

Towards the Circular Management of Construction and Demolition Waste

(Learning from innovative practices, barriers and enablers for designing Urban Resource Centre in European cities)

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Conference



EESTI RAHVA
MUUSEUM
Estonian National Museum



PEEDIST
PESUMASIN



Tartu
2024
European
Capital of Culture

SUSTAINABILITY

IN PRACTICE

DIY Repair, Reuse and Innovation

30.10-2.11.2024

Estonian National Museum, Tartu, Estonia

Estonian National Museum
Estonian Road Museum
Tartu City Museum
Estonian Agricultural Museum

SUSTAINABILITY IN PRACTICE: DIY Repair, Reuse and Innovation

30 October — 2 November 2024

Programme and Abstracts



Tartu 2024

The conference is organised by the Estonian National Museum in collaboration with the Washing Machine Made of Beetroot joint exhibition project curated by the Estonian Road Museum, the Estonian Agricultural Museum, and Tartu City Museum.

Conference Committee:

Tenno Teidearu (Estonian National Museum), conference committee head

Paavo Kroon (Estonian Road Museum)

Madle Uiibo (Tartu City Museum)

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TARTU CITY MUSEUM



ESTONIAN
AGRICULTURAL MUSEUM



EESTI RAHVA
MUUSEUM
Estonian National Museum

**WASHING MACHINE
MADE OF BEETROOT**



EMm
Estonian Road Museum



PROGRAMME

30/10/2024	
Exhibition Tour	
11:00–17:30	Tour of the Washing Machine Made of Beetroot joint exhibition project
19:00–22:00	Opening reception at the Tartu City Museum
31/10/2024	
Academic programme at the Estonian National Museum	
9:00–10:00	<i>Registration, coffee and tea</i>
10:00–10:15	Welcome Address
10:15–11:45	Keynote <ul style="list-style-type: none"> • Steven J. Jackson (Cornell University), <u>Broken World Thinking: Maintenance, Repair, Hope</u>
12:00–13:30	Session 1
	Museums and Sustainability <ul style="list-style-type: none"> • Tiina Paavola (The Historical Museums of Tampere), <u>Reuse, Recycle or Sale? Good Practice in the Use of Deaccessioned Textiles</u> • Katrina Kūkoja (Latvian Museum of Literature and Music), Elina Kursīte (Latvian Museum of Literature and Music) and Leonarda Ķestere (Latvian Museum of Literature and Music), <u>Preservation for the Future: Aligning Museum Policy with Sustainability Goals</u> • Theodora Năstasie (National Museum of the Romanian Peasant), <u>Table Display Case to Office Desk to Artefact: Assigning Uses to the Material Legacy of Former Socialist Museums</u> • Magdalena Puchberger (Volkskundemuseum) and Blandine Smilansky (House of European History), <u>History of Waste: Stories of Re-Use and Sustainability, a Cooperation Project on a European Level</u>
	Renovation and Repair 1 <ul style="list-style-type: none"> • Daniela Moisa (Université du Québec à Rimouski) and Iurie Stamati (Université du Québec à Rimouski), <u>Vernacular Houses, Repair and Community Building in Quebec, Canada</u> • Iida Kalakoski (Tampere University), <u>Building Repair As a Learning Process</u> • Sigrun Thorgrimsdottir (University of Gothenburg), <u>Byggnadsvård: Mobilising Alternative Narratives of Building Care</u> • Viktorija Smailytė (Museum of Urban Wooden Architecture), <u>Wooden Architecture: An Integral Part of a Sustainable and Environmentally Friendly City</u>

	<p>Resilient Community Practices</p> <ul style="list-style-type: none"> • Sunna Kovanen (Brandenburg University of Technology Cottbus-Senftenberg) and Lilian Pungas (University Duisburg-Essen; Friedrich Schiller University Jena), <u>On Babushkas and Post-capitalism: Theorising Diverse Economies from the Global East</u> • Lilian Pungas (Friedrich Schiller University Jena) and Bianka Plüschke-Altöf (University of Tartu; Tallinn University), <u>Same, Same but Different? The ‘Right’ Kind of Gardening and the Negotiation of Neoliberal Urban Governance in the Post-socialist City</u> • Dagmar Narusson (University of Tartu), Anneli Kährik (University of Tartu), Aet Annist (University of Tartu), Bianka Plüschke-Altöf (University of Tartu) and Lilian Pungas (University of Tartu), <u>Community Garden As a Citizen Space: Analysing the Transformative Potential of Emajõe Garden in Tartu</u> • Saara Mildeberg (Tallinn University), Lilian Pungas (University of Duisburg-Essen; Friedrich Schiller University Jena) and Annela Samuel (Tallinn University), <u>Building Bridges with Gardeners’ Day: A Tribute to Overlooked Food Self-Provisioning Practice through Transdisciplinary Dialogue and Co-creation</u>
13:30–14:30	<i>Lunch</i>
14:30–16:00	Session 2
	<p>Repair and Reuse Communities 1</p> <ul style="list-style-type: none"> • Rachel Smith (Repair Shop) and Sam Bennett (Repair Shop; Eindhoven University of Technology), <u>How Mending Survives: Repair and the Role of Communal Knowledge Exchange</u> • Isabel Ordóñez (Central University of Catalonia), <u>Fixoteket: Neighbourhood Spaces for Reuse, Repair and Community</u> • Thomas Meyer (Goethe Institute Czech Republic), <u>The Green Side of Libraries</u> • Lauri Mei (Paranduskelder), <u>How to Empower Repair in a Local Community</u>
	<p>Crafts, Heritage and Materials 1</p> <ul style="list-style-type: none"> • Ave Matsin (University of Tartu), <u>Local Natural Craft Materials for Resilience</u> • Asimina Kouvara (Tallinn University of Technology), <u>Vernacular Practices As a Catalyst for Sustainability: The Case of the Pokari Project (Wool)</u> • Lisanna Schmidt-Bureš (Estonian Academy of Arts), <u>Natural Colours As Part of Environmental Sustainability in Fashion: Does it Make Sense to Colour with Natural Dyes, and Which Ones to Choose?</u> • Madis Rennu (University of Tartu) and Andres Rõigas (University of Tartu), <u>Fieldwork Notes through the Eyes of a Craftsman: Economic Interests, Local and Cultural Cooperation in the Intentional Communities of Southern Estonia</u>

	<p>Renovation and Repair 2</p> <ul style="list-style-type: none"> • Rūta Šmite (The Ziedonis Museum) and Una Vindberga (The Ziedonis Museum), Summerhouse As A Manifest Of Sustainability • Timothy Meek (University of Stirling), Vicky Flintoff (University of York) and Kate North (English Heritage), Lime Finishes: What's the Point? • Aljona Gineiko (Estonian Academy of Arts), Considering Using Historical Wood Waste in Restoration through 3D Printing • Amelia Allen and Timothy Meek (University of Stirling), Fractured Fabrics: Exposing the Core of a Building to Reclaim Lost Knowledge and Inform on Modern Approaches
16:00–16:30	<i>Coffee and tea</i>
16:30–18:00	Session 3
	<p>Repair and Reuse Communities 2</p> <ul style="list-style-type: none"> • Frazen Tolentino-Zondervan (Amsterdam University of Applied Sciences) and Willem van Winden (Amsterdam University of Applied Sciences), Towards the Circular Management of Construction and Demolition Waste • Willem van Winden (Amsterdam University of Applied Sciences) and Isabel Ordóñez (Central University of Catalonia), Can Urban Resource Centers Help Us Re-Use CDW? • Iris Tähti Toom (Spatialist Studio) and Henri Kopra (Spatialist Studio), Meanwhile in Kopli • Rakel Jónsdóttir (University of Iceland), Empathfridges: A Story of Freedges and Invisible Family Members
	<p>Crafts, Heritage and Materials 2</p> <ul style="list-style-type: none"> • Thomas O'Dell (Lund University) and Lizette Gradén (Lund University), The Revitalisation of Cultural Heritage and Traditional Crafts: Lessons Learned from a Master Thatcher • Débora Paulino (Universidade de Trás-os-Montes e Alto Douro), Sustainable Applications of Industrial Hemp through a DIY Approach • Mathilde Frances Lind (Arrowmont School of Arts and Crafts), Artefacts or Living Tools? Dilemmas in the Conservation and Use of Antique Textile Equipment • Kadri Tüür (University of Tartu), Innovation In Crafts From A Semiotic Perspective
	<p>Workshop</p> <ul style="list-style-type: none"> • Hanna Korhonen (National Museum of Finland), My Heritage Box
18:00–19:00	Tour of the Daily Use exhibition, given by the exhibition's curators Tomás Errázuriz (Universidad Andrés Bello) and Ricardo Greene (Universidad San Sebastián)
18:00–20:00	Tours of the Estonian National Museum's permanent exhibitions Encounters, and Echo of the Urals

01/11/2024 Academic programme at the Estonian National Museum	
9:00–9:30	<i>Registration, coffee and tea</i>
9:30–11:00	Keynote <ul style="list-style-type: none"> • Tomás Errázuriz (Universidad Andrés Bello) and Ricardo Greene (Universidad San Sebastián), Care, Adapt, Survive
11:00–11:30	<i>Coffee and tea</i>
11:30–13:00	Session 4
	Repair and Mending 1 <ul style="list-style-type: none"> • Ren Ewart (University of Groningen), Sampling Samplers: Mending Heritage and Artistic Practice • Maris Taul, Exploring Traditional Textile Repair Techniques in Estonian Peasant Culture: Insights from the 19th and Early 20th Centuries • Tenno Teidearu (Estonian National Museum), The Changing Meanings of Repair in Estonia: From Necessity to Sustainability • Dominic Brownell (University of Hertfordshire), Repair and Reuse in the Mass Consumption of Cars in Britain, 1950–2010
	Design and Arts <ul style="list-style-type: none"> • Danielle Keller Aviram, Precious Minerals Can Never Become Waste • Amy Schwartzott (North Carolina Agricultural and Technical State University), Recuperating Object Materiality: Recycling in Contemporary Mozambican Art • Evgeniya Grafskaya, Modern Papermaking: Combining Sustainability, Budget and Art • Kateriin Rikken, Junk Glass: A Playful Source for the Glass Artist
	DIY Culture <ul style="list-style-type: none"> • Gábor Kőszegi (Museum of Ethnography) and Tamás Móser (Museum of Ethnography), Objects Born of Lack: Peculiar Object Making Practices in Hungary during State Socialism • Mari-Liis Tammiste (Estonian Agricultural Museum), New Materials and Old Techniques: How Hay Baling Twine and Other Synthetic Materials Were Adapted into Crafting Supplies from the Late 1960s to the 1980s • Madis Vasser and Maria Muuk, Terra Low Tech Theme Park • Robertho Miguel Paredes Coral (University of Tartu), Visual Narratives of the Forest and Tambopata Amazonian Cosmivision
13:00–14:00	<i>Lunch</i>
14:00–15:30	Session 5

	<p>Repair and Mending 2</p> <ul style="list-style-type: none"> • Marium Durrani, A Felt(-ed) Repair: Unveiling the ‘M’ of Mending • Anna-Maria Saar, The Fear of Disappearance • Wendy Ward (Sheffield Hallam University), EveryWear: Embracing Visible Wear through a Daily Hand Sewing Practice
	<p>Fashion and Sustainability</p> <ul style="list-style-type: none"> • Maria Rojko Nisu (Estonian Academy of Arts), DIY Sneakers • Joelle Jackson (Indiana University), Sustainable Consumption and Expressive Practice: Perspectives from a North American Thrift Store • Reet Aus (Estonian Academy of Arts), UPMADE® Certified Upcycled and Recycled Products: Digital Solutions • Key Külaots (Estonian Fashion Festival), Supporting Sustainability in the Fashion Industry: Models and Initiatives
	<p>Degrowth</p> <ul style="list-style-type: none"> • Madis Vasser (Degrowth Estonia), Every Problem Does Not need a High Tech Solution • Maris Pedaja (Degrowth Estonia), Degrowth Visions for Addressing Energy Poverty • Riinu Lepa (Tallinn University of Technology), Work Time Reduction As a Potential Instrument for Sustainable Communities • Marta Konovalov (Estonian Academy of Arts) and Jane Remm (Estonian Academy of Arts), From Sowing Confusion to Dialogical Co-Creation: Artistic and Designer Practices, and Creative Methods for Meaningful Engagement with Nature and Resilient Ways of Doing
15:30–16:00	<i>Coffee and tea</i>
16:00–17:30	Workshop session
	<ul style="list-style-type: none"> • Eerika Koskinen-Koivisto (University of Jyväskylä), Touching As Mediator: Embodied Knowledge of Sustainable Relationships with Things • Marium Durrani and Lucie Hernandez (Royal College of Art), Experiencing Repair: Applying a Repair Toolkit to Foster Social Innovation through Garment Mending Practices • Teele Pehk (Degrowth Estonia), Andra Jelle (Degrowth Estonia), Maria Muuk (Degrowth Estonia) and Diana Matejuk (Degrowth Estonia), Circular Economy and Degrowth: One Cannot Do Without the Other • Agnes Aljas (Estonian National Museum) and Reet Mägi (University of Tartu Natural History Museum and Botanical Garden), Fostering Sustainable Practices in Organisations: Case Study of the Green Museum Label • Débora Paulino (Universidade de Trás-os-Montes e Alto Douro), Workshop: Sustainable Applications of Industrial Hemp through a DIY Approach

17:45–18:45	Tours of Estonian National Museum’s permanent exhibitions Encounters, and Echo of the Urals
19:00–00:00	Ending gala at the Estonian National Museum
02/11/2024 Tour to Public Initiatives in Tartu	
11:00–15:00	Visits to public workshops, community garden and Foodsharing network in Tartu
15:00–16:30	<i>Lunch at Aparaaditehas</i>
17:00–18:30	Public film screening at Elektriteater <ul style="list-style-type: none"> • Rakel Jónsdóttir (University of Iceland), Empathfridges • Asimina Kouvara (Tallinn University of Technology), Tzoumakers: A Mountainous Community of Open Source Technologies

TOWARDS THE CIRCULAR MANAGEMENT OF CONSTRUCTION AND DEMOLITION WASTE

Frazen Tolentino-Zondervan

(Amsterdam University of Applied Sciences)

Willem van Winden

(Amsterdam University of Applied Sciences)

Construction and Demolition Waste (CDW) is the main driver of resource consumption and waste generation in Europe. Although most European countries achieved 70% recovery rate of CDW, the majority is used as backfill. Therefore opportunities for Circular Economy (CE) practices in CDW management are underexploited. This research identifies the innovative practices, barriers, and enablers for developing tailored-made Urban Resource Centre (URC) designs for managing CDW in four European cities, namely Riga, Tartu, Kavala, and Barcelona. Qualitative methods using multiple case studies were used to draw generalisations. Data was collected from reports and interviews with different stakeholders, and a validation workshop was held for URC design in each city. Current innovative practices include recycling and upcycling of CDWs; use of green points, exchange platforms, and waste management apps; repair cafés; selective demolition; and (pilot) initiatives on resource centres that function as material exchange points, recycling centres, work stations for repair and creative ideas, and prototyping hubs, among others. The identified barriers and enablers can be categorised as governmental, market, and individual factors. First, local governments (municipalities) play a key role in facilitating CDW management via both support, such as provision of subsidies, green procurement, and mandatory waste sorting, and through strict regulatory requirements. Second, URCs must be locally rooted with inclusion of citizens, grassroots initiatives, and schools and universities to increase community acceptance, awareness, and education on CDW management. Third, partnerships with local stakeholders, such as repair cafes, waste management companies, and local NGOs, is needed to operate the URCs both in the short and long terms. And fourth, the creation of niche markets such as linking localism (for example locally crafted CE stores) and supplying to businesses in need of CDW, can support the operation of URCs. The identified barriers and enablers can help further improve the design of URCs for each city.