

ABOUT NTU CCA SINGAPORE

Located in Gillman Barracks, the NTU CCA Singapore is a national research centre of Nanyang Technological University, supported by a grant from the Economic Development Board, Singapore. The Centre is unique in its threefold constellation of research and academic education, international exhibitions and residencies, positioning itself as a space for critical discourse and diverse forms of knowledge production. The Centre focuses on Spaces of the Curatorial in Singapore, Southeast Asia, and beyond, as well as engages in multi-layered research topics.

CLIMATES. HABITATS. ENVIRONMENTS. is NTU CCA

Singapore's overarching research topic which informs and connects the Centre's various activities over a longer period of time (2017-19). Changes in the environment influence weather patterns and these climatic shifts impact habitats, and vice versa. Precarious conditions of habitats are forcing migration of humans and other species at a critical level. The consequences of human intervention are felt on a global scale, affecting geopolitical, social, and cultural systems. The Centre intends to discuss and understand these realities through art and culture in dialogue with other fields of knowledge.

NOTES TO TEACHERS & EDUCATORS

This Education Resource Guide is developed to supplement the Workshop for Teachers and Educators with a focus on the exhibitions at NTU CCA Singapore. It provides an opportunity for educators to learn how contemporary artists address issues and concerns of our times. as well as to explore new teaching strategies. Here, you will find resources specifically designed for teachers and students. The proposed activities are conceived to be used in a flexible manner: educators can select suitable activities and combine them to meet the needs of their students. Before bringing your class to the NTU CCA Singapore, it is recommended that you visit the exhibition, consult the Exhibition Guide and the Education Resource Guide, and decide which aspects of the exhibition are most relevant to your students. Customised guided tours for student group led by NTU CCA Singapore curators are also available upon request.

1 ABOUT THE EDUCATION PROGRAMMES

The Centre's education programmes promote contemporary art as a form of creative learning through exhibition tours, talks, and workshops developed by our education team. These accessible and inclusive learning experiences connect students and teachers with contemporary art and artists to encourage new ways of looking, thinking, and creating. Crucial to our programme is the approach of "bringing your own story," which encourages students to connect the exhibitions with their personal experiences, generating new meanings through playful strategies, peer collaborations, and group discussions.

Who would benefit from working with/consulting the Education Resource Guide?

The Education Resource Guide is conceived for teachers and educators working in primary, secondary, and tertiary educational settings. It can also be a useful resource for general exhibition visitors as a tool to understand and enjoy contemporary art. Following the guided questions and activities, visitors are encouraged to enter the world of the artist(s) and reflect on what they experience in the gallery space.

How can the Education Resource Guide be used by educators and general visitors?

These educational activities can be used as pre-gallery, in-gallery, or as post-gallery lessons. Teachers can choose which activities are valuable for their educational objectives and are free to add on other related materials of their own choosing. General visitors can also decide on which ideas and content inspire them to further learn from and enhance their exhibition visit.

What is the goal of the Education Resource Guide?

We want to encourage people to discover and trust their own responses to contemporary art. We think contemporary art can be meaningful and relevant for everyone, but we also acknowledge that sometimes an exhibition can be perceived as intimidating and confusing. Hence, the resources we produce are conceptualised to build confidence in individual thinking to creatively engage with contemporary art.

Kelly Reedy, Educator, Artist
Magdalena Magiera, Curator, Outreach & Education
Syaheedah Iskandar, Curatorial Assistant, Outreach & Education
Zhang Jing Chao, Young Professional Trainee

For more information and enquiries, email: ntuccaeducation@ntu.edu.sg

Themes:

NATURE.
PROCESSES.
MATERIALS.

Cross-disciplinary subjects:

Biology,
botany,
regional arts
and craft
history,
social practice
in ethnography
agriculture

In the exhibition, *Trees of Life – Knowledge in Material*, five Asian artists' work will reveal how contemporary art practice and research can renew interest and knowledge of traditional nature-based materials derived from regional plants. The focus is on indigo, lacquer, rattan, and mulberry, looking not only at the properties of the plants themselves, but also at the unique characteristics of each material, the processes developed in relation to them, and the significance of century-old crafts. These natural resources have generated traditions that have passed from generation to generation, providing livelihood for communities and enriching their crafts. The research project intends to explore these cultural manifestations through various perspectives, pointing at the importance of preserving these traditions and advocating for environmental sustainability. It looks at the knowledge that is contained within the materials themselves, accumulated over time through various practices.

Manish Nai concentrates on the physical manipulation of materials and how they can be transformed from objects into art. His installation, Untitled, 2018, features indigo-dyed jute (another plant based matrial) compressed and wrapped around sticks, invoking powerful colour applications related to the mystery of the rich blue tones obtained from the natural dye plant indigo. In Palimpsest, 2013–18, **Phi Phi Oanh** explores the transparent properties of thin layers of lacquer 'skin' or painted membranes, which she projects with light onto screens. In her work with lacquer, she contemplates memory, socio-political context, and self-reflexivity. Sopheap Pich exhibits several sculptural and relief works made with rattan, Delta, 2007, Valley Drip (Maroon Top), 2012, and Red Grid, 2015. By using natural materials from Cambodia, he examines the history of his native country and his identity and relationship to it and the United States, where he fled for safety at the age of 13. The Asian white mulberry tree's leaves provide food for the silk worm, allowing it to produce this sought after textile. Both Liang Shaoji and Vivian Xu investigate the biological process and metaphoric of silk production. Liang uses a philosophical and poetic lens to interpret the life cycle of silkworms by incorporating sculpture, textile, and new media into his works Lonely Cloud, 2016, Broken Landscape, 2016, and Moon Garden, 2015. Xu probes the boundaries between biology and electronic media to create new forms of sensory systems and machine logic in The Silkworm Project (2013-ongoing). By exploring this exhibition, visitors will obtain a deeper knowledge of these natural materials and how they contribute to society and culture.

ABOUT THE ARTISTS 4 5

Sopheap Pich (b. 1971, Cambodia) left Cambodia with his family as a refugee towards the end of the Khmer Rouge's reign, a traumatic period of Cambodia's history, settling in the United States in 1984. Memories of his childhood and a desire to reconnect drew the

artist back to his home country in 2002, where he began working with local materials—bamboo, rattan, burlap from rice bags, beeswax, and earth pigments—to make sculptures inspired by bodily organs, vegetal forms, and abstract geometric structures.





Phi Phi Oanh (b. 1979, United States/
Vietnam) draws from the hybrid nature of
her personal history, constructing pictorial,
evocative, and meditative installations that
reconfigure culturally-specific signs and
symbols to create familiar yet unusual and
distinctive experiential spaces. In 2004, she
was awarded a Fulbright Scholarship to study
traditional tranh son mài (Vietnamese
lacquer painting) in Hanoi, which
has since become a key medium
in her practice.





Liang Shaoji (b. 1945, China) intersects science and nature, biology and bio-ecology, weaving and sculpture,

installation and performance.
He has been working for
28 years with his unusual
partners—silkworms, using
the life process of silkworms
as medium. Now working
in Tiantai, Zhejiang
Province, his works are
filled with a sense of
meditation, philosophy,
and poetry, while
illustrating the inherent
beauty of silk.

Manish Nai (b. 1980, India) concentrates on the material qualities of the different substances that he elects to deploy in his work. Nai's abiding interest has been in discovering the process of form modification, shaped by the physical manipulation of matter and the new life assumed by these objects. Everyday objects of jute, cardboard, newspapers and old clothes are transformed

in their condition, from objects of use to objects of art, divested of any function or utility.





intersection of electronic and bio media. While creating new forms of machine logic, life, and sensory systems, Xu emphasises on the materiality and potential transient quality of the artwork. She is the co-founder of Dogma Labs, a cross-disciplinary laboratory based in Shanghai, dedicated to integrating design, research, education, and production with the areas of computation, biology, and digital fabrication.

PRE-GALLERY VISIT ACTIVITIES:

expressed in the vocabulary list below prior to the gallery visit.	Are there any natural materials in the object that you like?		
Art –			
Biology –	3. Do you know where the material comes from and how is it processed?		
Botany –	from and now is it processed?		
Craft –			
Ecology –	5. Describe why you like it, taking into consideration your five senses.		
Indigo –	consideration your rive senses.		
Lacquer –	6. Where and how does this natural vmaterial grow?		
Mulberry –	vinaterial grow:		
Natural –	7. Do you know how your favorite natural		
Nature –	material was processed and used in the past? What about today?		
Rattan –	past. what about today.		
Silkworm –	8. Do you own more things made of		
Synthetic –	natural materials or synthetic materials?		
Tradition -			
Biodiversity –	9. What kind of materials do you think were used more commonly in		
Sustainability –	Singapore 70 to 100 years ago?		

10. Interview elders in your family or community asking them about the materials that were used to make "everyday" objects when they were children, e.g. clothes, shopping bags, tableware. Using your research, draw four objects in the boxes in Column 1 below that are no longer made with natural materials. In Column 2 and 3 write short descriptions of each object, comparing which materials were used to make them, "then" and "now."

Object	Then	Now

GALLERY VISIT ACTIVITIES: TREES OF LIFE - KNOWLEDGE IN MATERIAL

For millennia, natural materials provided all that was needed by humankind to create everyday objects such as clothes, containers, tools, and other utensils. Each society and culture perfected arts and crafts techniques using these materials in unique ways. In the 19th century the development of the chemical industry gave us an array of new synthetic materials, forever changing our way of .life and relationship with nature. Yet today, with the world's environment at risk due to over or misuse of chemicals and other manmade pollutants, there is a renewed interest in studying and utilising materials found in nature. Scientists, artists, and designers often research and reclaim traditional techniques, which use products from plants, insects, or animals. Much knowledge has been lost, but through careful detective work we can rediscover, relearn, and reinvent uses for materials from our natural world.

9 ACTIVITY #1: REDISCOVERING NATURAL MATERIALS

(Required materials: educational resource guide, pencil, camera, or a smart phone.)

An important note: The activity sheets will not be graded, nor is there only one correct answer. They are to provide a platform for creative dialogue, debate, and continued research into the suggested topics.

In Activity #1 explore the exhibition individually, spend time discovering how each natural material was used. Use the space below to note down the following:

- 1.) each artist's research concept in relation to a natural material
- 2.) your impressions of the aesthetic presentation of each piece
- 3.) two questions you would like to ask the artist about his/her artwork

Artworks	Rediscovering Natural Materials
Manish Nai, Untitled, 2018	1.)
	2.)
	3.)
Phi Phi Oanh, Palimpsest, 2013–18	1.)
	2.)
	3.)

Artworks	Rediscovering Natural Materials	10	11
Sopheap Pich, Delta, 2007, Valley Drip (Maroon Top), 2012, and Red Grid, 2015	1.)		
	2.)		
	3.)		ŀ
Liang Shaoji, Lonely Cloud, 2016, Broken Landscape, 2016 and Moon Garden, 2015	1.)		
	2.)		
	3.)		
Vivian Xu, Silkworm Project (2013 – ongoing)	1.)		
	2.)		
	3.)		

ACTIVITY #2: RELEARNING TO USE NATURAL MATERIALS

Pick your favorite natural material in this exhibition. Find out more about its botanical origin and its life cycle. For example, there are many different plants growing in different parts of the world that produce a blue colour used to make indigo dye, e.g. *Indigofera*, *Indigo suffruticosa*. Also, research the traditional ways in which your favorite material was processed and used in the past.

In simple sketches, draw out the growing and traditional processing method of your chosen material, step by step.

Would it be possible to do this kind of processing in the same way today in Singapore?

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(Required materials: white and coloured paper, transparent plastic sheets, watercolours, pillow filling, fabrics, needles, thread, string, glue, assorted natural materials such as rattan, sticks, etc.)

Students should work in a group of three or four to create an artwork or installation highlighting a natural material. This can take the form of a soft sculpture, two-dimensional work, or installation. Write your groups' concept out focusing on the themes of life cycle, harvesting, and processing or historical use. Together create an artwork to illustrate this concept. Get inspiration from one of the artist's works in the exhibition, Trees of Life - Knowledge in Material, use his or her ideas as a springboard when creating the group project!

In order to help your group to get started, ask the following questions:

- 1. Which natural material are you most attracted to in this exhibition?
- 2. ow can the material's unique properties inspire you to make an art piece?
- 3. Which artist's concept interests you the most?
- 4. Could this concept be used to explore any other natural or synthetic materials?

POST-VISIT IDEAS!

Each teacher must decide how to best continue to use the enriching and thought provoking gallery visits to enhance their students' cross-disciplinary learning experience. The following are a few ideas that could be developed by the students in post-visit lessons or projects.

- Students could research the various symbols representing the "tree of life" in Asia and/or the world, e.g. Dayak culture in Borneo, Indonesian batik motifs, Egyptian tomb paintings, etc.
- Organise a class trip to the Singapore Botanic Gardens to visit the "Healing Garden," which features a large collection of medicinal plants from Southeast Asia. Or visit the Jacob Ballas Children's Garden and delve deeper into the ecology of plants and their environment.
- Visit the National Museum of Singapore's collection of regional natural history drawings from the William Farquhar Collection. Make a list of those plants you see or use in your daily life.
- Students could map the location of and do research on the specific trees or plants found in their own neighbourhood in Singapore. They could also make botanical drawings and create a poster to be displayed at school promoting the material and/or uses of each plant, past and present.

Suggested definitions taken from www.freedictionary.com

Art – the conscious use of the imagination in the production of objects intended to be contemplated or appreciated as beautiful, as in the arrangement of forms, sounds, or words

Biology – the life processes or characteristic phenomena of a group or category of living organisms

Botany – the science or study of plants **Craft** – an occupation or trade requiring

manual dexterity or skilled artistry **Ecology** – the science of the relation-

ships between organisms and their environments

Indigo – a.) any of various shrubs or herbs of the genus *Indigofera* in the pea family, having pinnately compound leaves and usually red or purple flowers in axillary racemes b.) a dark blue crystalline compound, C16H10N2O2, that is obtained from these plants or produced synthetically and is widely used as a textile dye, also called indigotin

Lacquer – a glossy, resinous material, such as the processed sap of the lacquer tree, used as a surface coating

Mulberry – a.) any of several trees of the genus *Morus* having edible fruit that resembles the blackberry b.) Asiatic mulberry with white to pale red fruit; leaves used to feed silkworms

Natural – present in or produced by nature

Nature – the material world and its phenomena

Rattan – any of various spiny climbing palms of the subfamily Calamoideae and especially the genus *Calamus* of tropical Africa and Asia, having long, tough, flexible stems

Silkworm - any of various caterpillars that produce silk cocoons, especially the larva of a moth (*Bombyx mori*) native to Asia that spins a cocoon of fine, strong, lustrous fiber that is the source of commercial silk

Synthetic – Chemistry/produced by synthesis, especially not of natural origin

Tradition – the passing down of elements of a culture from generation to generation, especially by oral communication

Biodiversity - the number and variety of different plants, animals, and other living things in a particular place **Sustainability** - to maintain; to keep alive; to support; to subsist; to nourish

RESOURCE

Manish Nai

www.kavigupta.com/artist/manish-nai

Phi Phi Oanh

www.phiphioanh.com

Sopheap Pich

www.sopheap-pich.com

Liang Shaoji

www.shanghartgallery.com/galleryarchive/artists/name/liangshaoji

Vivian Xu

www.vx.dogma.org

Sunday, 22 July 2018 2.00 – 5.00pm

Workshop: Unearthing Lotus Flower - Sanding and Polishing a Vietnamese Son Mài Painting

by Saeko Ando, artist

As the name son mài (meaning "lacquer" and "sanding" respectively) suggests, sanding is an integral process of lacquer art, employed not only to acquire smooth surfaces but also to create dramatic effects. Participants will get a hands-on experience of sanding and polishing a lacquer painting.

Workshop fee: S\$35 (materials provided)

Developed for participants aged 13 and above.

Saeko Ando (Japan/Vietnam) studied Japanese art and philosophy at Waseda University in Tokyo. In 1995, she moved to Vietnam to learn lacquer art under the tutelage of Trinh Tuan, Doan Chi Trung, Nguyen Huy Hoan, and Lam Huu Chinh. Her practice integrates the traditional with the contemporary through an innovative use of Vietnamese lacquer techniques. Ando's eccentric style earned the respect of Vietnam's art society and she was the first foreign member to be invited to the Hanoi Art Association in 2000. She has exhibited extensively in Vietnam and internationally, and regularly presents her research on lacquer arts from Vietnam, Taiwan, Myanmar, Thailand, Cambodia, and Japan in conventions and symposiums.

Wednesday, 25 July 2018 4.00 – 6.30pm Wednesday, 15 August 2018 4.00 – 6.30pm

Workshop for Teachers and Educators

by **Kelly Reedy**, artist and educator

Focusing on the artworks in the exhibition *Trees of Life – Knowledge in Material*, the workshop engages with artistic practices and prepares educators for visits with their students by providing educational tools as entry points to the exhibition, and assisting in identifying aspects of the exhibition that might be relevant to their classes. It suggests techniques for exploring both the visual arts and other areas of daily encounters.

Write to ntuccaeducation@ntu.edu.sg for registration.

Kelly Reedy (United States/Singapore) has worked in Singapore for over 18 years as an artist and educator. She holds a BFA in Fine Art (University of Wisconsin, 1985), MA in Education (Hunter College, 1991), MA in Art Therapy (LASALLE College of the Arts, 2017). She has exhibited her artworks internationally in Paris. Chicago, and Berlin, as well as locally at Jendela Visual Arts Space, Esplanade, Singapore Tyler Print Institute, and Alliance Française. Reedy has developed educational resources for the National Gallery Singapore and trained teachers at the National Institute of Education, specialising in visual arts education in museums and galleries.

Saturday, 4 August 2018 2.00 – 6.00pm

Workshop: The Colour of the Region. Indigo Dye and Batik

by **Dinu Bodiciu**, Fashion Lecturer, LASALLE College of the Arts and **Martin Bonney**, Fashion and Textiles Lecturer, LASALLE College of the Arts, and textiles designer

An introduction will briefly present indigo's progression from the "colour of the kings" to the "colour of the masses" and its socio-cultural connotations around the world. Participants will explore resist dye approaches and tools (chanting, copper stamps, and brushes.)

Participation Fee: \$35 (materials provided)

Please register at: www.colouroftheregion.peatix.com

Dinu Bodiciu (Romania/Singapore) is a fashion and accessories designer. His designs are conceptualised as extensions of the human body, tackling aspects situated at the border between dress and skin. His projects include collaborations with Lady Gaga, *Hunger Games* episodes 3 and 4, KCPK, while his designs have been featured in various fashion and design magazines and specialist books published around the world.

Martin Bonney (United Kingdom/Singapore) is a fashion and textiles designer, practitioner, and researcher. His design and research question the use of craft and culture within contemporary practice today and has a range of international experience in London, Paris, and New York in the textile industry.

Sunday, 19 August 2018

2.00 - 5.00pm

Workshop: Mysterious, Magical, and Medicinal - The Power of Indigo

by Kelly Reedy, artist and educator

Indigo has fascinated people across ages and cultures, having been attributed mysterious, magical, and medicinal powers. Its fermented dye bath has been used to ward off evil spirits and applied as an antiseptic. Participants will experiment with indigo dye and *shibori*, a Japanese tie-dye technique.

Participation Fee: \$35 (materials provided)

Please register at: www.thepowerofindigo.peatix.com

Sunday, 26 August 2018 2.00 – 6.00pm

Workshop: Weaving Patterns with Rattan

by **P.C. Ee**, Co-founder, Industry+ and **Lim Masulin**, Founder, BYO Living

An introduction to applications and advancements of weaving from the perspectives of producer and manufacturer will be combined with a hands-on activity. P.C. Ee integrates playful geometry with traditional crafts, while Lim Masulin develops materials from recycled waste and natural plants for furniture, architecture, and accessories.

Participation Fee: \$35 (materials provided)

Please register at:
www.weavingrattan.peatix.com

P.C. Ee (Singapore) is cofounder of Singapore-based furniture brand Industry+, constantly working with designers and manufacturers to produce and promote Asian design products for the international market. Ee edits and produces the works of Asian designers including Jun Yasumoto, Studio Juju, and Nendo, in a collaborative process for the brand's collection.
Industry+ also produces a collection of outdoor furniture for WOHA's new brand WOHAbeing. Industry+ strives to push the boundaries of materials, manufacturing, and craftmanship in Asia, producing pieces that carry traces of influence from the culture of its designers and collectively represent a subconscious Asian aesthetic.

Lim Masulin (Indonesia) is "ASEAN Senior Mastercraft Designer" known to invent BYO Living weaving technology for energy saving architecture like Toyota Headquarter's 4,000 sqm LEED Platinum ventilation weaving panels, East Java power plant's cooling façade & Maldives Halaveli's outdoor furniture. On sustainable materials, he discovered renewable rattan with durable silica skin, tearproof grass from CO2 absorbing peatland, and weatherproof upcycle waste. At World Economic Forum 2018, he shares on making social impacts with weaving's circular sustainability. His work with Andra Matin for the Indonesian Pavilion at the Venice Architecture Biennale received Special Mention Award for reflecting on material/ form of traditional vernacular structures.

SIGN UP FOR NTU CCA SINGAPORE'S GUIDED SCHOOL TOURS!

These guided school tours provide opportunities for discussions on art, honing observation skills, and interpretive thinking for both students and teachers. The tours are led by NTU CCA Singapore's curators who will provide insights into the exhibition and share their experience of working with the artists.

All tours are free of charge. To arrange a day and time for school tours suited to your schedule, email ntuccaeducation@ntu.edu.sg.

VISITOR INFO

Exhibition Hours

Tuesday – Sunday, 12.00 – 7.00pm Friday, 12.00 – 9.00pm Closed on Mondays Open on Public Holidays (except on Mondays)

Free admission to all programmes (unless stated otherwise)

For updates, please visit: ntu.ccasingapore.org facebook.com/ntu.ccasingapore Instagram: @ntu_ccasingapore Twitter: @ntuccasingapore

Exhibitions

Block 43 Malan Road, Gillman Barracks, Singapore 109443 +65 6339 6503

Residencies Studios

Blocks 37 and 38, Malan Road Singapore 109452 and 109441

Research Centre and Office

Block 6 Lock Road, #01-09/10, Singapore 108934 +65 6460 0300

Email

ntuccaevents@ntu.edu.sg

LOCATED AT

GILLMAN BARRACKS