

The value of natural capital – education through craft

Johnny Ragland BA, MSc

2017

E-mail: johnny.ragland@uni-ak.ac.at

Telephone: 0043 664 52 60 777

Institute:

Universität für Angewandte Kunst Wien

University of Applied Arts Vienna

Design, Architektur und Environment für Kunstpädagogik,

Oskar Kokoschka-Platz 2, 1010 Vienna

Abstract

The study was conducted in Vienna, it researched the value children place on the natural world and how this perspective with engagement in creative studies in both a workshop and natural environment can alter.

The intention of the research is not simply to collect quantitative data, rather to subjectively judge how partnering these experiences together may influence the way children emotionally and intellectually position themselves within nature.

A group of ten young teenagers participated over four days of active research. They used their craft skills to creatively make objects of art in both a workshop and natural setting. They wrote about what nature means and how they judge their position within it. Their writing indicates that combining creative activities in an indoor and outdoor environment can influence children's perspective of what nature is and what it means to them.

Key words: natural materials, craft, education, nature

Acknowledgements

Johnny Ragland teaches in the department for design education at the Institute for Art Sciences and Art Education (DAE) at the Angewandte where the study took place. The researcher wishes to thank Prof. Christoph Kaltenbrunner, Head of this Dept. for his support.

Special thanks are due to the children who took part, who for reasons of standard ethical procedures are not mentioned by name. Without their willing and enthusiastic participation, this study would not have been possible.

Introduction

The University of Applied Arts, Vienna (the Angewandte) is an art and design institute in Austria. The department where the study took place offers a teacher education degree programme in design which is supported by technical craft subjects. The course focuses on the user oriented design process and participatory design.

Johnny Ragland (the researcher) has taught design and technology in the DAE, on a full-time basis, since 2010. At the end of the 1970s, he was indentured to a company to learn the trade of carpentry and joinery. In 1982 he became a freelance carpenter/furniture-maker, and from the early 1990s produced, within his own business, hand-made commissioned bespoke furniture. In 2001 he enrolled on a full-time 3-year degree; studying 'Furniture and product design' at Kingston University. In 2007 he took a Master's degree for 'Innovation and design in sustainability' at Cranfield University, where his interest was discovered for exploring a link between the decline/learning of hand skills and a dis/connection of 'self' within nature as a whole.

In the summer of 2016 the researcher ran a basic 4-day woodwork course for ten 13 and 14 year olds. Class started at 09.00 and concluded between 14.00 and 15.00 hours. In this paper he attempts to contribute to the re-engagement with nature through the (re)development and sharing of the practical hand skills necessary to work with natural materials in both a natural and indoor workshop environment. He is not so much driven by the need to work with materials in a sustainable way, essential though this is, but to facilitate an empathy with and appreciation of nature, which may lead to an improved level of sustainability.

There is growing evidence suggesting that engaging the young with creative studies while within a natural environment benefits both their interest and cognition speeds in the classroom (O'Brien and Murray, 2007). Organisations such as Woodcraft Folk, Forest Schools or Kindergarten Woods have, been for decades, been demonstrating the benefits of hands-on activities for the young working within a natural environment.

This study describes a method of determining how creatively constructing objects from natural materials within a natural environment, supported by a teacher, may influence the young in respect of their perceived bond with nature.

By natural materials, the researcher refers to all materials that have not been altered to the degree whereby their natural state can no longer be determined. The word nature, depending on one's perspective, can suggest different meanings. It will be used here in the sense of encompassing all material matter, in its natural unprocessed state.

The paper refers to 'creative studies' – the meaning here being woodworking. Nonetheless the researcher considers woodworking as one and the same, with all skills involving the creation of decorative or practical artefacts by hand, which he also refers to as crafts.

Objectives

- Can combining creative studies using natural materials, within a natural setting, together with an indoor workshop environment, alter children's perspectives of what nature means to them?
- Would any such alteration in perspective lead children to re-evaluate how they view their position within nature?

It is expected that results from this study will justify further research in this direction and that such research could have an influence on curriculum design, the impact of which may ultimately contribute to the current surge in hoping for a geographically wider spread and more relevant empathy towards matters of sustainability.

Problem statement leading to this study

Over recent decades, the number of people using nature for recreation purposes has increased; this has been aligned with increased amounts of leisure time (O'Neill, 1993). There is also however, evidence indicating that the young have steadily become more reliant on technology for *their* recreation (Orr, 2002; Robinson, 2011; Sennett, 2008).

However, Orr (1994) affirms that technology itself is not the problem, rather the way it is relied upon and the way it is used to replace skilled handwork and crafts; the latter Sennett (2008) asserts can lead to a deeper understanding of self, which Berry (1987) argues is vital for the appreciation of one's surroundings.

Schumacher (1973) in his book 'Small is Beautiful' explains that humans, shielded from the methods of producing from natural resources, are being blinded to their dependence on them. He affirms that a life-style designed for permanence requires, the taking greater care of natural capital from everyone, whether old or young, powerful or powerless, rich or poor.

This is no new theory; Tönnies (cited in Dickens, 1992, p.31) in 1955 argues that in order to know oneself it is necessary to interact with people *and* nature, and reflects that modernity is altering relationships, suggesting that humans are becoming impervious to their surroundings.

Supporting argument

To protect us against the uncertainties of the future and the related need for identity, we are now storing and protecting seeds, botanical and animal species, languages etc., all of which have some tangible form. At the same time, we recognize the need for skill retention but these skills cannot easily be harnessed within a library or specialist garden – they have to live through transmission from one person to another. This requires the ability, willingness and the receptivity, of both the possessor and potential recipient of those skills and a political, social and cultural environment which values and supports their transfer.

The processes of industrialization have both led to, and witnessed, the alienation or distancing of people from their 'home' within nature and the increasing loss of the skills necessary to sustain that home. Home in this sense is the awareness of self as part of something larger, which may be manifest in terms of the physical engagement with nature but also the role nature plays in supporting human life. Historically this has taken the form of predator/prey relations, transhumant lifestyles and the emergence of communities based on agriculture. 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. This use of our hands was initially linked to practical outcomes in terms of basic needs and was also restricted to the attributes of the natural materials available and the knowledge of them. It

also led to the generation of new knowledge and to the need to share that knowledge over time, learning and education; an emergent process that was grounded in the inter-relation between, and inseparability of, humans from their natural environment.

The study accepts but does not seek to prove or substantiate this process of alienation. It does, however, build upon the core themes discussed above in an attempt to contribute to a re-engagement with nature through the (re)development and sharing of the practical hand skills necessary to work with natural materials. The project was not so much driven by the need to work with materials in a sustainable way, essential though this is, but to facilitate an empathy with, and understanding of, nature and thereby to lead to more improved sustainability.

S. J. Gould said: "We cannot win this battle to save species and environments without forging an emotional bond between ourselves and nature as well-for we will not fight to save what we do not love" (Orr, 1994 p.43).

Method

The method has three contexts:

- Workshop
- Natural environment
- Writing

The programme had four phases:

1. Workshop – design and make
2. Forest – creative work
3. Presentation and reflection
4. Writing

Described is a method developed for the purposes of exploring ways of strengthening relationships with nature through craft. It describes a method for the purposes of increasing children's awareness of their dependence on and bond with Nature.

The objects of art they choose to make link the children's ideas with material and thereby through this argument with the material world. Material becomes a medium of expression – a language with which they communicate their thinking. Finishing their chosen designs acts as a strong incentive to develop their hand skills and obtain knowledge of working with wood. Important though their interest in both making and craft skills is, the goal here is to employ the children's tacit and explicit knowledge to facilitate the building of relationships with Nature through engaging with her materials. Making relevant the transferable nature of their craft skills from one environment to another is achieved through and with the children's interest in making something.

Information given to the children

During the introduction the children were informed of the four-day programme. They were informed that they would be part of a study and given an option to opt out.

The lecture given on the second day was by a professional designer, the content of which included how design can be considered – material in a process of change, a designed object, a way of thinking about design. The designer talked of the role materials can have – how much manipulation of material has to take place before material can be considered part of a designed product.

DAY 1. The introduction on the first day included safety instruction and the overall plan for the four-day workshop. The researcher at this point asked the children to write a few words in answer to the following: What is nature to you, what does it mean?

Subsequently the children designed and made objects of art, such as foot stools or pictures created with veneer marquetry. To achieve this, they initially sketched their ideas on paper, after which they drew them to scale. With designs finalized they glued their drawings onto pieces of pre-planed wood. They then proceeded to cut out the shapes needed with mostly hand tools, the only electrically driven tools used were a sander and jigsaw.

DAY 2. This began with a lecture by a well-known product designer; the title was 'What is design?' The designer asked the children what, for them, 'design' meant and how far the scope of design, from their perspective, reached. This was followed by a one-hour long Q and A session.

Afterwards the children continued their craftwork. All children except one finished their objects. At the end of the day before leaving for home the children were shown photos of creative work made in a natural environment by the artist Andy Goldsworthy. They were asked to think of designs to be made the following day in the forest.

DAY 3. Before leading the children to a forest, the researcher asked the children to use the 45-minute journey to make firm their ideas as to what they will make in the forest. Once in the forest the researcher divided the children into three groups; two of three pupils and one of four. From the natural materials they found, they made: a giant picture from leaves depicting a lifecycle, a makeshift shelter and a fence from lianas*.

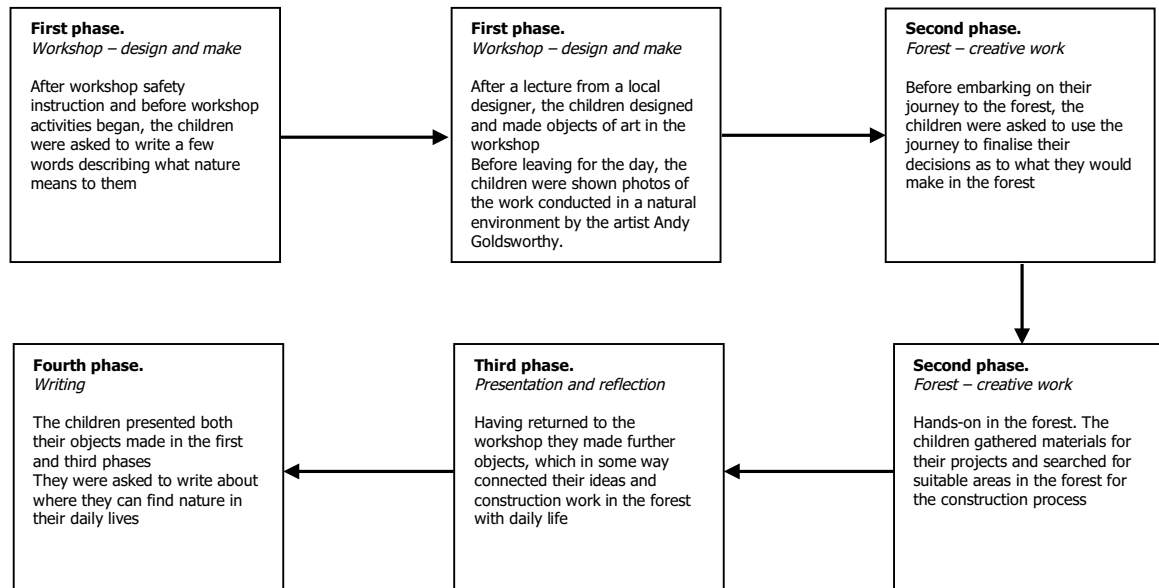
DAY 4. They were asked to link their work in the forest by making objects which have some connection and which could be recognised in daily life. This connection, they were told, should reflect the function, message or meaning of those objects made in the forest the previous day. For the purposes of incentive, the objects made were to be attached to a parachute which the children made from a variety of material such as textile or black plastic sacks. The children rose well to this challenge; they made, for example, a loaf of bread which they said reflected the picture of leaves which symbolised a lifecycle; they also made a model house which signified the makeshift shelter made the previous day. With their finished objects there was a competition for the parachutes with three categories; slowest to fall, most accurate to land, most beautiful. Those children not winning in the first two won the 'good looking' objects prize. All children were given a winning prize of a small chocolate bar.

The children were required to make a five-minute presentation of showing their work made in the workshop and a spoken description of the object made in the forest. They were asked to verbalise the connection of both. Afterwards, they were asked to write a few words in answer to the following: 'Where can you find nature in your daily lives?'

The objective was to approach the children's interest in craft and creativity from the angle of their relationship with the facilitating material.

The chart below provides a synopsis of this process.

* A liana is any of various long-stemmed, woody vines that are rooted in the soil at ground level and use trees, as well as other means for vertical support.



Why integrate activities in the workshop with those in the forest?

Polanyi (1958) describes experience within the material world as a 'tacit awareness'. He affirms that an expression of this experience is the ability to judge subjectively and explains that this ability, obtained through experience, uses the awareness obtained to make decisions. He argues that it is this awareness which also connects one, in a deeper sense, with the material world.

Partnering the workshop with a natural environment is a method of bringing the skills learnt, in a familiar setting, to life in the forest. In the forest the children need to draw on their hand skills and the knowledge of woodwork learnt in the workshop. Work carried out in the forest is carried back to the workshop symbolically through a meaning perspective. Thereby there is cause to reflect on the experiences of the forest in terms of material used as a medium of expression.

Why the two different questions – 'What is nature to you, what does it mean?' and 'Where can you find nature in your daily lives?'

To ensure the children were not presented with a leading 'before and after' situation which could potentially influence their answers, a research question was developed which, although related, presented them with a clear request for objectivity in their answers. The first question left open their thoughts about where and what nature is, whereas the second brings this question closer and includes the children's lives and asks them, as simply as possible, as to their position within nature.

The method here described was developed to be an initial stage in order to obtain an indication and to potentially justify further steps in this direction.

What was not taken into account in this study

The gender split

Which type of school the children attend

Any class background

Expected learning outcomes:

- An increase in knowledge of the origin of natural materials
- Knowledge of how to use wood as a medium of self-expression
- Greater craft skill competence

Data analysis

Samples of children's writing:

To the first question; "What does nature mean to you?"

- "When things are quiet"
- "Green and beautiful"
- "All the animals on the Earth"
- "Things that grow"

To the second question; "Where can you find nature in your daily lives?"

- A chair → wood → Tree. I see everything as nature if I want
- One can see nature everywhere
- Nature, when things are as they should be, everywhere
- Everywhere is nature, because all that is produced is natural

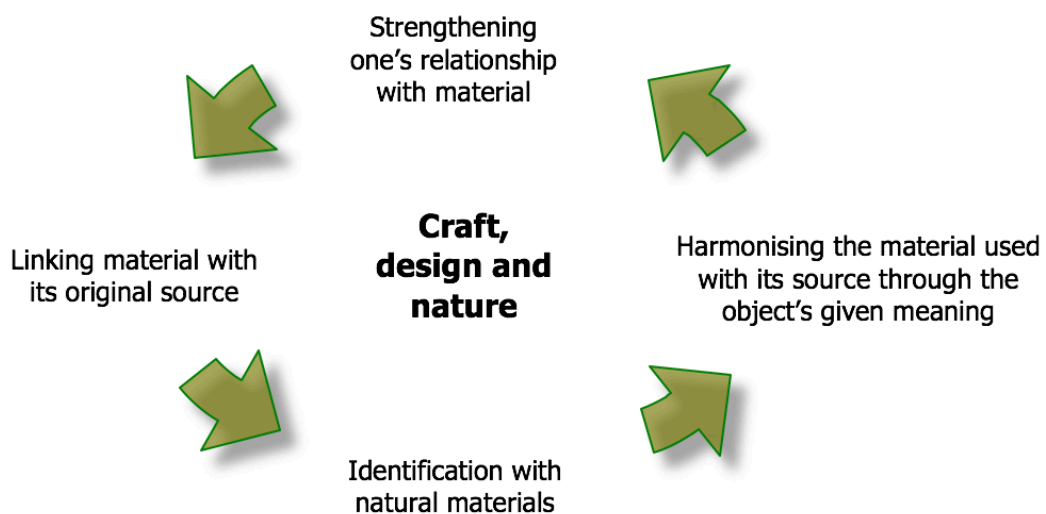
The data seen in the appendix, demonstrates the children have an understanding of nature in terms of *what* but, importantly, after their craftwork *where* nature is. The question of definition has for them been extended to include objects found in everyday life.

Conclusion and discussion

Indicated in the children's writing (see appendix) is an alteration of their perspective as to what for them is nature. Their writing shows that after the 4-day craft course, the children's perspective toward nature had altered. This shift in their perspective of their position within nature had the effect of connecting the children with nature through all material found in their daily life.

The design and make process acts to motivate the children to engage in craft. The relationship with material, built during this process of crafting objects, both in a workshop and nature setting, provides the opportunity to gain a deeper understanding of the source environment of the material. Transferring a self-made object meaning from the forest to the workshop, brings nature 'home' and leads the children to see nature in a more daily encompassing degree.

Gauging how the children's craft related skills were related to their bond with nature is summarised in the following chart.



Accessing feelings attached to nature is always difficult; however, from this study the researcher argues that the question of *how* an appreciation of nature might be initiated should be extended to include methods that are most likely to bridge everyday life with nature. He asserts this study provides the rationale for further research in this direction.

References:

Berry, B. (1987) *Home Economics*. North Point Press, New York

Dickens, P. (1992) *Society and Nature: Towards a Green Social Theory*. Billing, Worcester, UK

O'Neill, J. (1993) *Ecology, Policy and Politics. Human Well-Being and the Natural World*. Routledge, London

O'Brien, L., and Murray, R. (2007) *Forest School and its impact on young children: case studies in Britain. Urban Forestry and Urban Greening. Social and Economic Research Group*. [Online]. Available at:
[http://www.forestry.gov.uk/website/pdf.nsf/pdf/serg_forest_school_research_summary.pdf/\\$file/serg_forest_school_research_summary.pdf](http://www.forestry.gov.uk/website/pdf.nsf/pdf/serg_forest_school_research_summary.pdf/$file/serg_forest_school_research_summary.pdf) [accessed 18th May 2017]

Orr, D. (1994) *Earth in Mind*. Island Press, Washington, DC

Orr, D. (2002) *The Nature of Design Ecology, Culture, and Human Intention*. Oxford University Press, Oxford

Polanyi, M., (1958) *Personal Knowledge: Towards a Post-critical Philosophy*. Routledge and Kegan Paul, London

Robinson, R. (2011) *Out of Our Minds: Learning to be Creative*. Capstone Ltd. Chichester, UK

Schumacher, E. (1973) *Small is Beautiful: A Study of Economics as if People Mattered*. Blond and Briggs, London

Sennett, R. (2008) *The Craftsman*. Penguin Group, London

Appendix

Written notes from the children, translated from German to English

Beginning:

Beautiful, really good, many plants and animals, original

At conclusion:

A chair → wood → Tree

I see everything as nature if I want

Beginning:

Plants, shrubs, trees, animals, quiet

At conclusion:

Garden, holiday, a wooden table

Beginning:

An untouched habitat full forest, animals, lifecycle, rivers/lakes/seas, plants

At conclusion:

One can see nature everywhere

Beginning:

Oxygen, photosynthesis, essential

At conclusion:

If unicorns are nature, then I see nature everywhere

Beginning:

Plants, air, water

At conclusion:

At the beach, in a forest, while with plants

Beginning:

Natural forests where nature can grow. Animals, plants. Life.

At conclusion:

Holiday. In the garden. The stars. On the beach, water.

Beginning:

Trees, wilderness, no streets, animals, streams, rivers.

At conclusion:

Everywhere (is nature) on holiday, at home, with friends.

Beginning:

Life. Lifecycle. (Nature) is what one is.

At conclusion:

Nature, when things are as they should be, everywhere.

Beginning:

Plants, trees, silence.

At conclusion:

In the garden, in my room, on the street.

Beginning:

Nature is a part of the earth and is a place where things can grow and which produces life.

At conclusion:

Everywhere is nature, because all that is produced is natural.