

BERRIES, BIRCHES, BOGLANDS

Prospects for the Plant Humanities in Finland



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Southern Cross University & University of Notre Dame Australia



OVERVIEW

- 1) Introduction: Defining the Plant Humanities
- 2) Key Theories and Methodologies
- 3) The Narrative Basis of the Field
- 4) Prospects for the Plant Humanities in Finland
- 5) Berries
- 6) Birches
- 7) Boglands
- 8) Conclusion: Narrating Plant Life

Oratuomi or Sloe Berry (*Prunus spinosa*)

WHAT IS THE PLANT HUMANITIES?



Pekka Halonen, 'Pioneers in Karelia' (1900), 200 × 237cm, oil on canvas, Finnish National Gallery

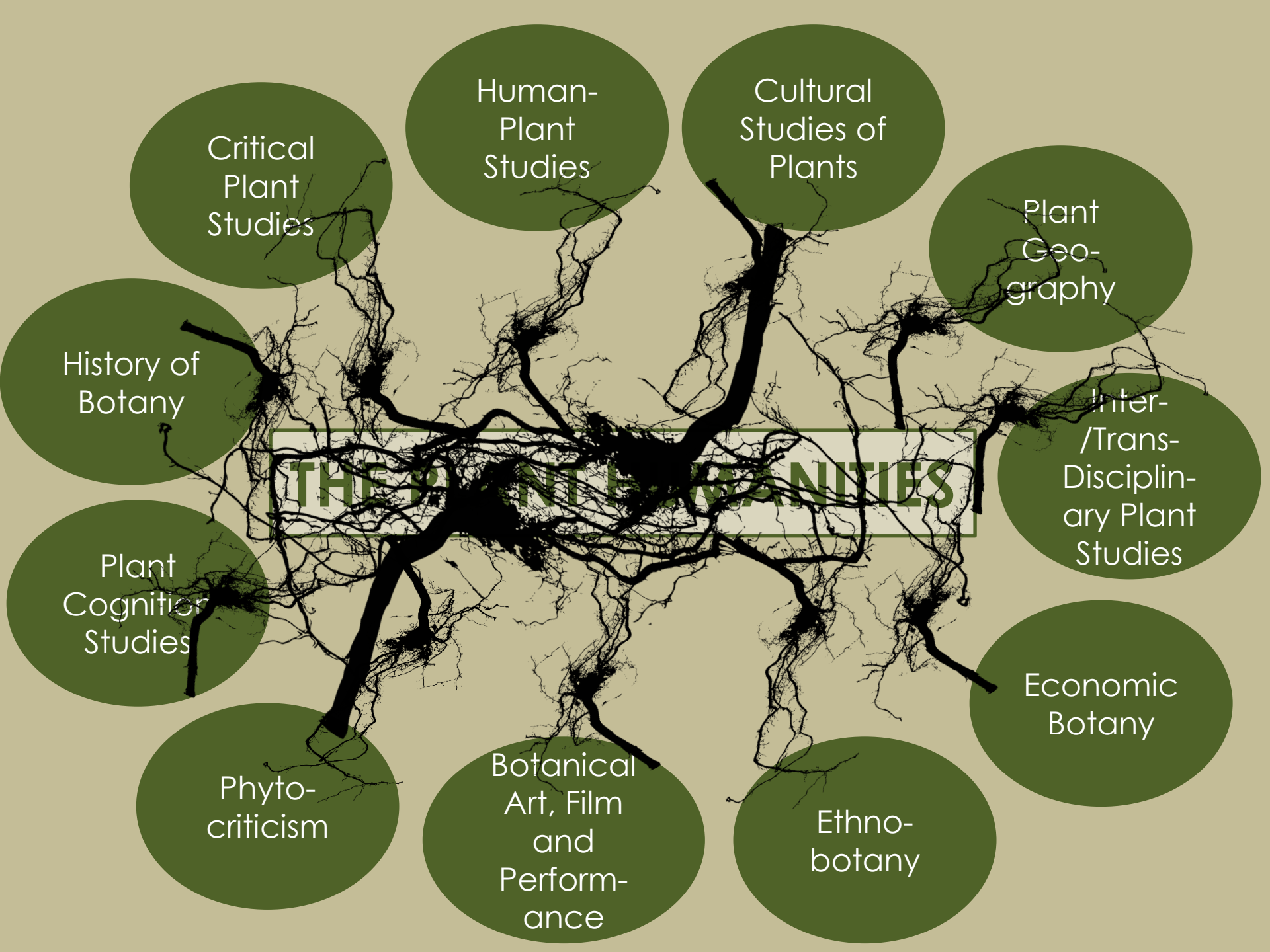


Torsten Wasastjerna, 'Bog in Lapland' (1892), 21.5 × 31.5cm, oil, Finnish National Gallery

WHAT IS THE PLANT HUMANITIES?



- the field of the plant humanities has gained momentum over the last five years as an inter-/transdisciplinary domain of scholarship concerning plants and their multifaceted intersections with humans.
- the term *plant humanities* denotes 'humanistic modes of interpretation' in the study of plants, society, culture, history, art, literature, and other disciplines (Batsaki 2021, 2)
- plants offer 'remarkable scope for research and interpretation due to their global mobility and historical significance to human cultures' (Dumbarton Oaks Plant Humanities Initiative 2023, para. 1)



THE PLANT HUMANITIES

Critical
Plant
Studies

Human-
Plant
Studies

Cultural
Studies of
Plants

Plant
Geo-
graphy

Inter-
/Trans-
Discipli-
nary Plant
Studies

Economic
Botany

Ethno-
botany

Botanical
Art, Film
and Perform-
ance

Phyto-
criticism

Plant
Cognition
Studies

History of
Botany

NEURO-BOTANY: A NEW PARADIGM WITH OLD ROOTS

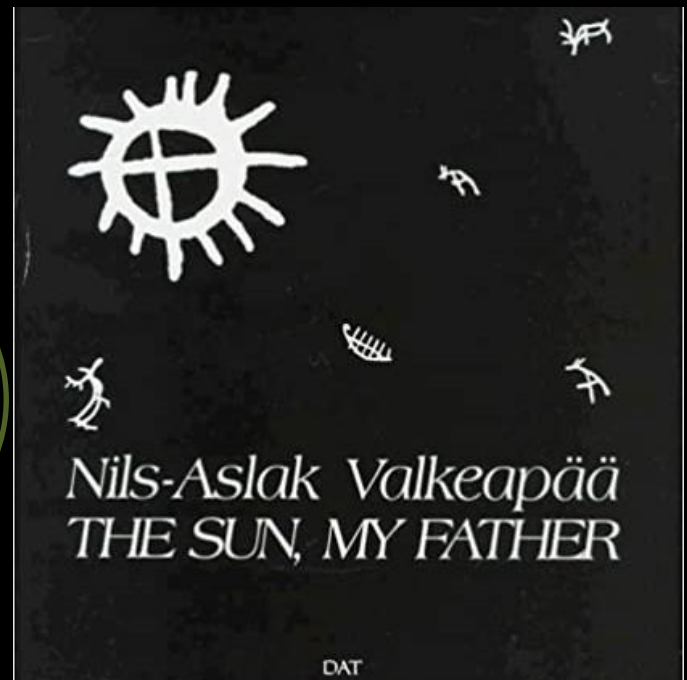
- pea seedlings and mimosa plants learn by association (Gagliano et al. 2014, 2016, Markel 2020)
- common mustard displays multigenerational inheritance of stress memory (Bilichak et al. 2015, Yadav et al. 2022)
- various species have the ability to 'forget' memories with potentially harmful effects on subsequent generations (Crisp et al. 2016)
- plants interpret sensory data to negotiate environments (Chamovitz 2012, Arimura 2021)
- arabidopsis enacts forms of altruism including care for kin and non-kin (Bais 2015, Dudley 2015, Murphy 2017)
- wooded web or rhizosphere (Gross 2016, Simard 2018, 2021)

Pekka Halonen, 'Titmice in Birch Trees' (1900), 35 × 16cm, oil, Ateneum Art Museum



THE SUN, MY FATHER (1991) NILS-ASLAK VALKEAPAA

66. time
for thoughts
to know
in time
the creek's flute
the wind
spoke
conversed
plays
the tundra
the times
the stones
the lichen on the pebbles, the reindeer moss
opens itself
moves
comes alive
and if I did not know the language myself
they told me
whispered
spoke
made a yoik



KEY THEORIES AND METHODOLOGIES



Ilkka Halso, 'Restoration' (2000), 132.5 × 100cm, photograph

- Theories of agency, embodiment, language, narrativity, sensoriality, subjectivity and temporality in plants (Marder 2013, Nealon 2015, Ryan et al. 2017, 2021)
- Historical and archival approaches (Driver and Cornish 2021, Driver et al. 2022)
- Ethnography (interviewing, participant observation) (Hartigan 2017 'How To Interview a Plant')
- Textual and discourse analysis (Ryan, 2018, Meeker and Szabari 2019)
- Digital plant humanities (Gianquitto and LaFauci 2022, Arthur and Ryan 2023)
- Creative, arts-based, practice-led approaches (Arlander 2019, 2020, Ryan 2020)
- Collaborative multispecies frameworks (Kealey 2019, Rezvani 2022)

Practice & Research in Plant Humanities



Kew herbarium specimen



Burchell colour chart 1820s (Kew)



Lindsay Sekulowicz, Watercolour 2017

Practices of collecting, making, documenting and analysing plants and plant-based artefacts have been the subject of much research in the Plant Humanities – for example, studies of the visual culture of botany (*Making Visible: The visual and graphic practices of the early Royal Society*, Sachiko Kusakawa, University of Cambridge, AHRC).

In addition to this concern with practices as objects of study, some Plant Humanities projects deploy drawing, writing and performance as practice-based methods of research. Examples include:

Sensing and presencing rare plants through contemporary drawing practice

Sian Bowen, Northumbria University, Leverhulme Trust

Collection to source: cosmology and ethnobotanical artefacts of the Northwest Amazon

Lindsay Sekulowicz, University of Brighton with RBG Kew, AHRC

Changing treescapes: making visible the cultural values at risk from tree pests and diseases through arts approaches

Julie Urquhart, University of Gloucestershire, AHRC

Some Recent Research Projects on Biocultural Collections



Cotton from Guyana, 1880
(Kew collections)



Parts for a violin from Bavaria, 1861
(Kew collections)



Rain cape from the Philippines, 1985
(Kew collections)

Biocultural collections are repositories for plants and animal specimens of use to people, potentially or actually. Typically they include both specimens and products, whether hand or machine-made, along with materials such as plant fibres and extracts. In the nineteenth and twentieth centuries, economic botany collections were found in many museums and botanic gardens, providing an archive of resource extraction. Today, with some exceptions (notably at Kew), such collections have been dispersed or renamed. From an arts and humanities perspective such assets provide the basis for interdisciplinary research on the intellectual, economic, cultural and scientific aspects of resource use - past, present and future.

Recent research projects on biocultural collections include:

Situating Pacific barkcloth production in space and time

Frances Lennard (University of Glasgow), Adrienne Kaeppler (Smithsonian) and Mark Nesbitt (Kew), AHRC research grant

Mobile museum: economic botany in circulation

Felix Driver (Royal Holloway) and Mark Nesbitt (Kew), AHRC research grant

Digital repatriation of biocultural collections: connecting scientific and indigenous communities of knowledge in Amazonia

Luciana Martins (Birkbeck), British Academy research grant

Seeds for survival: a global history of seed banking

Helen Curry (Cambridge), Wellcome Trust Award in the Humanities & Social Sciences



Annette Arlander, 'Meetings with Remarkable and Unremarkable Trees' (2018–19), <https://annettearlander.com>

NARRATIVE BASIS OF THE PLANT HUMANITIES

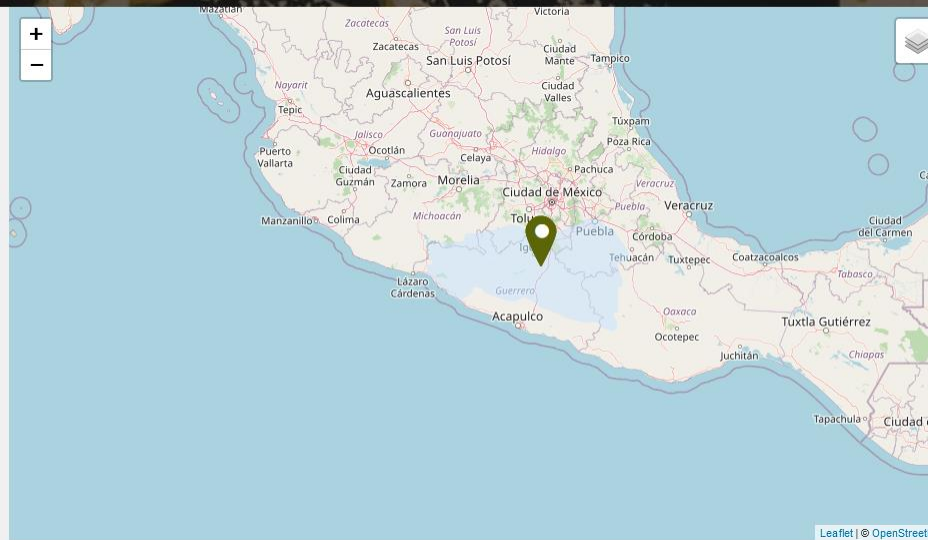
Maize: Sacred Plant, Global Commodity

Julia Fine

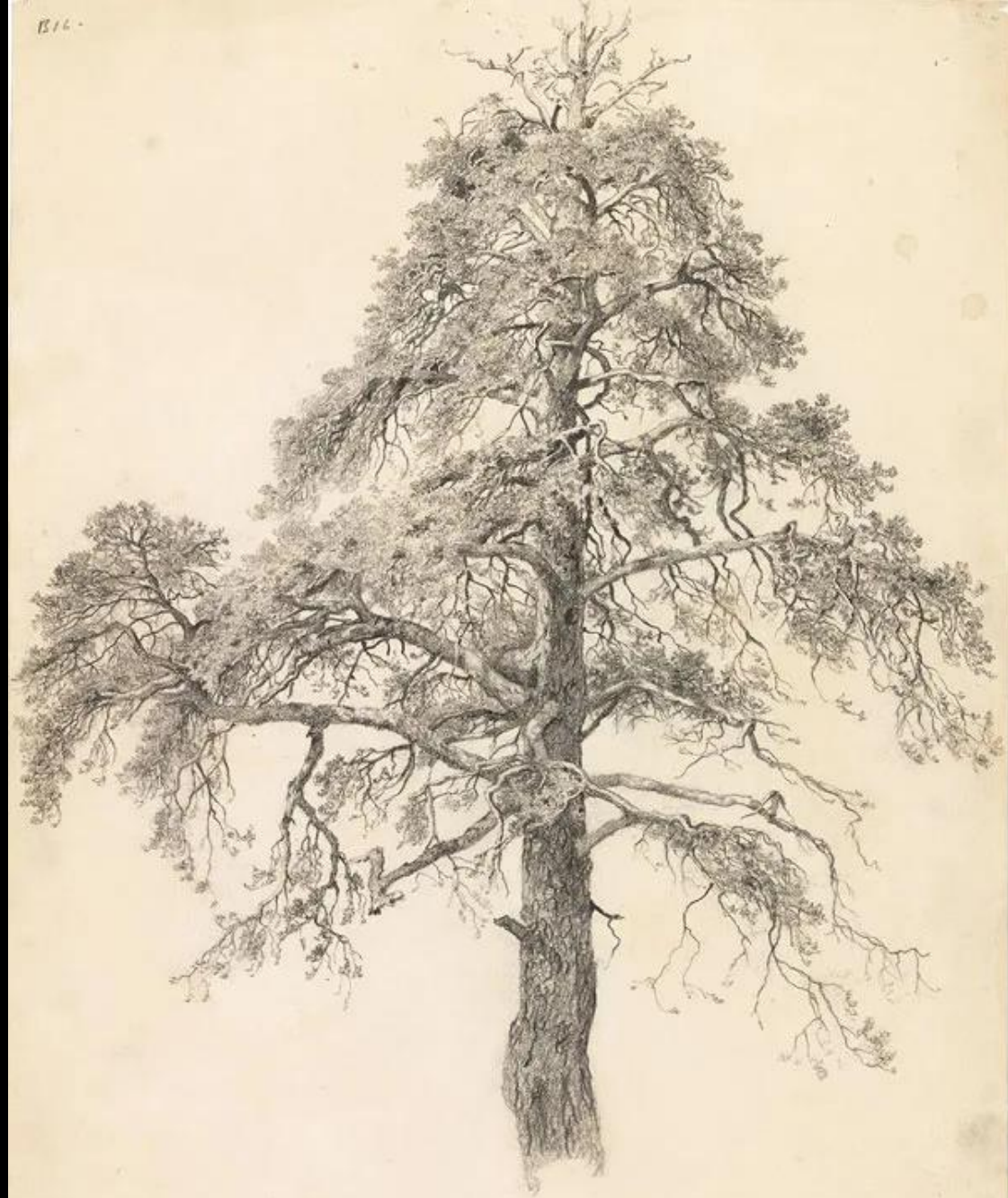
More resources

The year was 2014, and many Guatemalans were incensed. With a population of 14 million, approximately 120,000 took to the streets. Protesters blocked traffic along the Pan American Highway and other major roadways to voice their opposition to the “Law for the Protection of New Plant Varieties,” or, as it was popularly known, the “Monsanto Law.” The law “outlawed the replanting, transportation, or selling of privatized seeds without permission, and made these actions punishable by one to four years in jail and a fine of 1,000 to 10,000 quetzals (US\$130 to \$1,300).”^[1]

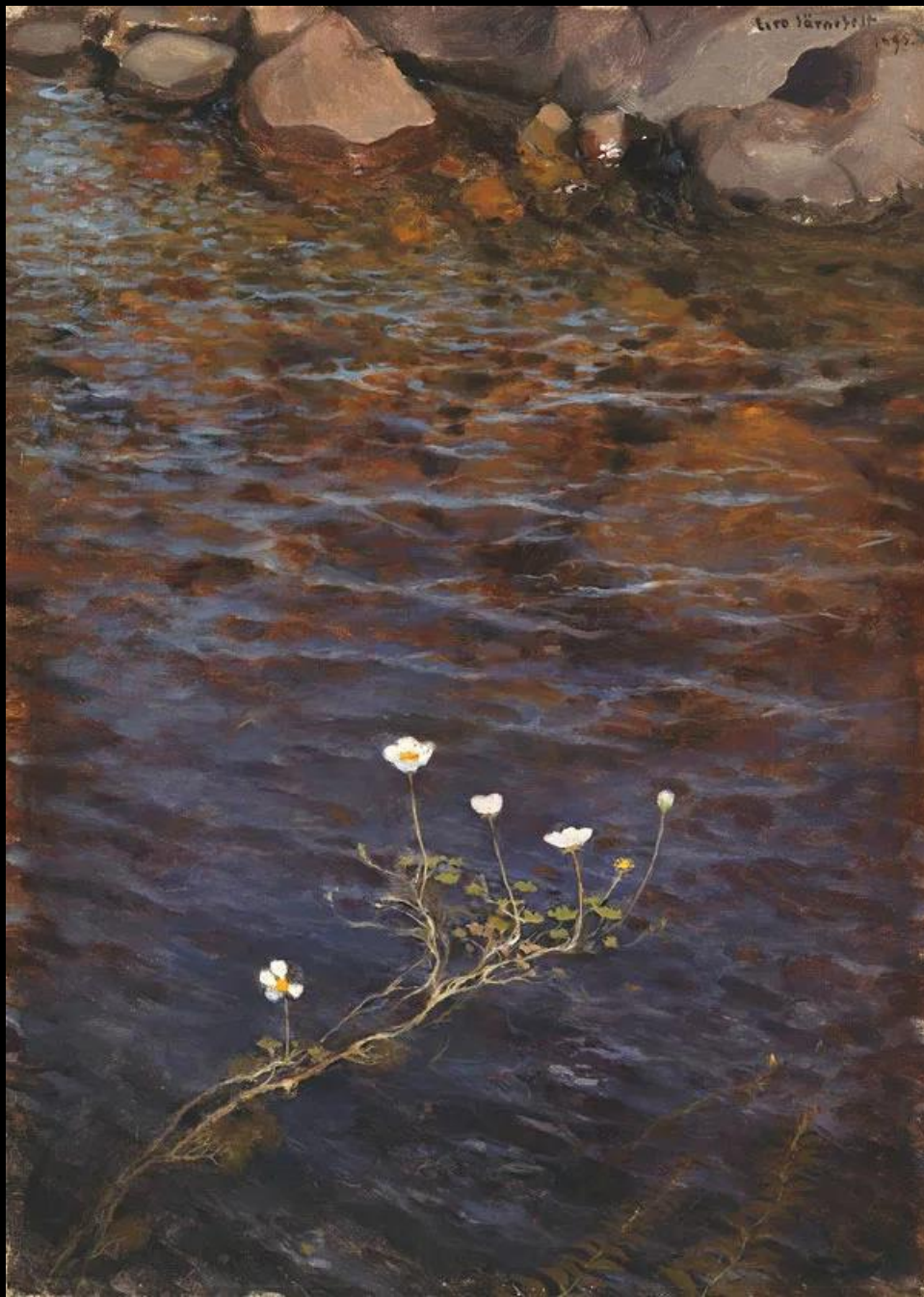
While the law sought to regulate the use of particular maize seeds engineered by Monsanto to withstand the company’s glyphosate-based herbicide, Roundup, the Guatemalan public saw several problems with this protection for privatized seeds, or genetically modified seeds subject to a patent or copyright. This included anticipating that the law would increase farmer dependence on big agribusiness. Opposition to the law swelled, bringing together, according to cultural anthropologist Liza Grandia, a motley crew of protestors, including “peasant federations, health workers, biologists, Maya spiritual leaders, environmentalists,



Julia Fine, 'Maize: Sacred Plant, Global Commodity' (2023) Plant Humanities Lab, <https://lab.plant-humanities.org/>



Eero Järnefelt, 'Pine Top' (c. 1900), 40.5 × 31 cm, pencil,
Finnish National Gallery



Eero Järnefelt, 'Pond Water Crowfoot' (1915) (left) and 'Frog With Marsh Marigold' (1915) (right)

THE PLANT HUMANITIES IN FINLAND



Ilkka Halso, 'Roller Coaster' (2004), 100×134cm, photograph, Finnish National Gallery

THE PLANT HUMANITIES IN FINLAND: POSSIBILITIES FOR COLLABORATION

Museums

- National Museum of Finland
- Finnish Museum of Natural History
- Finnish Museum of Photography
- Regional and specialist museums

Galleries and Art Institutes

- Finnish National Gallery (online)
- Ateneum & Kiasma

Botanical Gardens

- Kaisaniemi Botanic Garden
- Kumpula Botanical Gardens
- Botanic Garden of University of Turku
- University of Oulu Botanical Gardens
- Arktikum Arboretum

Herbaria

- LUOMUS Botanical Collection (Helsinki)
- Herbarium TUR (Turku)
- Nylander Herbarium (Lichens, Fin Museum)





'Takavuoma Bog and Ylläs Fell in Äkäslompola, Lapland' (2021), Wikimedia Commons



'Yllästunturi Visitor Center Kellokas' (2023), J. C. Ryan

Kirjasto/Library



767.



SIBBALDIA
Sibbaldia procumbens

NÄRVÄNA
Sibbaldia procumbens

DVÄRGFINGERÖRT
Sibbaldia procumbens

679.



ALPINE MILK-VETCH
Astragalus alpinus

TUNTURIKURJENHERNE
Astragalus alpinus

FJÄLLVEDEL
Astragalus alpinus



'Yllästunturi Visitor Center Wild Berry' (2023), J. C. Ryan



'Yllästunturi Visitor Center Tussock Cottongrass *Eriophorum vaginatum*' (2023), J. C. Ryan

THE PLANT HUMANITIES IN FINLAND: POSSIBLE RESEARCH TOPICS (TOP 20)

- 1) **Traditional botanical knowledge and practices** of Sami people
- 2) **Representations of plants** in literature, film, performance, music & popular culture
- 3) **Representations of plants** in art, illustration, photography, craft & digital media
- 4) **Historical depictions of Finnish species** by botanists, ecologists & naturalists
- 5) **Histories of plants**, human-flora traditions & collecting institutions
- 6) **Role of plants** in folklore, mythologies & biocultural knowledge systems
- 7) **Creation of digital collections** of Finnish botanical heritage
- 8) **Role of plants** in religious traditions & spiritual ceremonies
- 9) **Contribution of vernacular plant nomenclatures** to Finnish dialect formation
- 10) **Plant migration** across national borders (Finland, Sweden, Norway & Russia)
- 11) **Trans-border human-plant interactions** (Karelia, Lapland & Sápmi)
- 12) **Citizen science**, human migration & plant knowledge networks
- 13) **Interaction between plants**, politics, governance & nationalism
- 14) **Local food cultures**, seed cultures, wildcrafting & other plant-focused practices
- 15) **Plant-centric seasonal events** (e.g., World Championships of Berry Picking)
- 16) **Specific cultures of plants** (e.g., Cloudberry culture in Finnish Lapland)
- 17) **Plants, wellbeing, recreation & tourism** (e.g., sauna whisk, *vihta*, usually made from birch twigs)
- 18) **Humanistic & arts-based** interventions in botanical conservation
- 19) **Anthropocene impacts** on human-plant traditions and relations in Finland
- 20) **Mourning, grieving & solastalgia** associated with plant diversity loss



University of Oulu Botanical Garden, May 2023, photos by J. Ryan

BERRIES

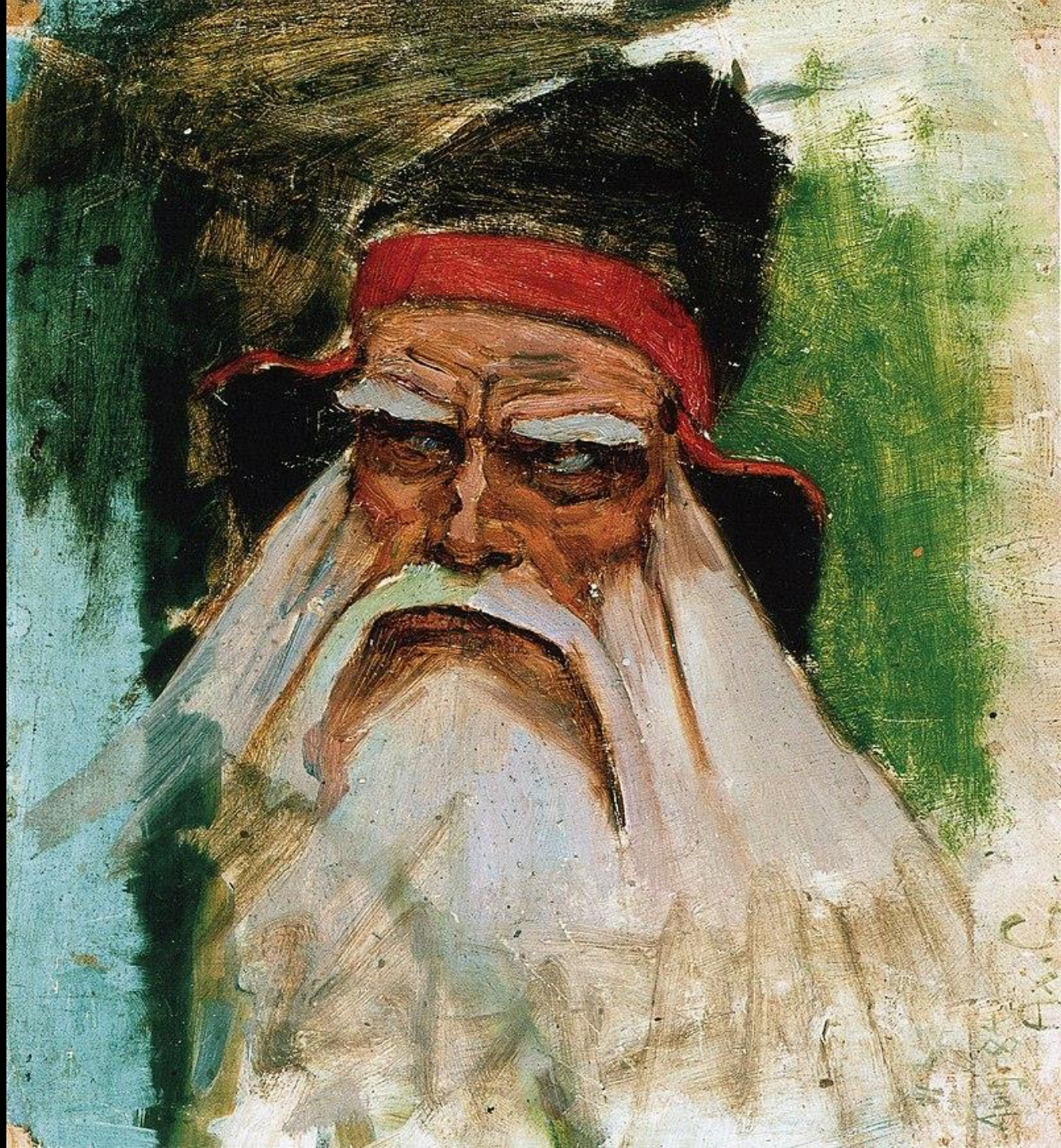


Heli Kurunsaari, 'One Evening' (2016), 100 × 94cm, woodcut

The Kalevala (1835)

- 'Berries grow on every mountain' (Canto III)
- 'Yield the ripe, nutritious berries' (Canto III)
- 'In the happy days of childhood / Hunting berries in the coppice' (Canto IV)
- 'Lest the harvest be ungarnered / Lest the berries be ungathered' (Canto X)
- 'In the marshes berries plenty / Strawberries upon the mountains' (Canto XI)
- 'Beautiful the mountain-ashes, / Beautiful their leaves and flowers, / Still more beautiful the berries' (Canto XXIII)

Akseli Gallen-Kallela, 'Head of Väinämöinen' (1895), 27 x 24cm, oil on canvas

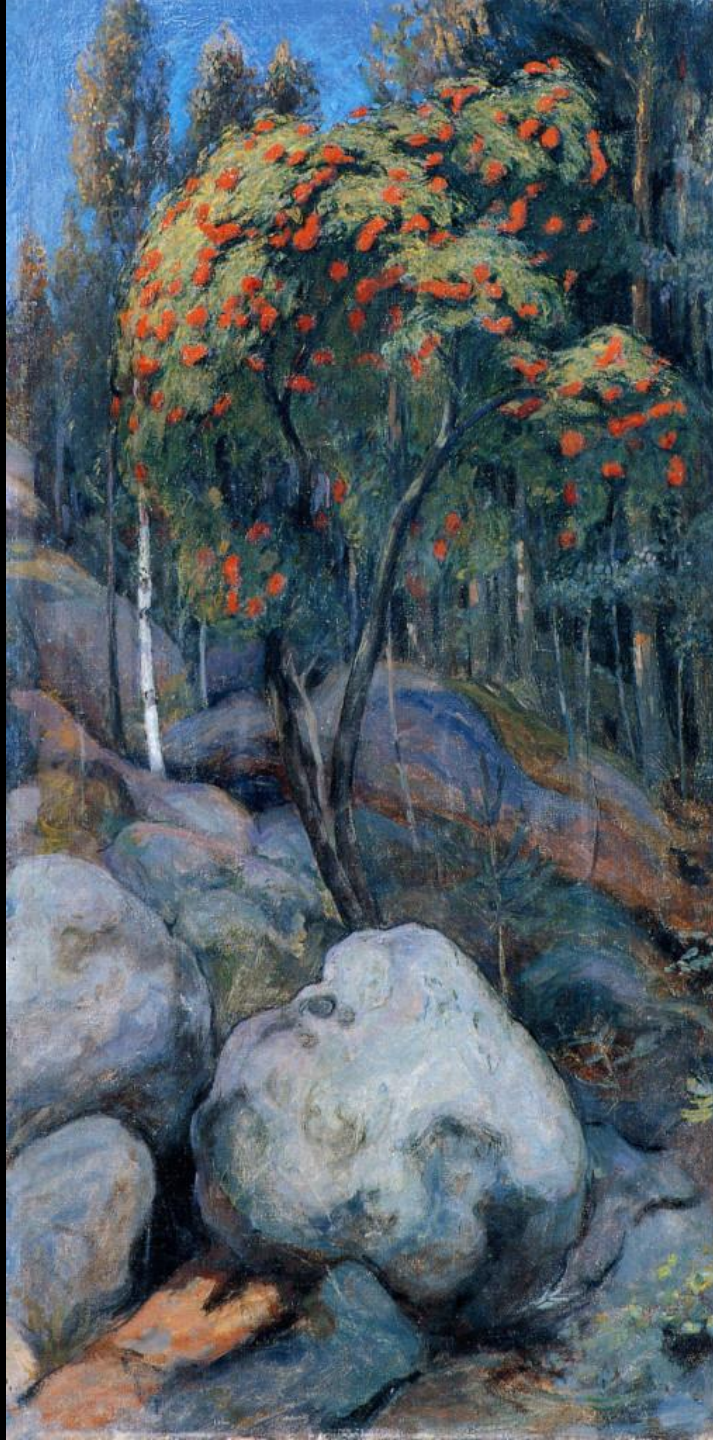




Eero Järnefelt , 'Berry Pickers' (1888), 45.4 x 69.7cm, oil on canvas



Tove Jansson, 'The Berry Pickers' (1941), 60 x 73 cm, oil on canvas



Pekka Halonen , 'Pihlaja' (1894), oil on canvas

Pekka Halonen , 'Rowan Tree' (1908), 87 x 64cm,
oil on canvas, Finnish National Gallery





Eero Järnefelt, 'Rowan Berries' (1915), 33.5 × 42cm, oil on wood, Finnish National Gallery

NATIONAL WILD BERRY MONITORING



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Weather information as a tool for improved wild berry utilization

MARJASÄÄ

INTRODUCTION

PROJECT TEAM IN LUKE

By utilizing the wild berry yield monitoring data of the Natural Resources Institute and the meteorological data of the Finnish Meteorological Institute, the effects of weather factors on the yield formation of wild berries (blueberry, lingonberry, cloudberry) are modeled. The yielded models are further processed into map data, by using

Project duration

1.1.2022–31.12.2023

Rainer Peltola and Jari Miina, 'Weather Information as a Tool for Improved Wild Berry Utilization' (2022–23), LUKE

BIRCHES



Tuulikki Pietilä

Tuulikki Pietilä 1964

Tuulikki Pietilä, 'Birchbark' (1964), 42.5 × 47cm, soft-ground etching, woodcut, Finnish Nat Gallery

Werner Holmberg, 'Koivunrunkoja, Harjoitelma' (c. 1854),
34×28cm, oil on canvas, Finnish National Gallery





Eero Järnefelt, 'Koivuja' (1884), 24×22cm,
oil on canvas, Finnish National Gallery



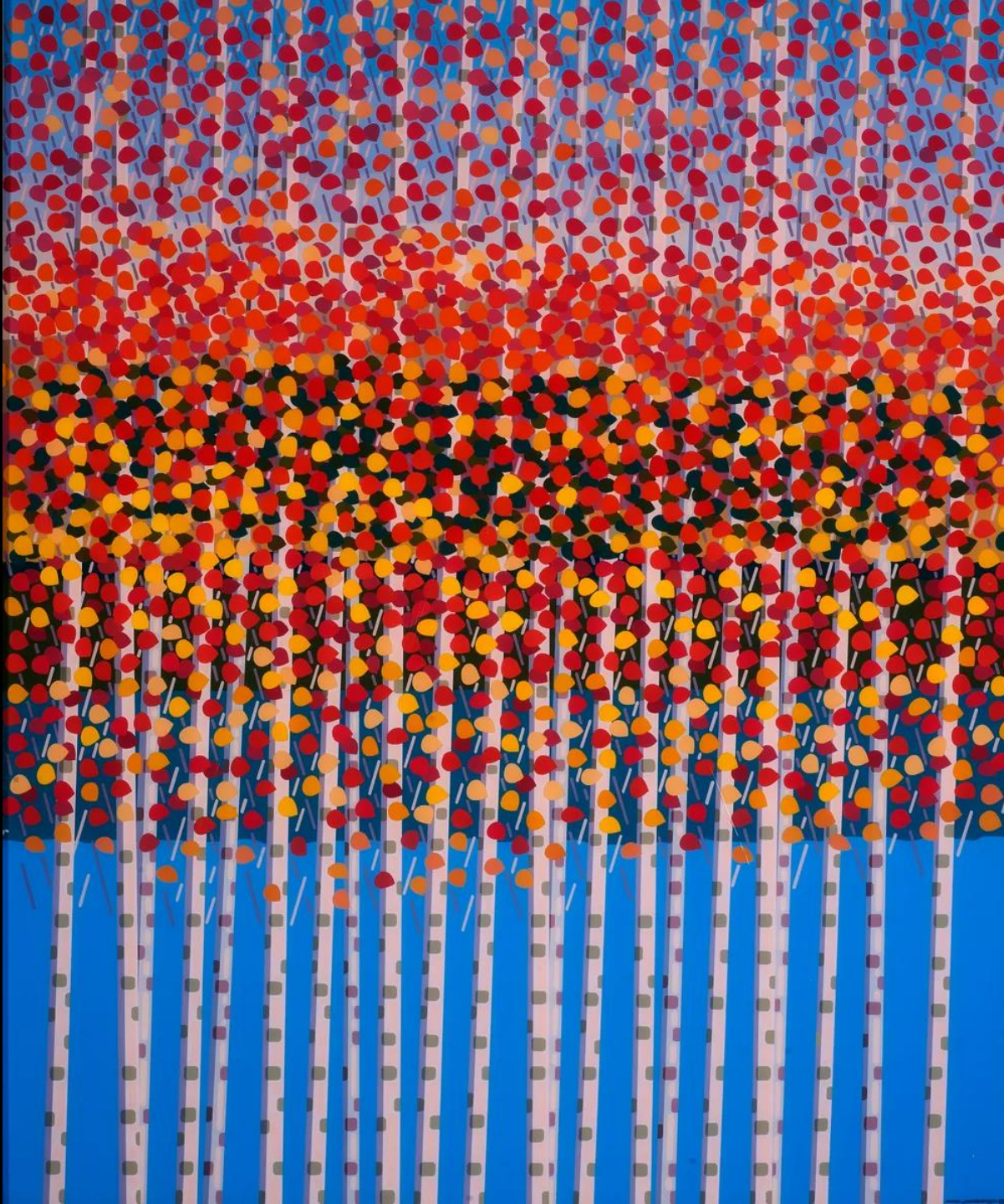
Magnus Enckell, 'Birches in Vääksy' (1919), 60.5 × 74cm, oil on canvas, Finnish National Gallery

Helmi Kuusi, 'Koivu ja pilvi [Birch and Cloud]' (1965), 33.4×28.9
cm, drypoint print, Finnish National Gallery





Hilikka Ukkola, 'Koivu' (1976), 28.5×35cm, etching, Finnish National Gallery



Antti Jantunen, 'Autumn Birches' (1977),
118×98cm, Finnish National Gallery



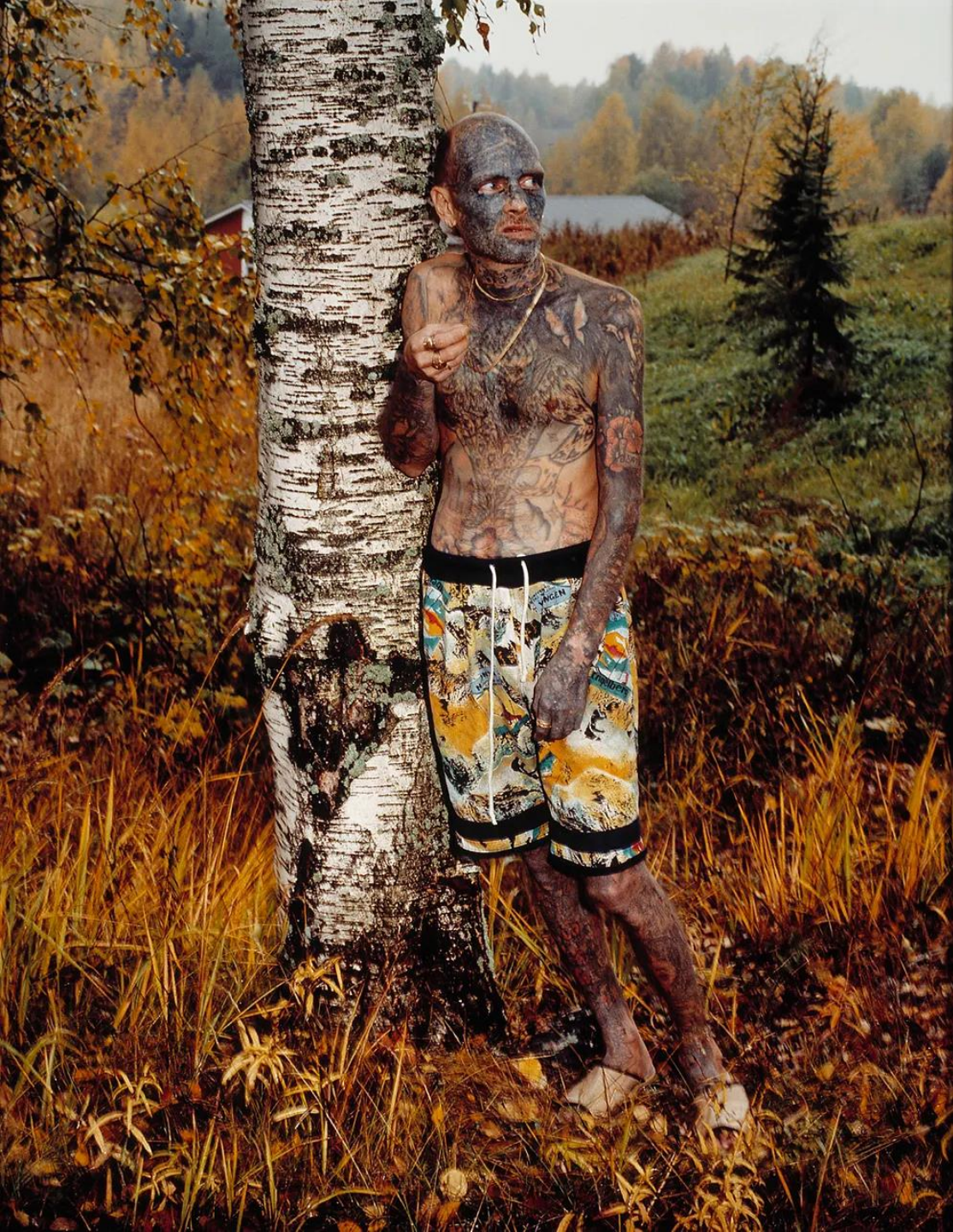
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Viktor Kuusela - 82

Viktor Kuusela, 'Tunturikoivu' (1983), 22.5×33cm, aquatint, etching, Finnish National Gallery



Jorma Puranen, 'From the series Imaginary Homecoming: Untitled' (1991), 38cm, photography, Finnish National Gallery



Jouko Lehtola, 'Tommi from the series Marked Skin' (1999), 100×80cm, photograph, Finnish National Gallery



Janette Holmström, 'Sarjasta Katkos (puut)' (2021), 105x157cm, photography, Finnish National Gallery

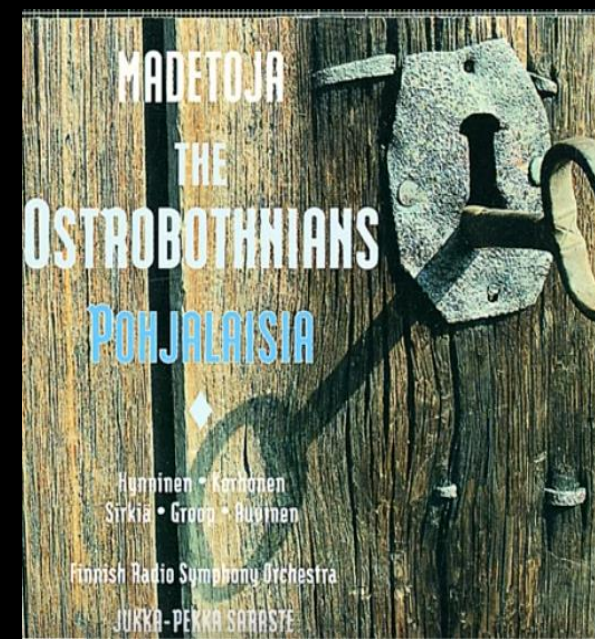
the sun
through the cloth
ribbons of light
the birch shadows ripple
the cloth into a yoik
the face of the tundra

I knew
I know

540 the low grown arctic birch
the hidden shadows of the thickets
the excitement of the golden plover
to the tundra's windy sea

545. the sun was big and red
warm and adorning, illuminated
our heart's moor
and we heard, it shone
smiling to the willow trunk
grass growing on the slopes, bursting buds
pushing sap
below the birch bark
the blood's vein
rippling





Laura Sippola & Tuki, 'Tuuli Se Taivutti Koivun Larvan [The Wind Bent the Birch Tree Top]' (2015), South Ostrobothnian Folk Song
www.youtube.com/watch?v=ddHRQGq8tx8

SUMMER

The birch tree photosynthesises and collects energy from sunlight.

AUTUMN

The birch stores the energy it has collected into its roots in the form of sugars.

SPRING

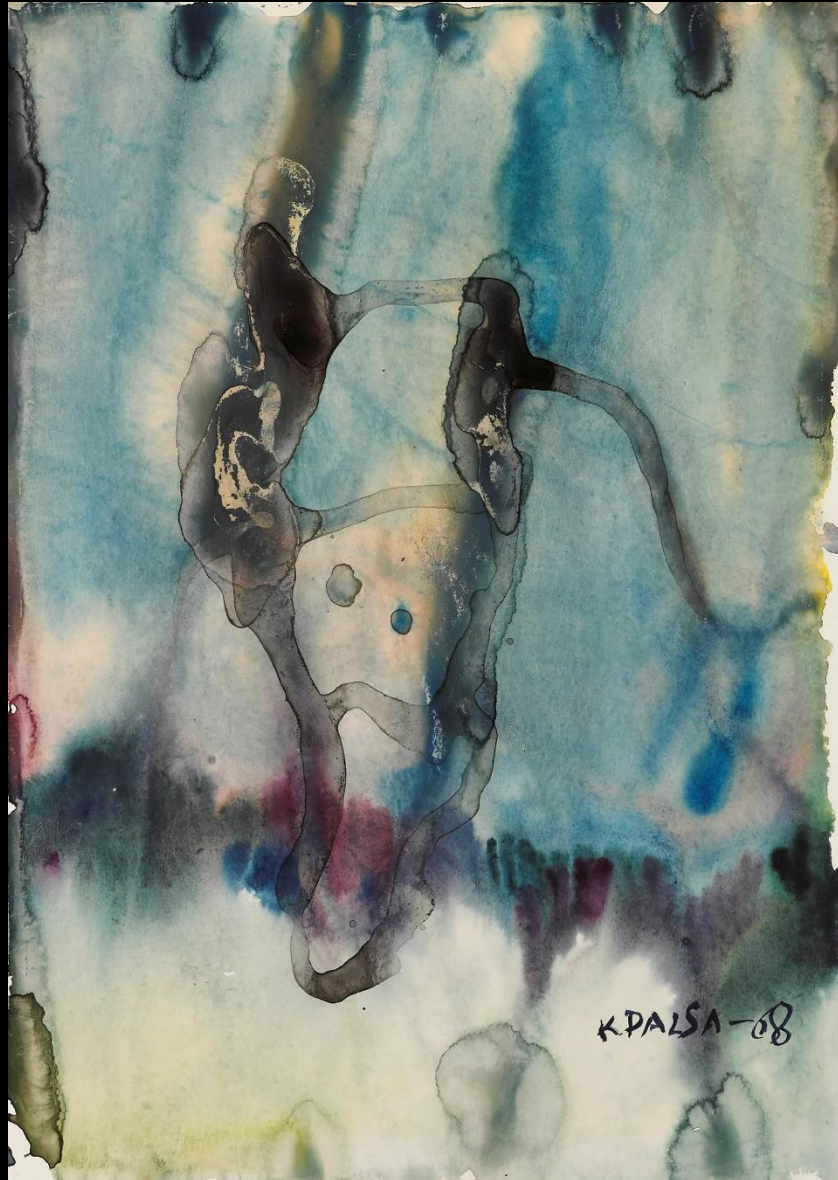
The birch draws water and minerals from the soil and mixes them with the stored sugars. For three weeks, birch water flows towards the top of the tree. The time to collect birch water ends once the tree has acquired a sufficient amount of nutrients and is ready to grow leaves.

WINTER

In the cold Nordic winter, the birch rests and preserves its strength.



BOGLANDS



Kalervo Palsa, 'Bog Landscape' (1968), 42×29.5cm, watercolour



8/30

Vilho Askola 1956.



Helmi Kuusi, 'Suo' (1965), 26.9 × 30.4cm, aquatint, drypoint, Finnish National Gallery



Helmi Kuusi, 'Boggy Lake' (1965), 14.5 × 15cm, aquatint, drypoint, Finnish National Gallery

Tuulikki Pietilä, 'Bog Mist (from the series Other Worlds)' (1966), 54.5 x 44.5cm, aquatint, soft-ground etching, woodcut, Finnish National Gallery





Aimo Kanerva, 'Snow on Marshes, Raattama' (1972), 25 x 46cm, oil on canvas, Finnish National Gallery



Aune Mikkonen, 'Suo' (1978), 22x28.5cm, aquatint, drypoint, Finnish National Gallery



Reijo Turunen, 'Suo' (1984), 100 x 80cm, crayon, oil, Finnish National Gallery



Irmeli Hulkko, 'Bog 1' (1999), 44 x 44cm, gouache, watercolour, Finnish National Gallery



Tarmo Paunu, 'Suo' (2011), 50x61cm, oil on canvas, Finnish National Gallery



Väinö Kirstinä from *Säännöstely eutanasia* (*Rationed Euthanasia*, 1973)

Tree roots wedge into a rock to break it.

How does that happen?

Let's take a birch root – it squeezes and grips the rock
and when the tree sways, the root pulls away from the rock
just a little with each shake of the tree.

If the tree is tall, fifteen meters, let's say,
the wind strong and the treetop bushy, there's enough
strength if only the roots can take it.

How patient the birch has to be!

And yet fast!

It cannot crunch the rock to pieces all at once,
for it grows in the rock and would fall.

It works quietly.

**All the time, it enters deeply into the situation and comprehends
the rock with its roots.**

Now, when the tree sways once
and something in the rock moves a tiny bit,
let's say, making a hairline crack,
just then some tip of fine roots
falls or sinks into a crevice of the rock and stays there with the sand and earth,
and the rock is finally split
and the crack can never grow together.

**The root doesn't think, of course,
nor does the treetop. They don't conspire
to conquer the rock
but the stone is rent all the same.**



Thank you



For



Listening

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