

COL
LEC
TIVE
FOR
DESIGN

An active teaching and learning methodology for collaborative art and design disciplines within the framework of sustainable development.

Marta Miaskowska
Jeremy Hugh Aston
Marta Varzim

This publication describes the work of research and analysis for teaching-learning methodologies in the context of training designers and artists for future international careers. It is a complete and detailed work where the different dimensions, from creativity to critical thinking, are explored and experimented within a series of workshops. From this, there was an investment in articles resulting from this reflection; namely, there was a refinement in the evaluation indicators and conclusions, making their contribution justified and relevant for higher education.

Teresa Sarmiento, DSc
University of Porto,
Portugal

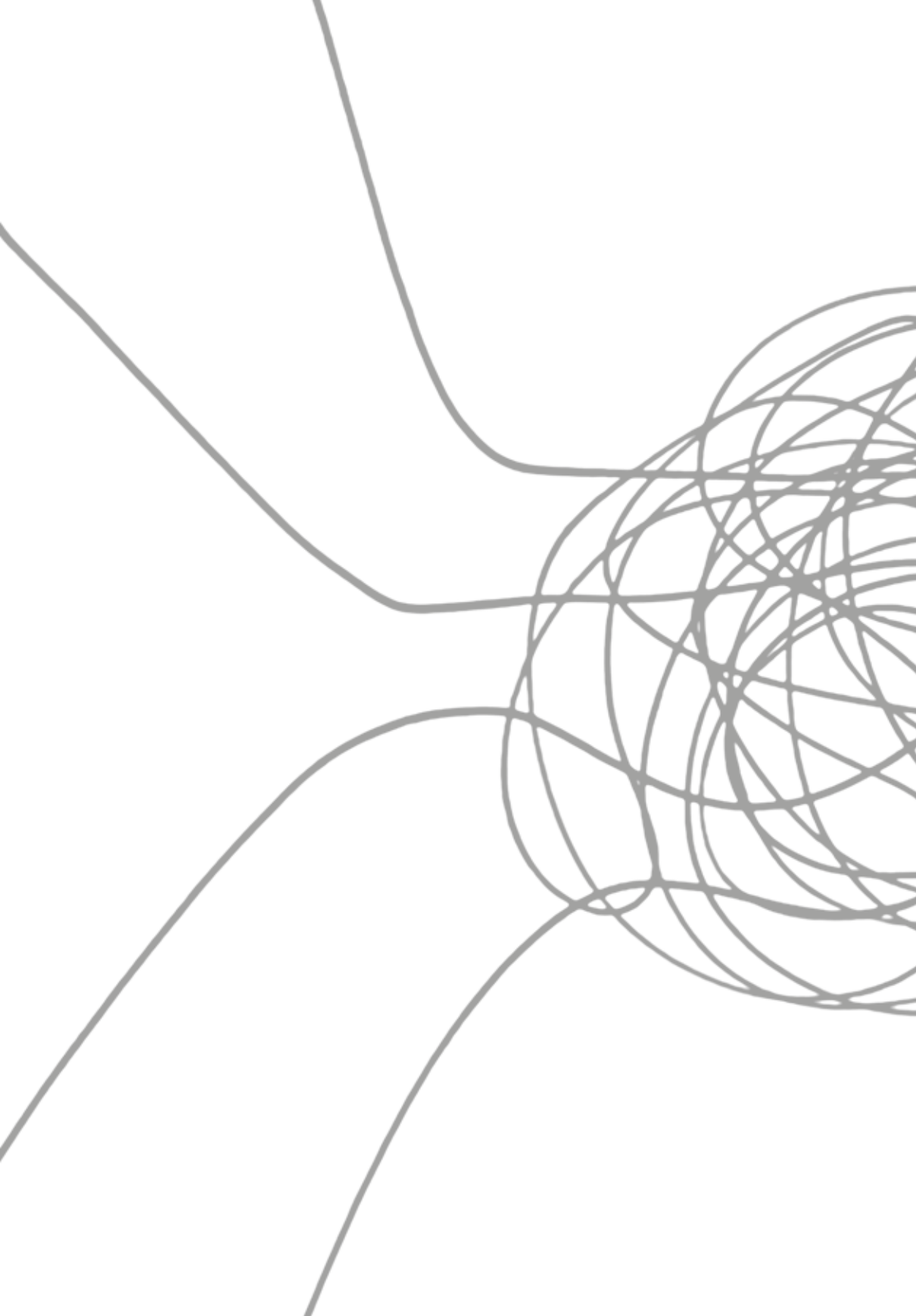
The contents of this publication use a language that is clear and understandable, not only for specific scientific or artistic circles, but also for a wider audience. The Collective Design Method, in addition to didactic values, includes others that are difficult to overestimate. It shows the great value of respect for other people, their culture and different traditions, along with technological innovation, all working synergistically to create better, lower cost and more environmentally friendly products.

Beata Kotecka, DSc
Adam Mickiewicz University in Poznań,
Poland

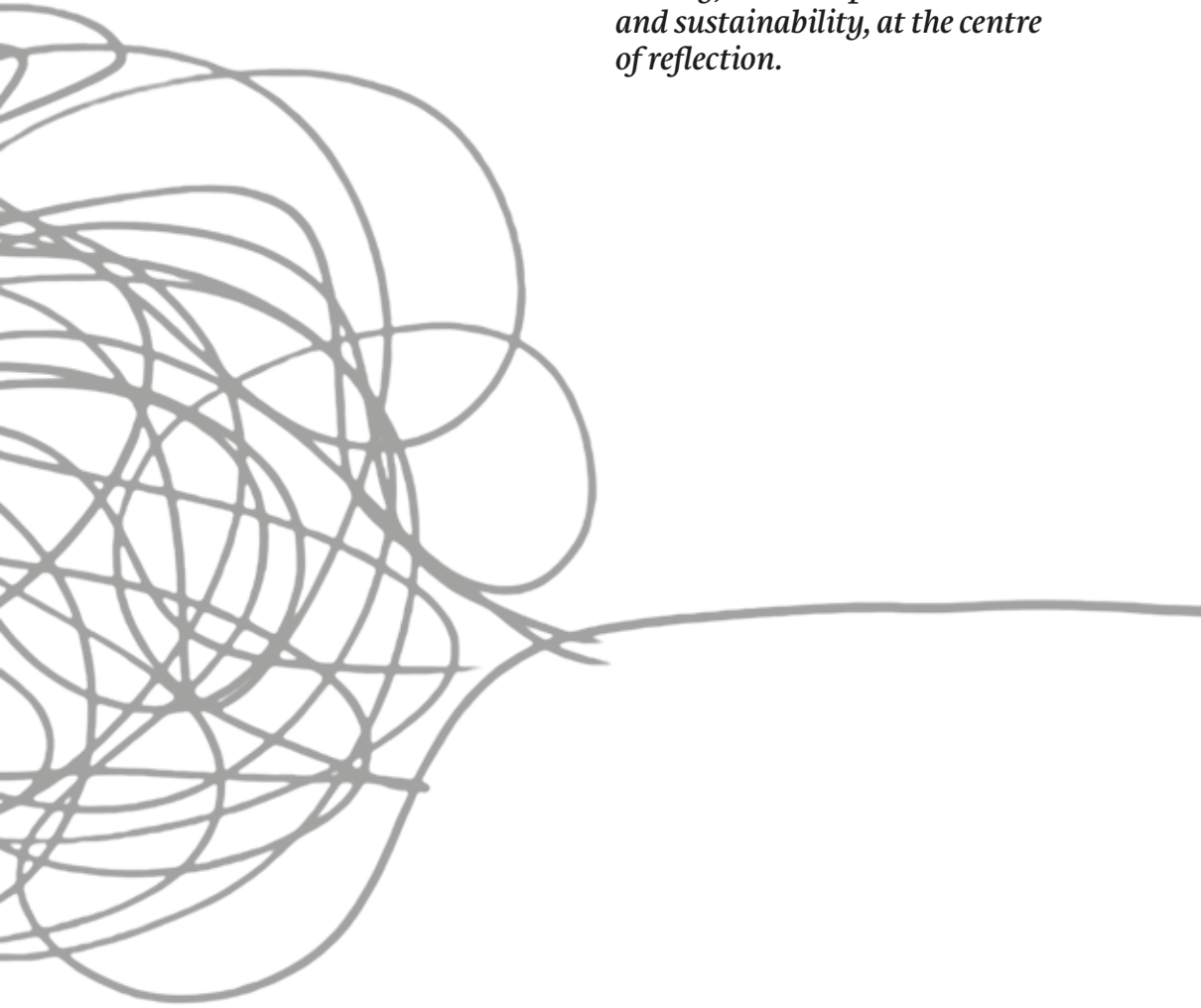
COL
LEC
TIVE
FOR
DES
SIGN

An active teaching and
learning methodology
for collaborative art
and design disciplines
within the framework of
sustainable development.

Marta Miaskowska
Jeremy Hugh Aston
Marta Varzim



This book addresses the need to re-evaluate current teaching-learning methods and aims to contribute to the preparation of art and design students for the international labour market, placing the issue of collectivity, locality, material provenance and sustainability, at the centre of reflection.



1 INTRODUCTION

8 — 21

2 METHOD AND OBJECTIVES

22 — 29

2.1 Overview

25

2.2 Synopsis

25

2.3 Program: Expected Teaching-Learning Results

26

2.4 General Topics

27

2.5 Coherence Between the Programmed Topics and the Expected Teaching-Learning Results

27

2.6 Description of the Teaching-Learning Methodology and Assessment

28

2.7 Coherence Between the Teaching-Learning Methodology and the Expected Learning Results

28

3 VOICES OF DESIGNERS, ARTISTS AND EDUCATORS

30 — 165

3.1 DRAWING AS A DESIGN MEDIATOR OF CROSS-CULTURAL COMMUNICATION.

By Jeremy Aston and Marta Varzim, PhD.

33

3.2 THE NEW COLLECTIVISM: Individualism and Teamwork in Art Education Against the Background of Social and Systemic Changes.

By Marta Miaszkowski, PhD.

51

3.3 LOCAL MARKERS: Material Narratives Through Place-Based Design Research.

By Melanie McClintock.

67

3.4 OCEAN PLASTIC: Towards New Experimental Making and Material Outcomes.

By Ian Lambert, PhD.

83

3.5 WHY IS CRITICAL ANALYSIS ESSENTIAL TO DESIGN PROCESSES?.

By Shujoy Chakraborty, PhD and Dirk Loyens, PhD.

97

3.6 DIMENSIONS OF CREATIVITY.

By Bilge Kinam, PhD.

115

3.7 LEADERSHIP AND PARTICIPATORY MODELS IN DESIGN.

By Ana Duque, PhD.

133

3.8 RESILIENCE AS A FUNDAMENTAL SOFT SKILL IN DESIGN: Teaching-Learning Process and Innovation Achievement.

By Luciana Barbosa.

143

3.9 RESILIENCE AND DESIGN.

By Mónica Yoldi López, PhD.

157

4 TOOLS

166—183

4.1 Hosting Institution

169

4.2 Participants

169

4.3 Briefing

170

4.4 Schedule

171

5 TESTING

184—209

5.1 1st Workshop in Poland

186

5.2 2nd Workshop in Portugal

194

5.3 3rd Workshop in Turkey

202

6 RESULTS

210—215

6.1 Assessment and Results

213

6.2 Expectations and Student Feedback

214

7 CONCLUSIONS

216—221

8 RESEARCHERS

222—233

8.1 Editors

224

8.2 Contributors

226

8.3 Experts

227

8.4 Academic Institutions

230

REFERENCES

234—237

3.3

LOCAL MARKERS: Material Narratives Through Place- Based Design Research.

Melanie McClintock
(College for Creative Studies, USA)

ABSTRACT

Researching through local materials has the capacity to produce results that are both emotional and functional. The source of the materials, when identified by the individual, imparts a subject-object impression, or *marker of place*. This marker of place, along with the makings of the matter, has the potential to generate a narrative of the past for the future. As a result, this practice-based research explores materiality through human experience. The research process is rooted in observing, collecting, making, and assembling materials, which are investigated to form a critical analysis that maps a connection to place. The series of material interactions represent singular experiences alongside a communal collection — a shared material story — within a local-global community.

The aim of this text is to show the ability of local materials, as defined by their provenance, attributes, and their natural ability, to create a material connection through a subject-object model. Within the two shared examples, (1) *Point of Origin*, led by the author from an collector-maker-curator approach combined with public interaction; and (2) *Material Connections*, led by the author from an educator-collaborator-designer approach, the storytelling is the emotional thread — a fascination of the ‘vital matter’ of the object — of what philosopher Jane Bennett refers to as the ‘thing power,’

whereby the “sense of a strange and incomplete commonality with the outside may induce vital materialists to treat non-humans — animals, plants, earth, even artefacts and commodities — more carefully, more strategically, more ecologically” (Bennet, 2010).

The handling of the materials to manifest outcomes, some presumed and others unforeseen, consists of trial and error using various methods of experimentation for ideation and reflection, giving value to the origin of the material and the intent of the designers.

KEYWORDS:

SENSE of place; Local markers; Human experience; Education; Storytelling.

Introduction

Materials, through provenance and process, are signifiers of cultural narratives, acting as markers of time and place. While globalisation and increased technology have created an environment of rapid change across all design sectors, a return to hyper-local processes and authenticity of materials within products and environments has continued to counter. Sharing narratives, traditions, and resources which harken to a specific place creates a strong connection of what the geographer Yi-Fu Tuan coined as *topophilia* — the “affective bond between people and place or setting” (Tuan, 1974, 1990) — which can be stimulated within creative pursuits directed by socially responsible designers through identifying natural resources, promoting local assets, and preserving cultural narratives.

Local Materials as Markers of Place

Place-based pigments, the foundations of dyestuffs, paints, and inks, have been the source of increased research and studio practice in recent years, as Caroline Forde states in *Chromatic Geography: Natural Dyes in the 21st Century*, “interest in natural dyes is undergoing a global revival, fueled by a growing awareness of the harmful by-products of the industrial dye process” giving rise to “bioregionalism as an expression of a sense of place and cultural origin.” (Forde, 2017). Heidi Gustafson’s *Early Futures Ochre Sanctuary* (Lasane, Colossal, 2019), Kayla Powers hand-dyed textiles from local plants, *Colours of Detroit* (2019), and Tilke Elkins’ *Wild Pigment Project*, promote discussions on ecological balance through “a passion for wild pigments, their places of origin, and their cultural histories” (Elkins, 2020). A final precedent, the modern ink-ologist Jason Logan, references historical processes, while his alchemical narratives are infused by ink-making from “the flimsiest of ideas and the unlikeliest of materials” (Logan, 2018) including materials foraged from the urban landscape — *cigarette butts mixed with rust and stinging nettle* — are romanticization of often overlooked moments in time and place.

Project 01: Point of Origin

As a researcher and maker, a series of experimentations focused on professional and artistic discovery regarding the nature, provenance, and abilities of local materials for pigments were conducted (2019-20). As a result, *Point of Origin* developed as a two-part exhibition that included

1) a practice-based research project exploring the materiality of pigments through first-hand communication with local resources through collecting, making, and curating; and 2) an interactive installation for the purpose of a shared social and educational experience with an the local, international-diverse, visiting community.

The methods for experimentation included gathering, processing, making, and assembling organically occurring pigments, which were later apportioned to form a palette that mapped a sense of place, mimicked terrestrial landscapes, and evoked emotional connections. The palette of 32 pigments were collected from natural environments while living and travelling between the cities of Detroit, San Francisco, Yogyakarta, and Doha. The hierarchy of materials was defined by their provenance, materiality, hue, fastness, and their natural ability to create a material connection through a subject/object model. Sources for each pigment were, when possible, neighbourhood-based, which elevated the unique qualities of the materials. The hyper-focus on *hyper-local* materials created a natural constraint, constructing within a boundary to identify the perimeters of a shared material narrative.

Methods and Materials

The manipulation of the materials to manifest the pigments consisted of trial and error, using various methods of extracting, reducing, precipitating, levigating, drying, and grinding to produce powdered dust for experimentation. The selection of materials for binders were specific to the material, including natural forms of gum, shellac, tempera, or honey. The assemblage strategy included strategically layering the pigments between two 16-inch diameter, half-inch thick transparent acrylic plates, in order to observe the colored pigments both in their raw form and interacting with adjacent materials. While the pigments were placed with intent, the fluidity of the material structures, chemical interactions, and the weight of the transparent plates created a chromatic, kinetic dispersion, requiring an openness to the random, the *'thing power'* that is outside of the maker's control.

Each of the eight material landscapes consisted of four pigments with their own origin stories, linked together in a single narrative (fig 3.3.1a). For example, *The Architect of Place* includes pine wood ash and horsehair plaster from a 150-year demolished home in Detroit, burnt clay brick, and vinegar — a solution of vinegar and iron to turn leather black — to form a material snapshot of *home* through the concepts of time, loss, corrosion, and rust.

“In the same house as the horsehair plaster were beams dampened and damaged by water over time. The wood was removed, burned, and left in the pit for weeks, later covered by snow. After the melt, the ashes were collected and placed into the maker’s hands. During the levigation process, the wood — still soaked by snow water — transformed into a thick and lustre-like paste. The texture was transfixing, imagining early cave painters dipping their fingers to create zoomorphic outlines. The pigment has been put through washes and mixed with binders, but the maker’s favourite is when it is left just as it is.”
(*Point of Origin I*, 2020)

The interactive installation was designed to share the material origins of pigments, connecting with the visitors through a similar iterative process, in which the participants created a smaller, individual landscape (fig 3.3.1b) from the collection of 32 inks made from: sugar starfish (“blood” and shell), sea urchin shells, blue-green algae, bone, purple cabbage, crustose lichen, oyster shell, red maple, mulberry, Palo de Brazil, black walnut, apatite, eucalyptus (bark and seed), Nag Champak ash, avocado, padauk sawdust, verdigris, anthracite, pomegranate skin, turmeric, Palo Santo ash, 150-year old pine ash, horsehair plaster, vinegarroon, burnt clay, marigold, pink peony, bearded iris, and grape vine ash. These material landscapes were placed within a grid (fig 3.3.1c) to unite through a larger representation of collective storytelling. This process of iteration, as Jane Norris states in *Making Polychronic Objects*, “is an attempt to map through making,” (2016) giving value to the origin and intent of the local-global markers. As a result, the participants shared like materials, yet elected personal colour strategies through proportion, which lead to unique interpretations while still feeling connected to the collective material archive.



Fig. 3.3.1a: *Point of Origin I*, VCUArts
Gallery, Doha, Qatar



Fig 3.3.1b and 3.3.1c:
Visitor Material Landscapes





Fig 3.3.1d: Interactive Installation.
(Photos courtesy of VCUArts)

Project 02: Local Markers as Material Connections

In March of 2022, while leading a workshop with a group of cross-disciplinary design students, *Material Connections*, at the Escuela Superior de Diseño de la Rioja (ESDIR) in Rioja, Spain, they were asked two questions: 1) “How *do* materials connect?” and 2) “How does their connection affect their function, human interaction, lifespan, and disposal?” These questions were meant to be answered on both a functional and emotional level. During the course of the week, the students worked individually, and then in pairs, to observe and document how materials connect within their local surroundings, including specifically 1) the school (interior landscape); 2) their home (interior/exterior landscape); and 3) their immediate natural environment (exterior landscape).

Participants in the *Material Connections* workshop included twelve fourth-year undergraduate and graduate students from the disciplines of fashion design, graphic design, interior design, and product design. Each one-day exercise incorporated an hour of observation and photo-documentation of objects and surfaces within a specific environment, presented on the day, followed by two hours of material experimentation, and ending with an hour of open discussion of findings on feasibility, functionality, climate-positive initiatives, sustainable practices, and the role of designers as change makers.

Methods and Materials

The workshop was designed to include a series of four one-day exercises followed by an exhibition of work. During each exercise, the students observed and photo-documented nine connections, formatting the images into a grid (fig. 3.3.2), and presenting their findings for analysis and discussion by the group. From the nine material pairings, students selected several on which to iterate potential physical samples, experimenting with a variety of *bricolage* materials — those materials found within their immediate environment — to brainstorm new ways of joining, attaching, binding, integrating, and embedding materials.

The decision to use bricolage materials was intentional as a way to *link to the locale* through bricolage thinking. Bricolage thinking, when used to solve problems, is more constructive than analytical thinking, and encourages solutions through experimentation and play (Keisuke, 2017). This way of creating, coined by the French anthropologist Claude Lévi-Strauss in 1962, introduces the immediate and the random, by which he positions,

“The process of artistic creation therefore consists in trying to communicate (within the immutable framework of a mutual confrontation of structure and accident) either with the model or with the materials...”
(Lévi-Strauss, 1962).

The students were given an hour each day to collect the bricolage materials, which included visiting studios within the school to gather small samples of scrapped materials (wood, metals, textiles, plastics, paper, etc.). In the case of the third exercise, the *natural environment*, the students worked in pairs to collect natural materials within a two-block radius outside of the university. These locally-sourced materials were used alongside the processed materials to create hybrid outcomes.

During the final, fourth exercise, the collection of material samples was used as inspiration to ideate products and environments that demonstrated best practices, design for disassembly, reuse, repair, and reassembly. Every effort was made to find sustainable ways to join the materials without the use of toxic adhesives. Final concepts were selected and visualised digitally through the lenses of fashion design, graphic design, interior design, and product design.

The week culminated on the fifth day in a final exhibition of the work, including a montage of the photographic grids connecting to nearly 100 material experimentations and the final curated collection of outcomes (fig 3.3.2). The students verbally presented their findings to their peers, faculty, and administration. The resulting response from the students was a new outlook to materials, within varied social contexts relating to function, appropriateness, sustainability, connections, and disposal.

The outcomes from the students initially were of an expected nature, putting materials together that felt *appropriate*. Through repeated critique and continued exercises, students began to embrace a greater openness to the materials. One industrial design student noted, “Balsa wood x low density polyethylene foam: taking a look at the past as a form of inspiration with a twist in the materials connected together (fig 3.3.2b). A second student from interior design wrote of the natural study, “Only in one leaf can we discover many different shapes, textures, colours, and stories. These samples are the connection between all of them.” Using bricolage thinking, students simultaneously showed *consideration* and explored *chance* when playing with the combinations of materials existing next to one another, and finally generating inspired outcomes that included options for disassembly and self-generated textures for surface design.

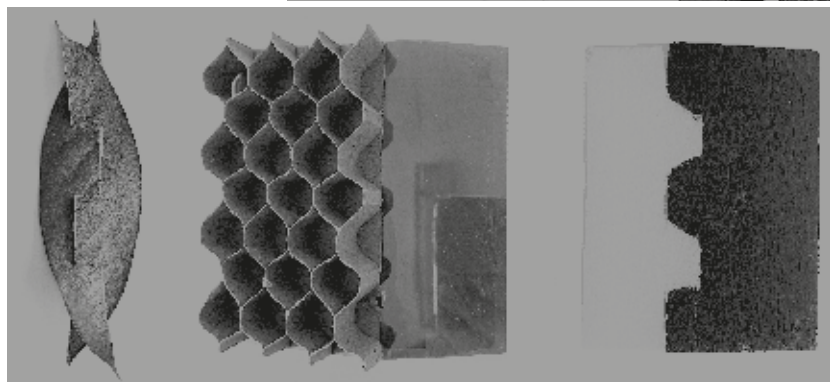


Fig 3.3.2: From top to bottom:
 Fig 3.3.2a: Students selecting and critiquing final work, including material grids, material experimentations and final outcomes. Fig 3.3.2b: Material Connection outcomes 1) Magnolia leaf, cut and inverted, natural study; 2) honeycomb kraft paper x double-stacked acrylic sheets; and 3) low density polyethylene foam x painted balsa wood.

Conclusion

As artists, designers, and educators with a lens on materials, finding new ways to work with local resources, whether they be extracted or bricolage, is instrumental to connecting materials as markers of place. Success has been shown in design projects in which designers have had first-hand experience with materials, specifically the selection of materials in which to define cross-disciplinary subject-object narratives. Through interactive exercises, including observation, experimentation, and assemblage, designers are able to generate uniquely considered outcomes that link collectively to a sense of place.

The material connections represented in these examples are singular and collective experiences within a shared local-global narrative. Such narratives have the potential to produce new material results that can be defined as both emotional and functional, the development of material connections made through human inquiry and experience.

As evidenced in both the curated, interactive project and the process-led material workshop, an awareness of the provenance of materials strengthens the connection of the designer to the outcomes, thereby increasing the chances of utilisation in future products and environments, and ultimately promoting greater adoption within their design communities. In addition, promoting cross-disciplinary collaborations with local and international design teams allows for new perspectives on local materials, encouraging the potential discovery of the overlooked, and fostering new constructs for future material markers.

References

- Bennett, Jane. (2010). *Vibrant Matter: A Political Ecology of Things*. Duke University.
- Bhattacharya, Arindam. (2017). "The New Globalization: Going Beyond the Rhetoric." Boston Consulting Group, 25 April 2017.
- Castle, Elena. (2019). *One Artist, One Material: Fifty Makers on Their Medium*. Frame Publishers.
- Chick, Anne, and Paul Micklethwait. (2017). *Design for Sustainable Change: How Design and Designers Can Drive the Sustainability Agenda*. Bloomsbury Visual Arts.
- Dean, Jenny, and Karen Diadick Casselman. (2010). *Wild Color: The Complete Guide to Making and Using Natural Dyes*. Watson-Guption.
- Finlay, Victoria, and Narayan Khandekar. (2019). *An Atlas of Rare & Familiar Colour: The Harvard Art Museums' Forbes Pigment Collection*. Atelier Éditions.
- Franklin, K. & Till, C. (2020). *Radical Matter: Rethinking Materials for a Sustainable Future*, Thames & Hudson.
- "Interview with Tilke Elkins of Wild Pigment Project." (2020). *Green Dreamer*, 29 June 2020. <http://www.greendreamer.com/podcast/tilke-elkins-wild-pigment-project>.
- Kirita, Keisuke. (2017). *Understanding the Creativity of Bricolage in Zoukei-Asobi*. 10.1057/978-1-137-55585-4_31.
- Kuta, Daniel and Elodi Ternaux, *Materiology: The Creatives Guide to Materials and Technologies*, Frame Publishers, 2014.
- LaSane, Andrew. (2020). "A Multicolored Library of the World's Ochre Pigments Archived by Heidi Gustafson." *Colossal*, 15 April. <http://www.thisiscolossal.com/2019/11/heidi-gustafson-ochre-pigment-archive/>.
- Lefteri, Chris, *Materials for Design*, Laurence King Publishing, 2014. Lefteri, Chris, *Making It: Manufacturing Techniques for Product Design*, 3rd Edition, Laurence King Publishing, 2019.
- Levi-Strauss, C. (1968). *Savage Mind*. University of Chicago Press.
- Logan, J., & Ondaatje, M. (2018). *Make Ink: A Forager's Guide to Natural Inkmaking* (Illustrated ed.). Abrams.
- Norris, Jane. (2016). *Making Polychronic Objects for a Networked Society*. DRS2016: Future-Focused Thinking. Royal College of Art.
- Thomas, Rachael. (2019). "Meet the Makers: Salt Textile Studios." *Hour Detroit Magazine*, 5 September. <http://www.hourdetroit.com/community/meet-the-makers-salt-textile-studios/>.
- Tuan, Y. (1990). *Topophilia: A Study of Environmental Perception, Attitudes, and Values* (Reprinted.). Columbia University Press.

esad—idea
Research in Design and Art

esad—idea seeks to respect
all copyrights and apologises
for any error or omission.

© 2020-2022
esad—idea
Research in Design and Art

esadidea.pt
edicoes@esad.pt

.

Project

PICODE — 2020-1-PL01_KA203_081456

Project — Product — Promotion
International Collective for Design

Coordination

Lodz University of Technology, Poland
<https://picode.p.lodz.pl/en>

Publication

COLLECTIVE FOR DESIGN

An active teaching and learning methodology
for collaborative art and design disciplines within
the framework of sustainable development

Editors

Marta Miaskowska
Jeremy Aston
Marta Varzim

Contributors

Bilge Kinam
Melanie McClintock
Mónica Yoldi López

Experts

Ana Lúcia Pinto Duque
Dirk Loyens
Ian Lambert
Luciana Moreira Barbosa
Shujoy Chakraborty

Peer review

Beata Kotecka, DSc
Adam Mickiewicz University in Poznań, Poland
Teresa Sarmiento, DSc
University of Porto, Portugal

Proofreading

Andreia Faria

Graphic Design

Sérgio Correia

Publisher

esad—idea

Printer

Gráfica Maiadouro, SA

Print run

300 copies

ISBN

978-989-53907-3-1

Legal deposit

510553/23

© 2023

Co-funded Project



Co-funded by the
Erasmus+ Programme
of the European Union

Institutions



Politechnika Łódzka



ESOGU COLLEGE OF ART AND DESIGN



Art, Design, Detroit.



Creative Commons



The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

This book addresses the need to re-evaluate current teaching-learning methods and aims to contribute to the preparation of art and design students for the international labour market, placing the issue of collectivity, locality, material provenance and sustainability, at the centre of reflection.