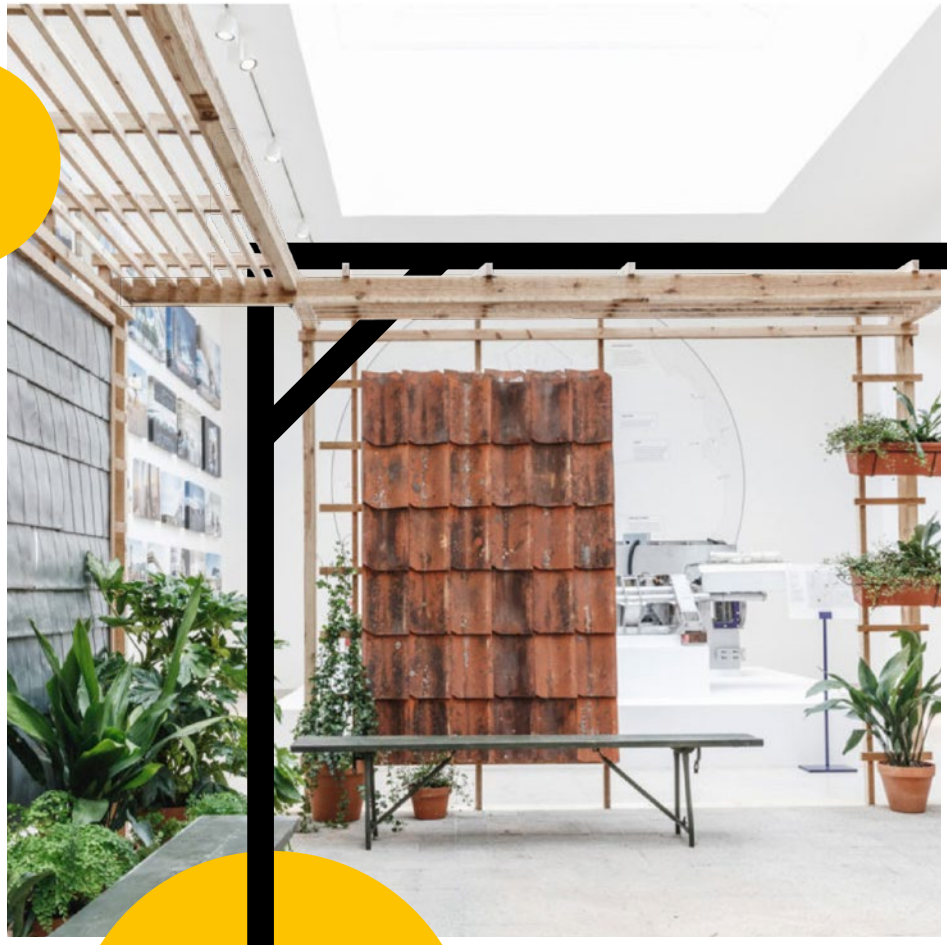
Repurposing architectural elements



Architecture and design
2 hours
2D/3D creative development

Ravensbourne
University London

The brief

Architecture is the art and science of designing buildings and physical structures. Architectural design is primarily driven by the holistically creative manipulation of mass, space, texture, light, materials, program, etc.

The focus of this workshop is to explore new ways of reusing objects, spaces and materials.

You will be challenged to question how we use the space and objects around us, learn how to look beyond the visible. Investigate through a series of sketches, drawings, collaging and models. With repetitive attempts to capture the materials, form, depth, light and functional qualities of your chosen space or objects in your home, (it can be your room or kitchen) or it can be imagined. Present your findings for the chosen architectural element or object and explain what benefits the repurposed architectural element would bring to your everyday life.

Another challenge of this exercise would be investigating the relationship between 2D and 3D representation in architecture, which implies rethinking the architectural drawing.

> If you see this icon it means the link is clickable, this will take you to a video tutorial or website needed for the workshop

Sustainable architecture

Sustainable architecture seeks to minimize the negative environmental impacts of buildings by means of efficiency and moderation of the use of materials, energy, and development space as well as considering the ecosystem at large.

Sustainability addresses the negative environmental and social impacts of buildings by utilizing design methods, materials, energy and spaces that aren't detrimental to the surrounding ecosystem or communities.

The philosophy is to ensure that the actions taken today don't have negative consequences for future generations and comply with the principles of social, economic and ecological sustainability.

Reusing materials provides an excellent, environmentally-preferred alternative to other waste management methods, because it reduces air, water and land pollution. Reusing materials limits the need for new depletable resources such as steel, concrete, glass, plastic, etc.

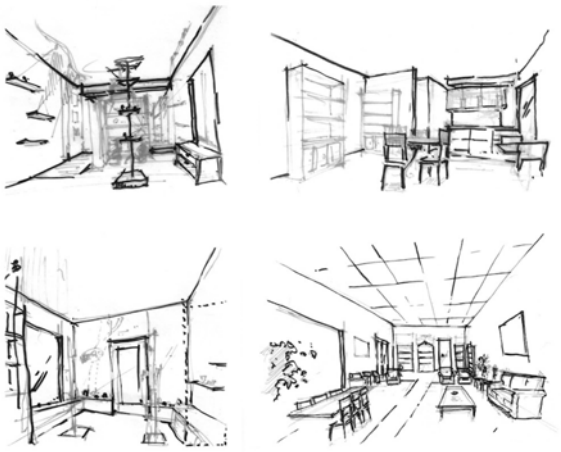
References

- dezeen.com/tag/sustainable-architecture/
- architizer.com/blog/inspiration/collections/repurposed-architecture/

Activity one

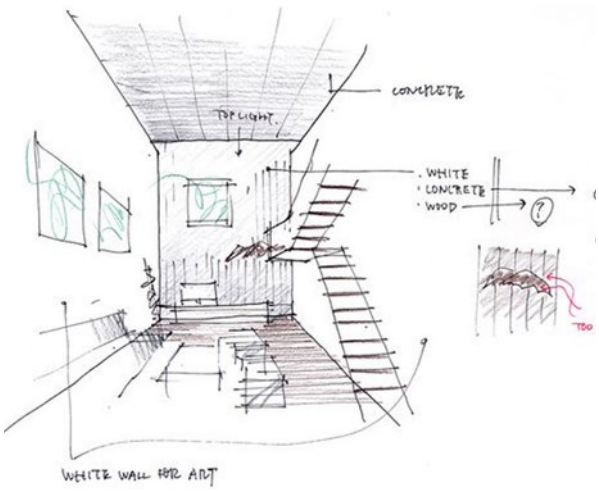
Start by producing quick perspective spatial sketches of your chosen space or object.

Aim to complete 10 sketches minimum, by capturing as many details as you can.

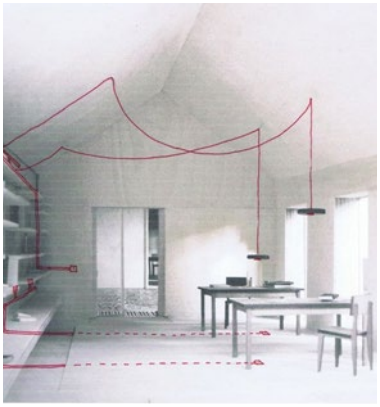


Annotate and analize you drawings, explaining the existing materiality, shape, colour and texture. Map and measure your object or space, inspect it in multiple dimensions.

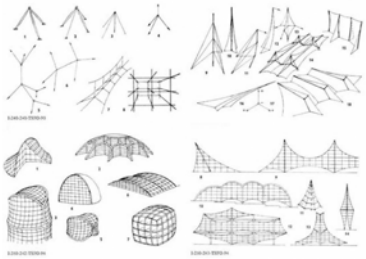
These research/drawings are your starting point to your repurpose designs



Activity two

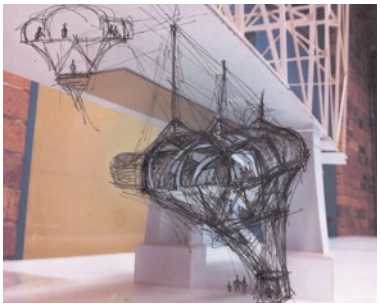


At this stage, you should have completed at least one detailed drawing of your chosen space or object into that space. If you are not very confident with your drawing you can take a picture of your space, print off and start to sketch your new intervention/ design into that space.



Next step is to develop your new repurposed design by producing at least 10 sketches.

Once you have your final design start to make quick 3D physical models or 2D drawings.



If you are not very confident with making 3D physical models, produce 2D concept sketches, start to think and experiment how your new idea fits into context .

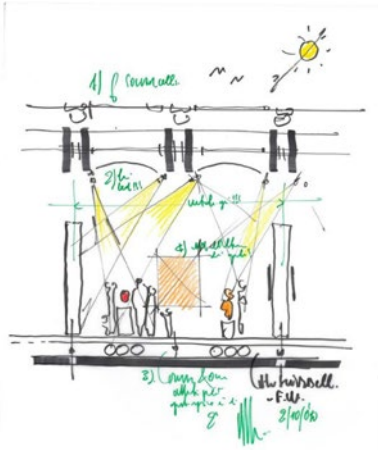
Remember to record your design process

Consider re-arranging your space with your new design in mind, it can be presented through photo collage or in other abstract ways, leading to a 3D model.

Use more than one way of experimenting, think about colour, texture and materiality.

Collage these elements into your sketches, graphic work, paintings, etc.

Diagrams



Diagrams are essential representations for thinking, problem solving, and communication in the design disciplines, in particular those concerned with making physical forms.

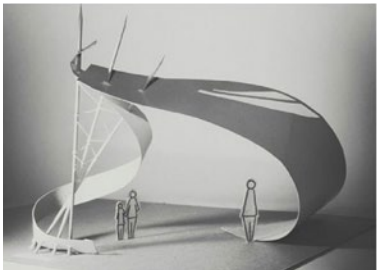
Architectural diagrams employ a full range of graphical indicators, they represent topology, topography, shape, size and positioning in the real world.

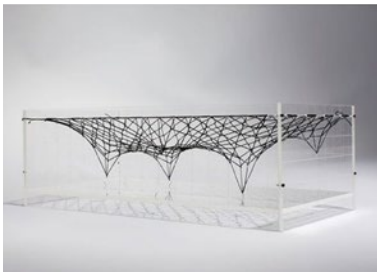
Try to sketch some digrams explaing the main fuction of your repurposed design, also show some scale by sketching human figures.

What are the benefits of it?

How is it going be used?

Activity 3





The final step is producing a 3D physical model.

Model making is vital in Architecture, making physical models help an architect to represent their design in physical form. models also explore the potentials of the project as well as possibilities of having different solutions.

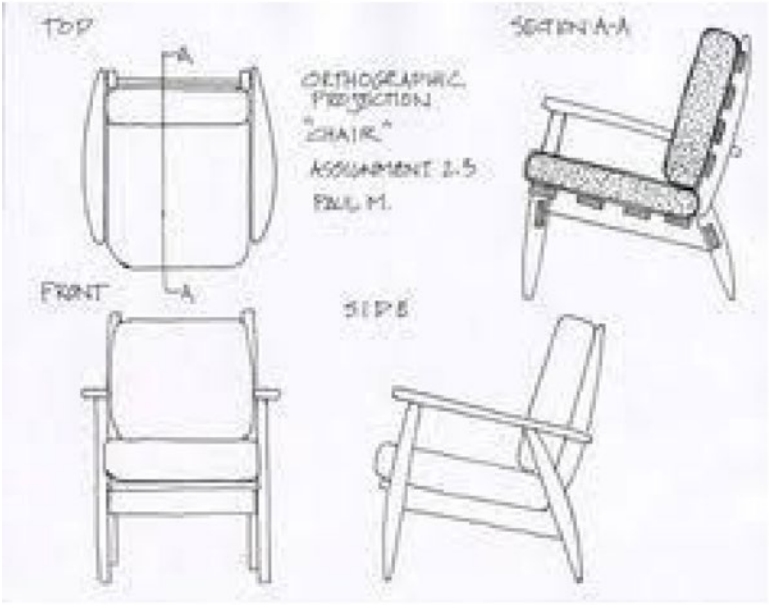
It can be a simple model made by paper or fabric gathered from around the house. Photograph your physical model using light to create shadows and depth, experiment with different angles moving the light around.

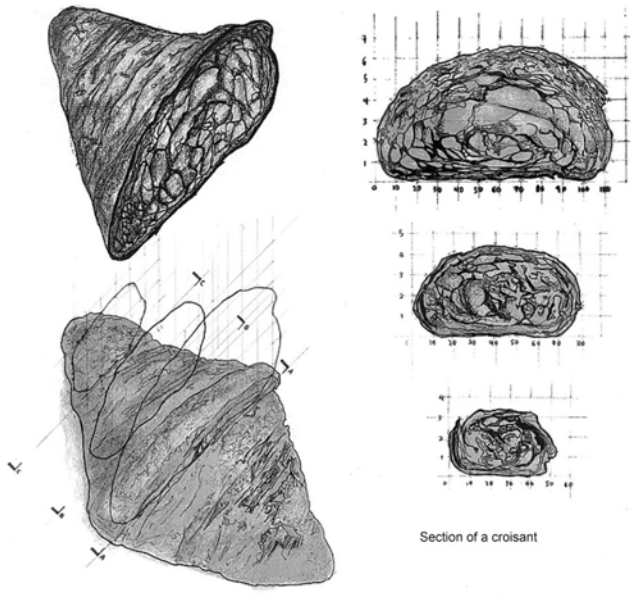
If anyone is unable to create or finish a physical model, your final outcome can be a 2D render via digital graphic, mix-media collage, etc.

Extension activity

After completing the previous stages, challenge yourself by producing technical drawings of your design.

This will include elevations, a floor plan and sections as shown on the images below.





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Ravensbourne Outreach tutors and students have produced a new series of online projects and courses to help you stay creative at home

If you'd like to find out more please visit our website makeit.ravensbourne.ac.uk or email us at outreach@rave.ac.uk

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#letsmakeitcreative

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