retrofit in an age of scarcity
a report on an RIBA student charette

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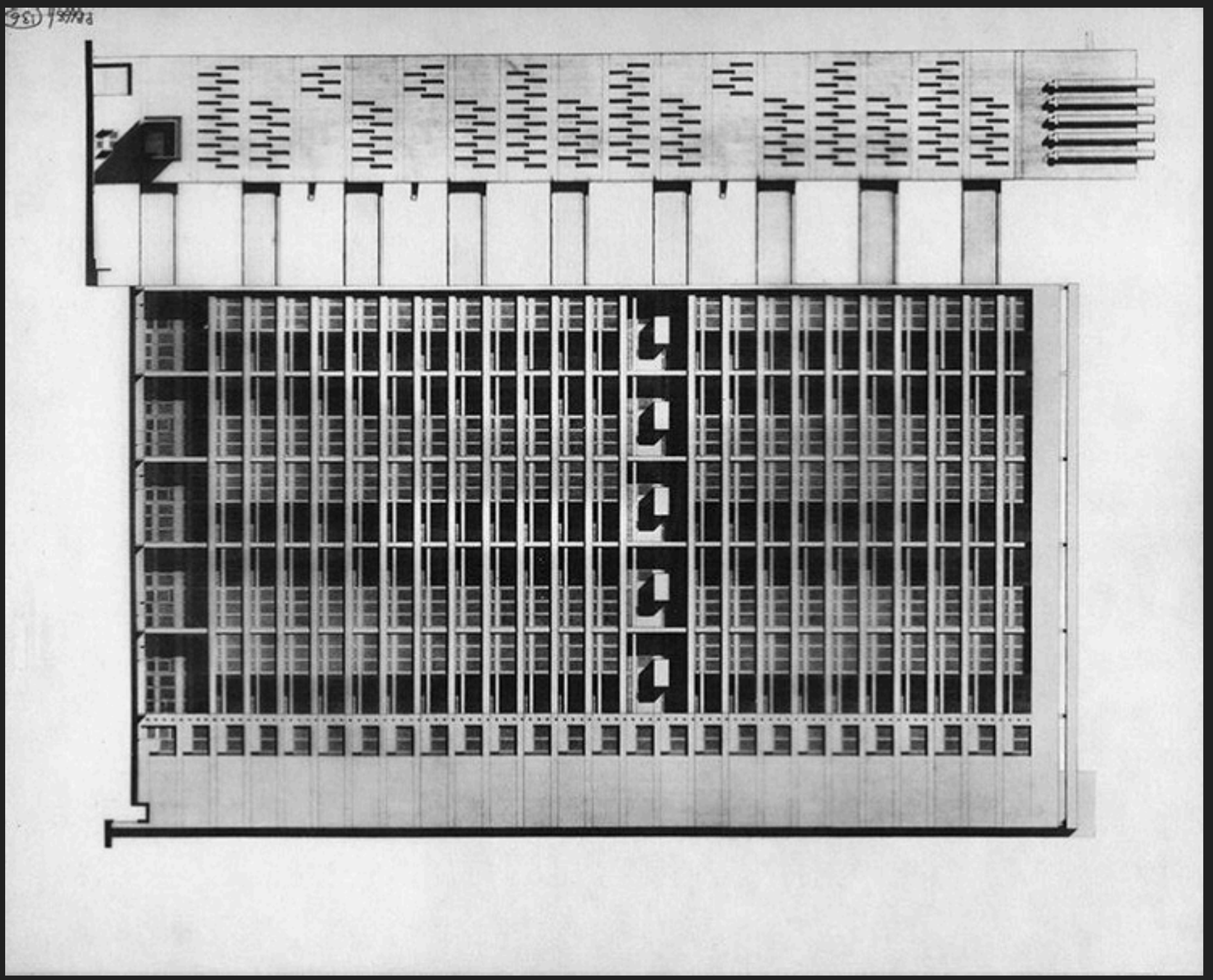
BALFRON TOWER

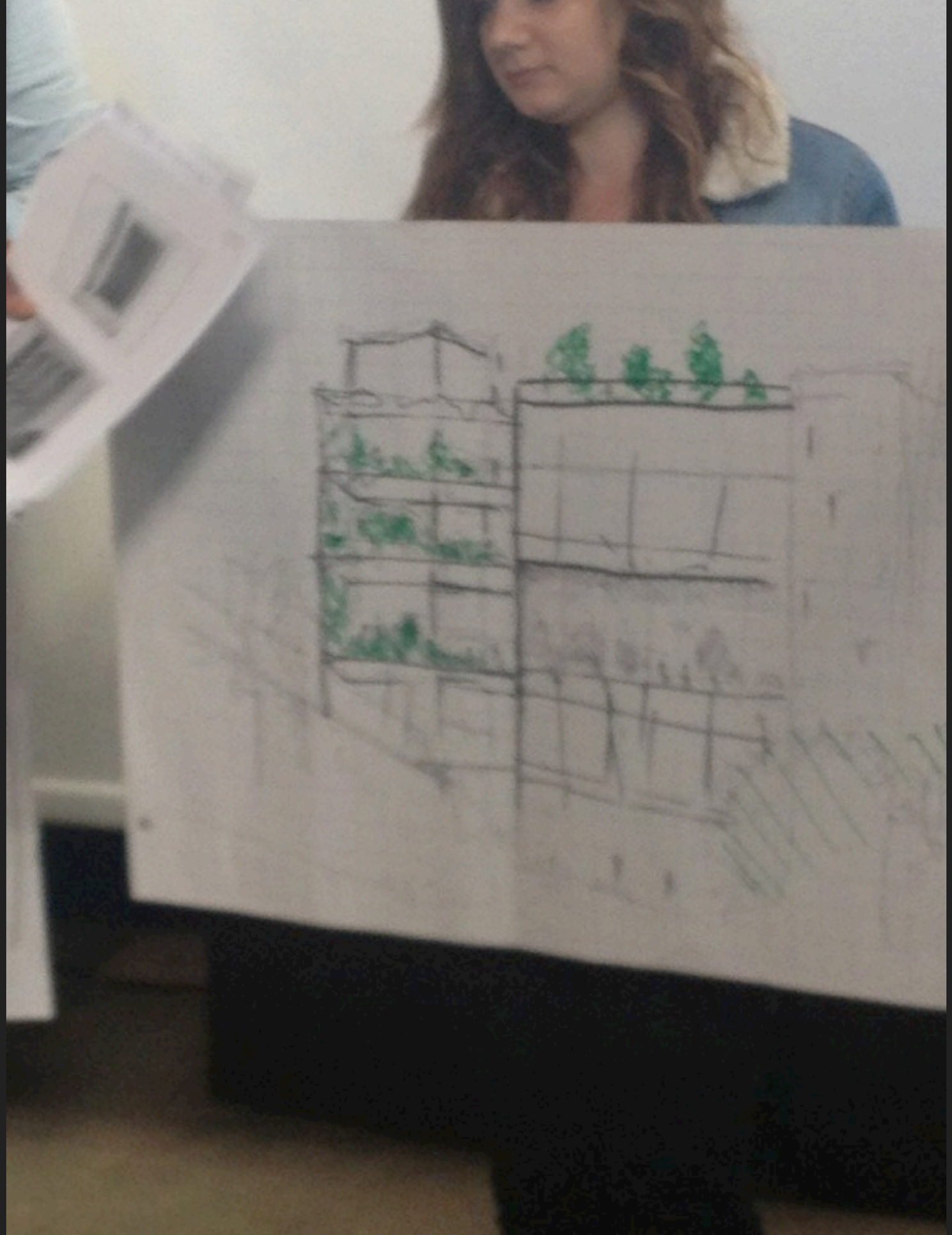


programme of the charette

design frenzy
design not a thing
design assembly

design frenzy

two groups
two clients
no tutorial input
45 mins
reverse crit



WHAT'S
BEAUTIFUL
ABOUT THIS
BUILDING?

ESSENTIALS:

STRUCTURAL STABILITY

BUILDING ?

POTENTIALS:

MATERIAL QUALITY

GRID HIERARCHY OF INITIAL DRAWING

SUSTAINABILITY

TAKE ACCOUNT OF

SCALE

INTERNAL

design frenzy lessons

performed to type
focus on “design”
“architecture”
“lambs to the slaughter”
general embarrassment

design not a thing

introduction to scarcity thinking

don’t add more stuff to the world, redistribute what is there already
optimising of systems and resource flows
notion of real versus constructed scarcity
design produces scarcity
not just about doing less but doing differently

design not a thing

introduction to scarcity thinking
divide into four groups
Briefing
Design
Construction
Occupation

RIBA Outline Plan of Work 2007

The Outline Plan of Work organises the process of managing, and designing building projects and administering building contracts into a number of key Work Stages. The sequence or content of Work Stages may vary or they may overlap to suit the procurement method .

		RIBA Work Stages		Description of key tasks	OGC Gateways
Preparation	A	Appraisal		Identification of client's needs and objectives, business case and possible constraints on development. Preparation of feasibility studies and assessment of options to enable the client to decide whether to proceed.	1 Business justification
Preparation	B	Design Brief		Development of initial statement of requirements into the Design Brief by or on behalf of the client confirming key requirements and constraints. Identification of procurement method, procedures, organisational structure and range of consultants and others to be engaged for the project.	2 Procurement strategy
Design	C	Concept		Implementation of Design Brief and preparation of additional data. Preparation of Concept Design including outline proposals for structural and building services systems, outline specifications and preliminary cost plan. Review of procurement route.	3A Design Brief and Concept Approval
Design	D	Design Development		Development of concept design to include structural and building services systems, updated outline specifications and cost plan. Completion of Project Brief. *Application for detailed planning permission.*	
Design	E	Technical Design		Preparation of technical design(s) and specifications, sufficient to co-ordinate components and elements of the project and *information for statutory standards and construction safety.*	3B Detailed Design Approval
Pre-Construction	F	Production Information	F1	Preparation of detailed information for construction. *Application for statutory approvals.*	
			F2	*Preparation of further information for construction required under the building contract. Review of information provided by specialists.*	
Pre-Construction	G	Tender Documentation		*Preparation and/or collation of tender documentation in sufficient detail to enable a tender or tenders to be obtained for the project.*	
Pre-Construction	H	Tender Action		*Identification and evaluation of potential contractors and/or specialists for the project.* *Obtaining and appraising tenders; submission of recommendations to the client.*	3C Investment decision
Construction	J	Mobilisation		Letting the building contract, appointing the contractor. Issuing of information to the contractor. Arranging site hand over to the contractor.	
Construction	K	Construction to Practical Completion		Administration of the building contract to Practical Completion. Provision to the contractor of further Information as and when reasonably required. Review of information provided by contractors and specialists.	4 Readiness for Service
Use	L	Post Practical Completion	L1	Administration of the building contract after Practical Completion and making final inspections.	
			L2	Assisting building user during initial occupation period.	
			L3	Review of project performance in use.	5 Benefits evaluation

The activities in *italics* may be moved to suit project requirements, ie:

- D *Application for detailed planning approval;*
- E *Statutory standards and construction safety;*
- F1 *Application for statutory approvals;* and
- F2 *Further information for construction.*
- G+H *Invitation and appraisal of tenders*

zone of creativity

zone of creativity

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zone of creativity

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zone of creativity

design not a thing

introduction to scarcity thinking
divide into four groups
three instructions
three actions

group 1: briefing: instructions

consider who we are designing for, and design for future adaptation

develop acute awareness of context with a view to working with existing resources

define the materials and parts that can be reused within the building and let this list inform the design as an initial inspiration

group 4 : occupancy: actions

encourage ‘social systems’ within the building - exchange of skills, goods, resources

develop means of exchanging and repairing the parts of the building (doors, furniture, etc.)

create spaces for users to collectively use and maintain

group 2: design: instructions

View design as a continuous process through life of building, and address project on a space by space basis to ensure all interventions are minimal and efficient

Look to immediate context for inventive ways of designing services, creating closed loops

View furniture as core part of design so that spaces can be easily adapted, and provide workshops in building for adapting furniture and parts

group 1: briefing: actions

consultation with tenants from the start

fundamental design principles established, allowing flexibility and upskilling of tenants to allow them to engage in future change

closed loop systems to be established in the building

group 3: construction: instructions

Ensure transfer of materials between building sites to eliminate waste, with reward systems for reuse and recycling

Treat site as ‘open’ and not closed

Use of local labour and materials rather than imported specialised labour and materials

group 4 : occupancy: instructions

foster collective pride in building, allowing to actively take ownership in the building rather than passively react to it

design out redundancy, allowing adaptation by future users

encourage (or ‘enforce’) public interaction, through design of collective spaces.

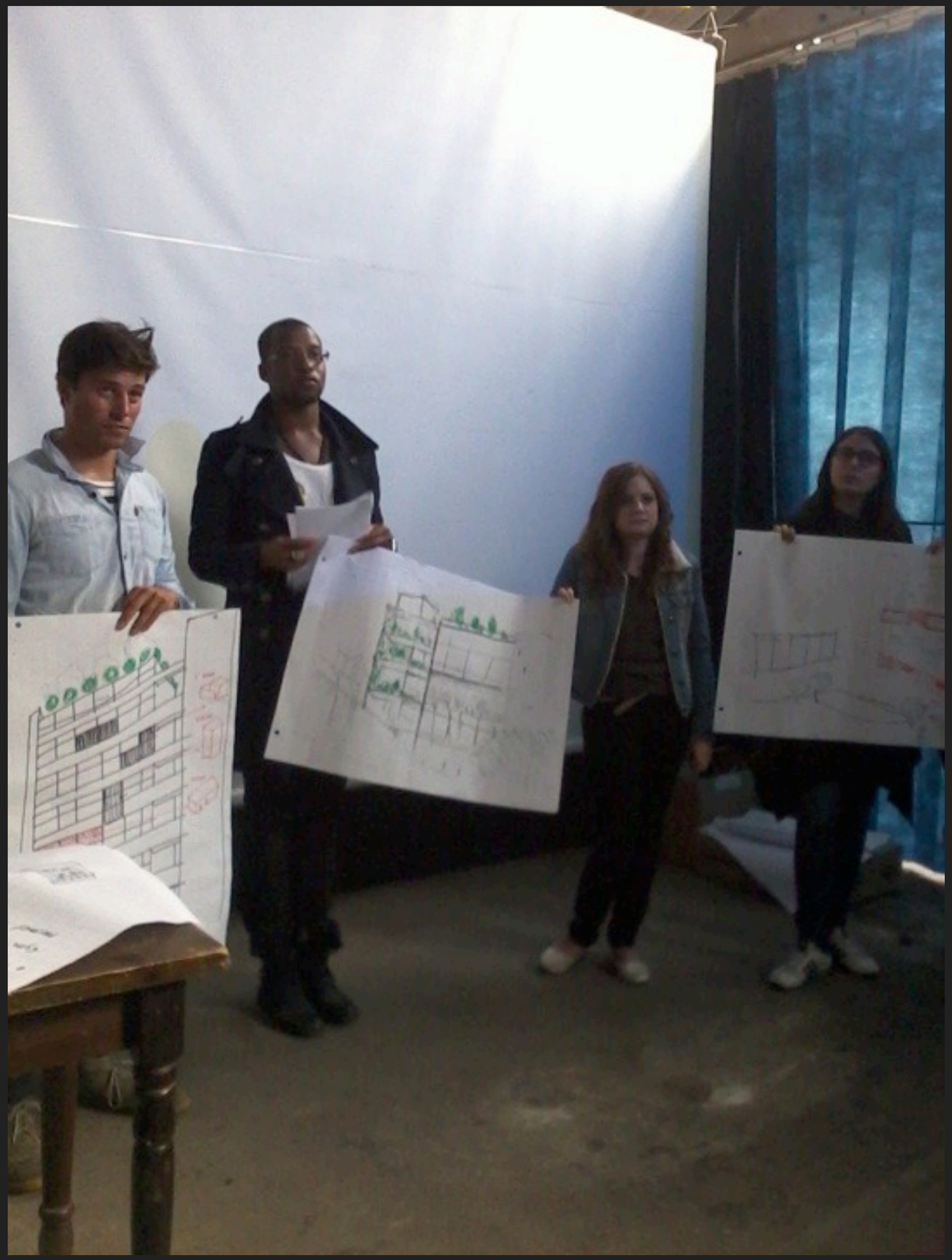
group 3: construction: actions

Occupants to be given much greater responsibility throughout construction, including training to allow them to engage in the process.

Source and salvage materials from local area

Make quality paramount, particularly in public areas

DESIGN ASSEMBLY



THE SCARCITY MANIFESTO

THE SCARCITY MANIFESTO

We will design out redundancy

Theo Games Petrohilos
ex Bartlett

THE SCARCITY MANIFESTO

Recycling in its purest form is reuse: retrofitting requires communication between projects

Lucy Owen
Huddersfield

THE SCARCITY MANIFESTO

Designing for scarcity needs to involve the end user at an early stage

Chris Kelly
Greenwich

THE SCARCITY MANIFESTO

Scarcity thinking is about
increasing output while
decreasing input

Oliver Hepworth Bell
Sheffield Hallam

THE SCARCITY MANIFESTO

We want public spaces to be collectively managed by the community

Tuba Dogu
USDY: Turkey

THE SCARCITY MANIFESTO

To achieve longevity the architect needs to instill maintained collective pride through design

Marcus O’Connell
Welsh School of Architecture

THE SCARCITY MANIFESTO

Spaces must be adaptable not only to optimise day to day use but to accommodate the changing needs of the occupants over time

Josephine Dand
Welsh School of Architecture

THE SCARCITY MANIFESTO

In order to stop the growing redundancy of buildings we first need to discover what makes them redundant

Nathan Medhurst
De Montfort

THE SCARCITY MANIFESTO

Scarcity means you can only start thinking creatively once you know what you have left to work with

Steph Asher
Sheffield Hallam

THE SCARCITY MANIFESTO

Sourcing local skillsets will enrich not just the design and construction phases of a building but also the longevity of a building

Nicholas Procter
Huddersfield

THE SCARCITY MANIFESTO

Retrofitting projects should share and mix their services with other local buildings to improve efficiency

Alex Scragg
Bartlett

THE SCARCITY MANIFESTO

Let’s make opportunities for tomorrow with the spaces from our past

Camille Thuillier
Oxford Brookes

THE SCARCITY MANIFESTO

Designing for scarcity requires
a radical shift in the way that
we design and construct
buildings today

Prince Emmanuel Yemoh
Greenwich

THE SCARCITY MANIFESTO