Research by
Johnny Ragland

*University of Applied Arts, Vienna*

# Reflecting on the experience of craft in the context of art and design

# Acknowledgements

*University of Applied Arts, Vienna*

**Johnny Ragland BA, MSc, Prof. Kaltenbrunner**
Department of Design, Architecture and Environment
for Art Pedagogic, University of Applied Arts, Vienna

**Companies:**
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**Authors:**
- Dr. David Orr
- Dr. Peter Dickens
- Dr. Ing. Mike Cooley
- Dr. Per Norstrom

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# Introduction



- Background/context
- Objectives
- Research
- Conclusions

# Context



Personal background:

- Furniture designer-maker
- BA. Furniture and Product Design
- Designer project-manager, shop furniture
- MSc. Innovation and Design for Sustainability
- Lecturer in 'design and technology' for wood

Project direction

**'The DAE woodwork course'** investigates how experiencing 'design and technology' may increase awareness of one's surroundings

# Keywords / elements of lecture

Craft and technology

‘Design and technology’

Identity

# Technology and craft

Technology has many guises, from know-how in craft to science based knowledge in modern engineering

Tech and science share many areas of interest. But primarily tech is about creating objects and solving problems, while science is primarily about describing and explaining phenomena in the world (Norstrom, 2014)

Science: To find as close as possible truth, models, theories, explanations, descriptions and ideally knowledge

Technology: To find what works or construct products - these can be objects, buildings, machines or abstract such as processes. Technology does not require a truth

# Technology

Tacit and explicit knowledge - understanding tech. Tacit knowledge: e.g. ‘sensing’ which plank of wood is reliable. Explicit knowing why the piece will be reliable.

How context dependant is tacit knowledge in respect of wood working?

If this dependence is low, to which areas can these hand skills be transferred?

# Technology in school

Wood and metal work were in many countries the forerunners of craft education (Normstom, 2014)

By the end of the 70's they were being given the name of 'design and technology'. This new orientation supported mechanisms of studies which involved product development, design processes and the social effects of technology

# Technology in school

USA: To make pupils technology literate - what it is, its development and impacts on society and how society impacts it.

UK: With a focus on the design process pupils become capable of intervening in a technology advanced society. Their goal is to design and develop objects and therefore have ability to influence the world of technology

USA: Also design objects but do so mainly as a means to learn about the technology involved

UK: Pupils design objects to learn of the design process - design ability is the goal (Norstrom, 2014)

# Hand skills development

Initially craft took the form of physical engagement with nature for the purpose of supporting human life. This required the use of hands for making and using weapons, for making and using tools, for creating shelter and for harvesting and cooking food

Apprenticeships and mentoring became accepted methods by which tacit knowledge was handed down through generations

With the assimilation of this new knowledge came the need to share that knowledge over time, through learning and education – **an emergent process that was grounded in the inter-relation between, and inseparability of, humans from their environment** (Orr, 1994)

# Hand skills – a transferable competence

i.e. knowledge that is assimilated and underpins behaviours in contexts other than 'design and technology', without resorting to explicit guidance

**Doing** – making an active exploration through engaging the senses

**Touching** – haptic perception derived from subjectively interacting with materials - *"The eyes of the skin"* (Juhani Pallasmaa, 2005)

**Tacit awareness** – assimilating the properties of those materials and their location in the 'wider' picture - *"We know more than we can tell"* (Polanyi, 1966)

# Context

Making the connection

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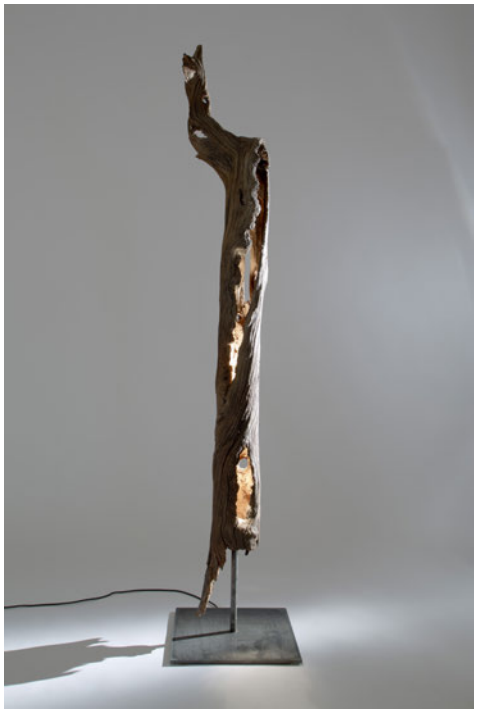

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Research

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# (Re)connecting with one's surroundings with 'design and technology'

DAE
WERKSTATT FÜR HOLZ
HANDWERKLICHE FÄHIGKEITEN
4 SINNE GLEICHZEITIG EINBRINGEN
WERKSTATT ÜBERGREIFEND ARBEITEN
TECHNOLOGIE (METHODEN)
MATERIAL KENNTNIS
VERBINDEN VON THEORE AND PRAXIS
UMSETZEN VON IDEEN
SUBJECT / OBJECT BEZIEHUNG
DAS END PRODUKT ALS REFLEXION DES SEHENS PROZESSES
DER WERKSTOFF ALS KOMMUNIKATIONSMITTEL
GRENZEN DURCH ERWEITERN EXPERIMENTE
SELBSTEINSCHÄTZUNG DURCH ENTWICKLUNGSFÄHIGKEIT
FORM ALS REFLEXION DES SELBST ERKENNENS

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Polanyi, M., 1966. *The Tacit Dimension.* Routledge and Kegan Paul, London

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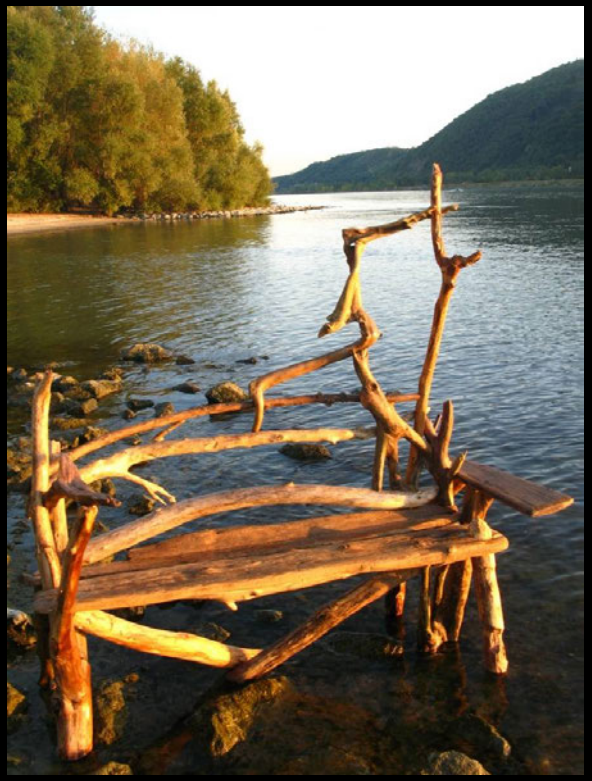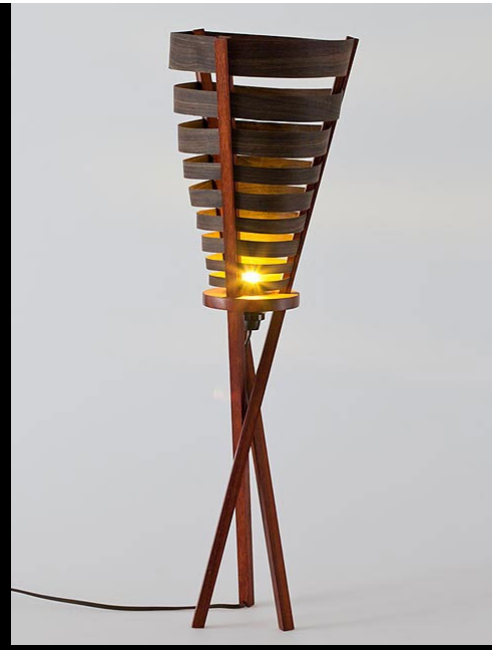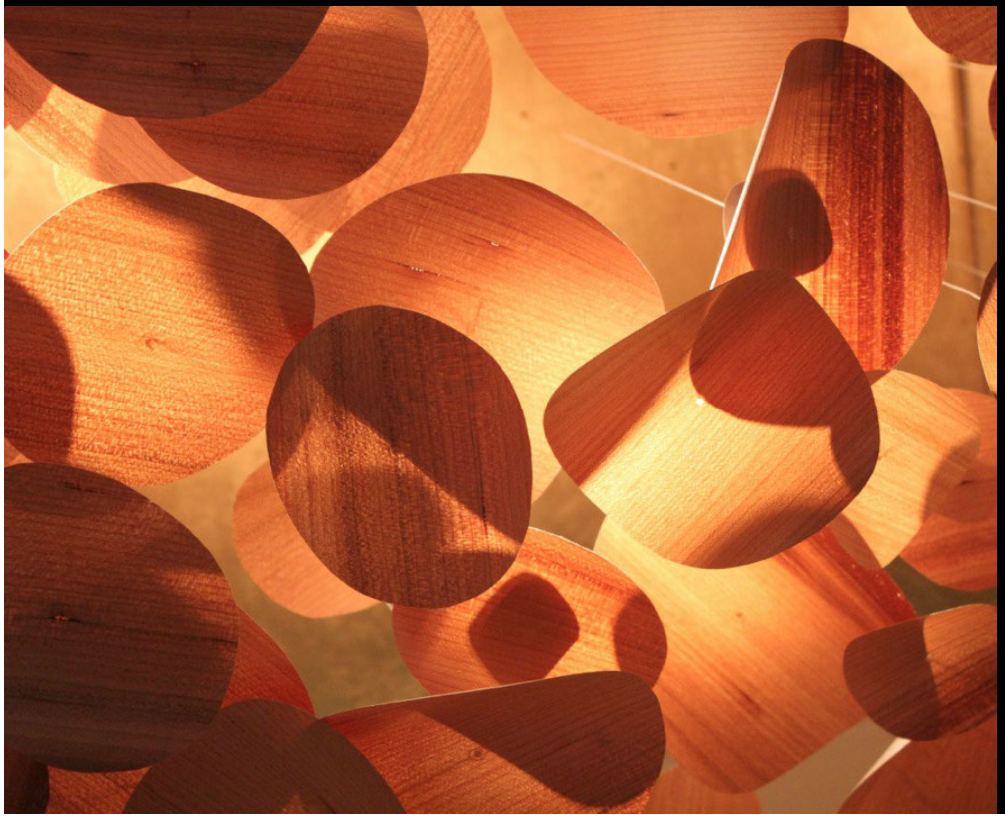
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