

ONE WHITE CUBE

Concept statement

Guy Keulemans & Kyoko Hashimoto

This cubed-shaped furniture is part of a broader attempt to uncover the extended relations of materials. It is a polemic against the hylomorphic style of design and production that conceptually separates form and material (a style that draws the eye towards surfaces, hiding the interrelated, complex, and often polluting, burdensome materialities of real world production).

This is not just a story of ecological effect, but ecological origin: so much of our material resources come from animal and plant based sources. Concrete comes from limestone that comes from the crushed bodies of sea animals, sedimented into rock over millions of years. Spray paints and plastics derive from petrochemicals, extracted from petroleum that is refined from crude oil, made from millions of years of dinosaur bones, ancient planktons and plants, compressed underground. What we consider the common and artificial materials of the built environment, truly originate in the life and death of animals.

The expression of material production conditions, the scope and scale of materials and processes required to produce an object, should not be limited to the superficialities of external surfacing. Yet, this is conventional practice. Many designers obsesses over surfaces, and use superficial features, reflection management technique and characteristics of smoothness and gloss to direct attention to surfaces. But, because that limits comprehension and sensibility of the material processes and energies required to produce objects, it should be condemned.

We propose our task is to sensitise the ecology of extended material relations and bring their complex and chaotic qualities into perception through form.

Materials

The materials on this list are suffixed with superscript numbers that refer to footnotes detailing the composite materials, to the elemental level when known. Please always include the associated footnotes when listing the materials.

Tasmanian oak¹, MDF², polyurethane spray foam & paint³, concrete⁴, various other paints⁵, silver leaf, shellac⁶ and PVA glue⁷

¹ a type of wood, a composite of lignin (organic cross-linked phenolic polymer) and cellulose (organic polysaccharide compound) in a porous, fibrous structure found in tree stems and roots

² medium-density fibreboard (unknown wood or paper fibres¹ in a resin binder, typically urea-formaldehyde⁸)

³ isocyanate (treated amines extracted from ammonia⁹ and phosgene¹⁰) and some kind of polyol resin¹¹ with dimethyl ether (dehydration of methanol¹²) with or without a hydrocarbon propellant¹³

⁴ cement¹⁴, sand (various granular minerals, commonly silica and calcium carbonate¹⁵) and aggregate (various rocks and minerals from an unknown source)

⁵ unknown petrochemical¹³ polymer colourants, plus some metals, with or without a hydrocarbon¹³ propellant.

⁶ the resin secreted by the female lac bug (*Kerria lacca*) and ethanol (either fermented sugar yeasts or an industrial petrochemical¹³)

⁷ polyvinyl acetate (ethylene¹⁶ reacted with acetic acid¹⁷)

⁸ urea (organic compound made from ammonia⁹ and carbon dioxide) and formaldehyde, an oxidised methanol (carbon monoxide and hydrogen, a petrochemical gas¹³, reacted with zinc and copper catalysts)

⁹ a naturally occurring substance now most commonly sourced as a byproduct of coal-fired power plants¹³

¹⁰ an industrial reagent made from carbon monoxide and chlorine gas (made via the electrolysis of salty water, a process that also creates caustic soda, or lye).

¹¹ an alcohol with multiple hydroxyl groups (likely petrochemical origin¹³)

¹² synthetic gas made from a hydrocarbon feedstock, either natural gas¹³, coal¹³ or a biofuel source

¹³ fossil fuel (the bodies of plants, animals and other living organisms anaerobically decomposed over millions of years underground)

¹⁴ cooked and crushed limestone¹⁵ with a pozzolanic material (probably fly ash, a coal¹³ fired power plant byproduct)

¹⁵ calcium carbonate (shells, corals and the bodies of other sea animals composited into rock over half a billion years or so)

¹⁶ fractionally distilled petrochemical hydrocarbon¹³

¹⁷ also know as vinegar, produced by the natural fermentation of plant products or synthesis from a petrochemical¹⁶ using a palladium catalyst