk households were in this category in 2019, and those households would require substantial assistance to be able to up-grade their homes. For those who could afford to retrofit Dr Pooley shared some ideas from the recent Suffolk Retro-fit Conference. One unlisted building in a Conservation Area was highlighted. The front elevation was triple glazed but otherwise remained visually unchanged in the street scene while substantial insulation had been applied to floors, roof spaces, and to the rear requiring chamfered widow reveals to maximise light. In the case of a listed timber framed building some restoration was permitted making use of hemp and lime insulation but the requirements of listing limit what could be achieved. One suggested solution is the de-listing of listed properties to enable works to take place – an interesting debating point for a building preservation trust!

Perhaps the greatest immediate challenge outlined by Dr Pooley is the current housing being thrown up by volume housebuilders much of which will require retro-fitting immediately to meet the challenge. These homes are often built to minimum standards with no solar panels and only traditional gas-fired central heating. This concern prompted considerable

comment and discussion about the importance of adequate planning and building controls and the role of central and local governments to influence both large scale housing and to reach individual owners and tenants. Perhaps there should be local retro-fit champions to provide expertise and of course government grants and subsidised materials would also make a significant difference. The particular challenge of older properties such as our FLS stock is clearly a context where good advice and support can help. We need to persuade those who can retro-fit to spend wisely for the longer term rather than on eye-catching upgrades which are largely designed to improve the market price.

Dr Pooley's talk provided an excellent launch for our Vintage House project, and we are delighted to be working collaboratively with colleagues at the University of Suffolk. We look forward to sharing approaches and expertise in the months ahead.

Bob Allen (Vice Chair, IBPT)