

Cohesive Mobility – Growing the Future

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Is it possible to rethink current production process...



...and how do we do this in a sustainable manner?

1. http://dimbulb.typepad.com/my_weblog/2009/09/the-first-social-media-car.html
2. http://www.abc.net.au/reslib/200711/r198975_759479.jpg
3. Authors own images.

Sides of bamboo: **utilitarian and versatile**



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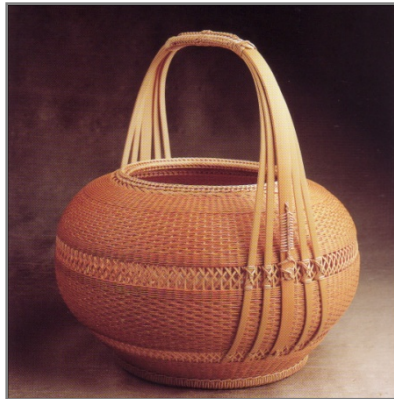
6

4. Grow Your Own House, Vitra
Design Museum, P.140

5. "On Melekula (New Hebrides)"
ibid, P. 120

6. Interior Views of the prototype for the
ZERI pavilion in Manizales (Colombia),
OpCit, P. 32

Craftsmanship: elegance and interface



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8



9



9

Research challenge: applying similar qualities to personal mobility interiors and exteriors...

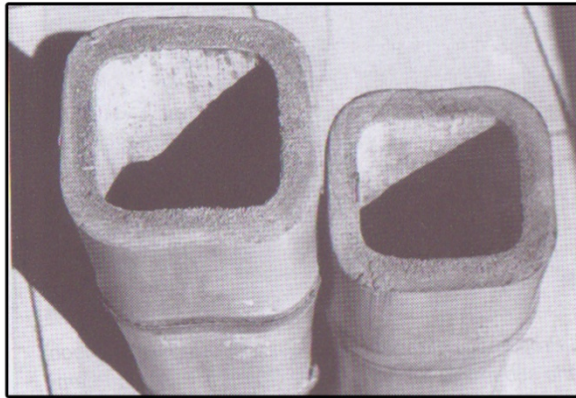
7 - Images : Contemporary Japanese Bamboo Arts, 1999, Art Media Resources, Chicago, P. 21, 75, 127

9. Bamboo connection in metal by Japanese architect Shoji Yoh, P. 108, Grow Your Own House, Vitra Design Museum

Manipulation: allowing the material to 'do the work'



(a)



(b)

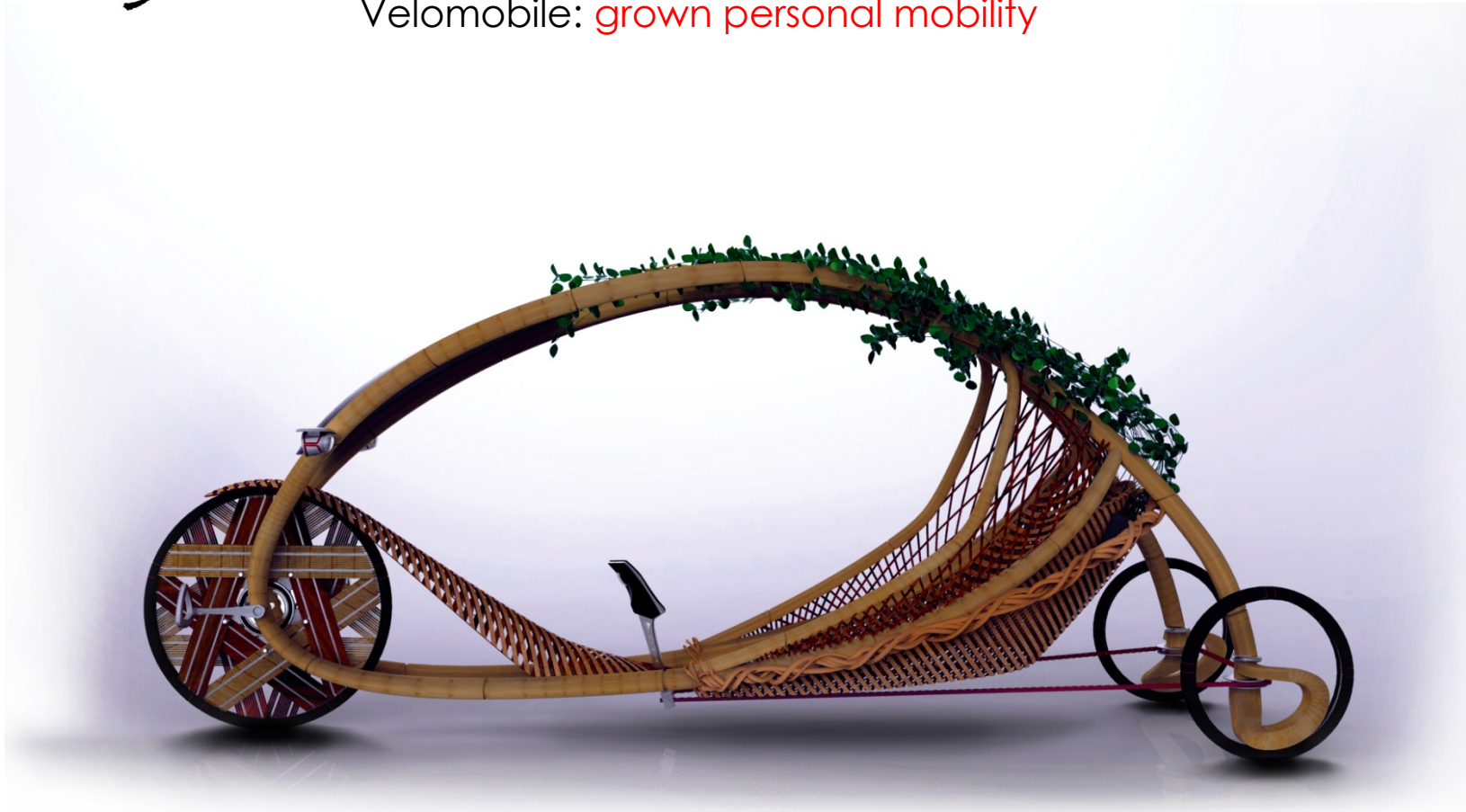


Research investigation: material intervention

Image a. and b.: Hidalgo, O., (2003). Bamboo - The gift of the gods. Columbia: D'VINNI LTDA
Authors own images – Experimental Version 1.5, growth of bamboo culms

Ajiro

Velomobile: grown personal mobility



Conceptual proposal and visualisation



The desired shape: grown



Conceptual visualisation, Detail grown example

Result: personal mobility using minimal post processing



Experimental Version 1.0 – growing bamboo sections, Conceptual visualisation

Physical attributes: **extracting usage from one material**



Conceptual visualisation, detail grown example – Bamboo side shoots

Living components: mobility that gives continuously



Pea canopy shelter detail, Conceptual visualisation - Experimental Version 1.0

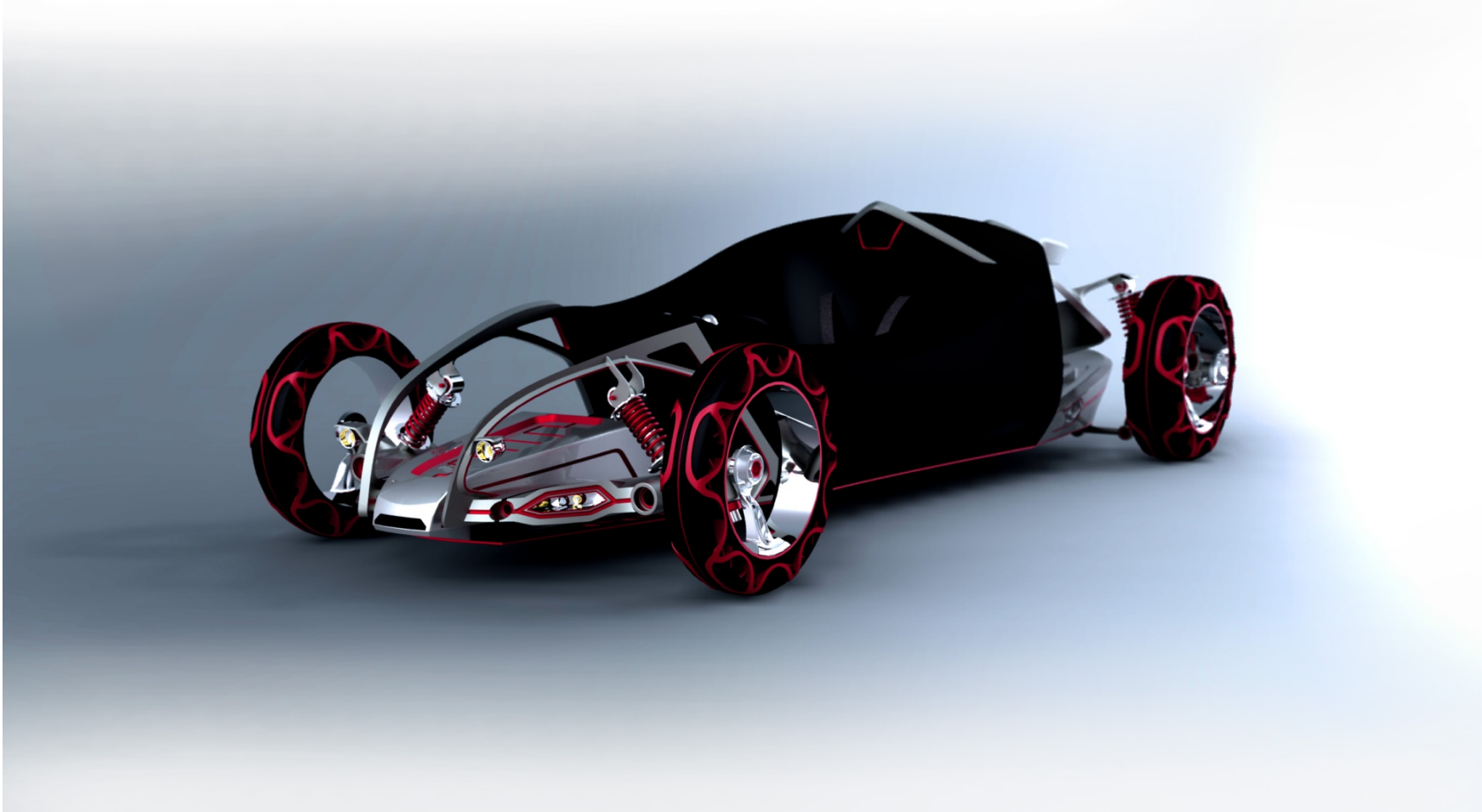
Choices: harmonising engineering and styling surfaces



Authors own images

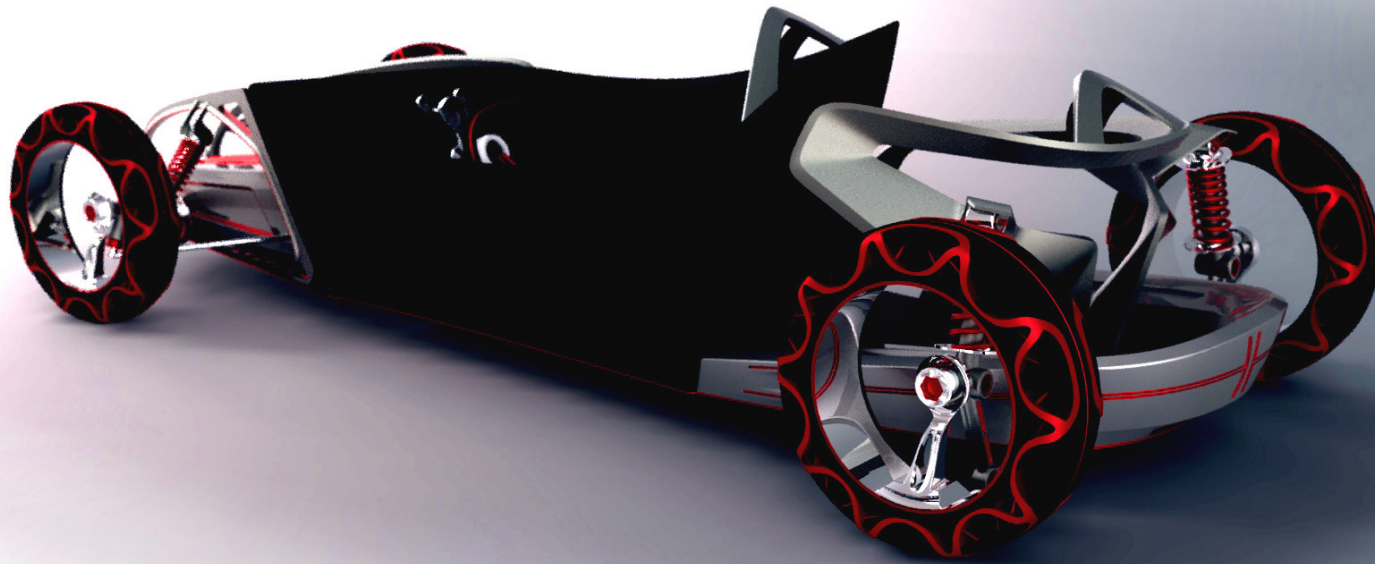


Flat pack: self assembly with a tailored skin



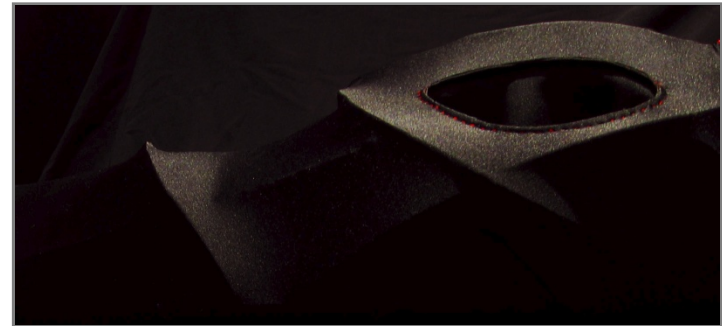
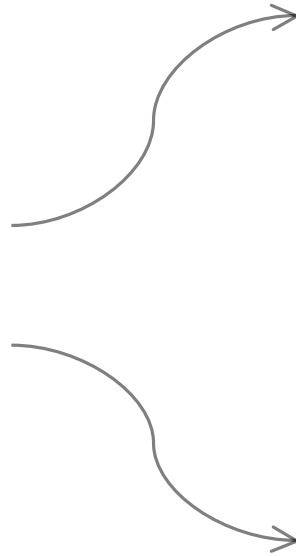
Conceptual visualisation

Parts consolidation: interior and exterior from a single skin



Conceptual visualisation

Material response: **substructures influence fabric**



Conceptual visualisation trial – Chassis network, Research experiments

Changing parts: zip on/off... or patch



Conceptual visualisations

Conclusion: 'pre' and 'post' production methodology



Conceptual visualisations