New European

Bauhaus

Reflections from the Nordic co-design

beautiful I sustainable I together

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1. Foreword

To some extent, Nordic countries are at the forefront of climate policies. They are targeting carbon neutrality well before 2050, which is the goal for the EU. As a result, Nordic ministers have made an ambitious joint declaration on low carbon construction and circular principles in the construction sector, which will have a significant influence across Nordic architecture and design of the built and living environment.

Nordic authorities have already established an active collaboration for preparing effective and practical policies for sustainable construction. Regular activities include Nordic stakeholder meetings and Nordic Climate Forum for Construction, held every year. Sustainability and climate action are also well embedded into the architectural policies of the Nordic countries.

Because of this strong ambition towards sustainable built and living environment as well as the rich and diverse Nordic architecture and design traditions, the Nordic countries strongly support the emergence of the New European Bauhaus. European built and living environments, and their development, are pivotal for reaching the climate goals, as well as for addressing the social and demographic challenges that are ahead of our continent.

In order to provide the New European Bauhaus initiative with Nordic ideas, examples and views, we organized a round of joint co-design events, delivered online due to the Covid19 restrictions. This report summarises the outcomes of these events.

The Nordic co-design activities have been organized and facilitated by Finland, the current president of the Nordic Council of Ministers in 2021. In collaboration with other Nordic partners, we have reached thousands of Nordic stakeholders. In addition to numerous local and national events, these joint Nordic events have been instrumental to bring the region together, sharing enthusiasm, building motivation and preparing the ground, suggesting how we might design our way out of our global challenges.

We hope that this report does justice to the many voices that contributed to the Nordic co-design events. We are looking forward to the development of the New European Bauhaus movement. Working with the inspirational potential of design and culture, we are determined to find a sustainable balance in the European built and living environments.

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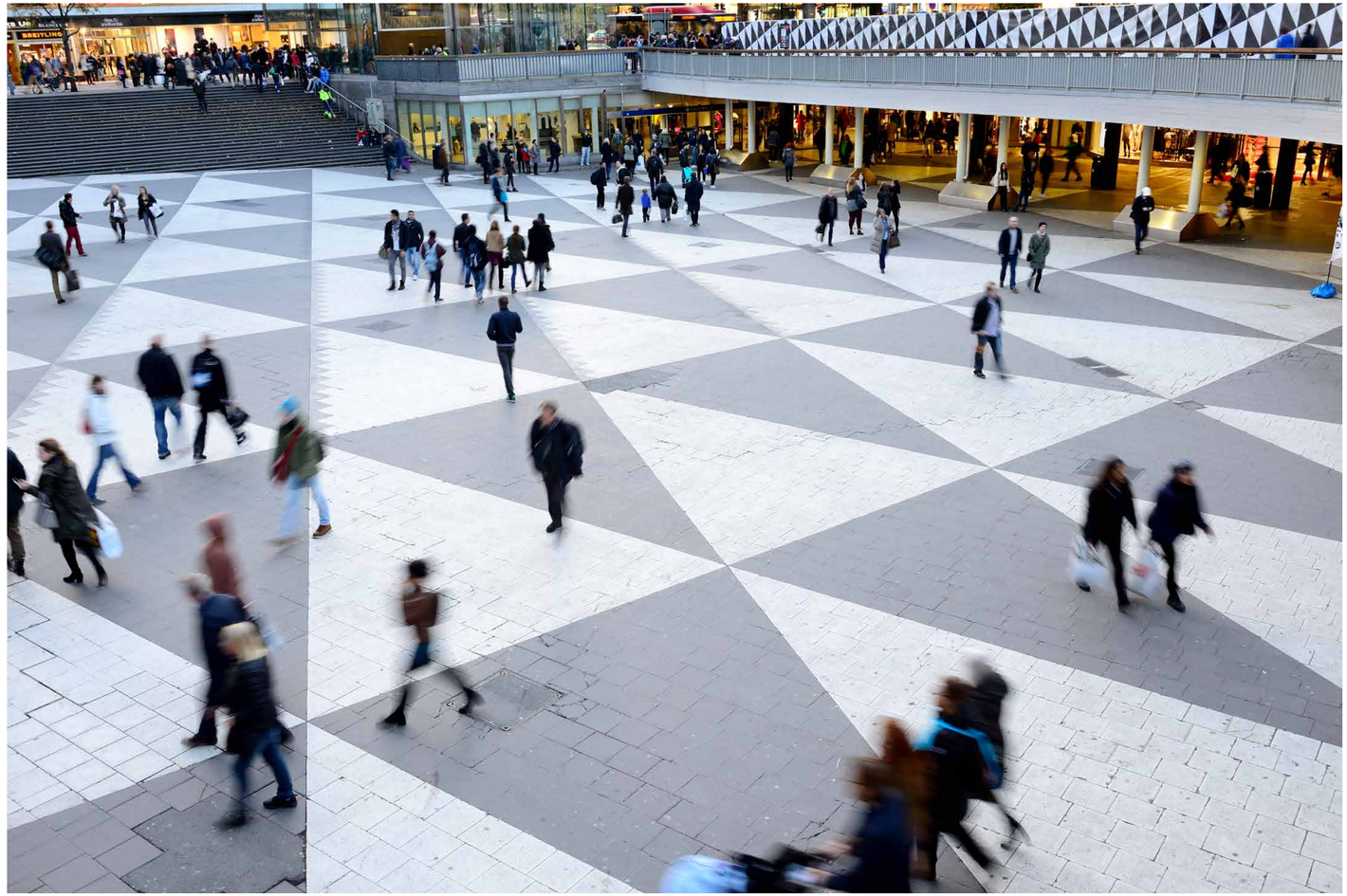
2. Executive summary

The Nordic co-design webinar workshops have gathered over 1600 participants from over 20 countries by the end of May 2021. The intention of the workshops has been to present the New European Bauhaus initiative of the European Commission and to gather joint Nordic ideas, challenges and examples for the development of the initiative. In addition to the co-design webinars, multiple national and regional events have been organized.

The outcomes from the workshops were documented, analysed and grouped. As a result, 22 different thematic groups were identified. The importance of equality, participation, nature and various sustainable building solutions were repeatedly documented among these groups. In addition, weak signals that touched upon the importance of adjusting our societies and values according to planetary boundaries.

All comments from the workshops were further listed and compared to UN's Sustainable Development Goals. Most seemed to represent Goal 11 (Sustainable Cities and Communities), but goals 9 (Industry, innovation and infrastructure), 10 (Reduced inequalities) and 4 (Quality education) showed up in the number of ideas presented as well.

The outcomes of the Nordic co-design workshops will be reported to European Commission during summer 2021.



3. Description of the co-design process

The Nordic Ministers' declaration on low carbon construction and circular principles resonates very well with the New European Bauhaus (NEB) initiative. The same might be said about the Nordic ambition of becoming the world's first carbon neutral welfare region. As Finland holds the presidency of the Nordic Council of Ministers currently, it has brought together these perspectives and facilitated a series of joint Nordic webinars and workshops. In these events, the NEB initiative has been presented and Nordic ideas for its co-design have been gathered.

Altogether eight different joint Nordic events have been held or will be held during the year. In addition to these, there have been several national and regional NEB events.

Over 1650 participants have taken part in creating Nordic perspectives for the NEB by the end of May 2021 (Table 1).

In the five events arranged so far, three have been highly participative co-design workshops. In the other two, the material was gathered from the event chat discussions and talks. The findings of this report are concluded from almost 400 virtual post-it notes, multiple chat comments, surveys and conversation notes.

1678
Amount of registered participants

5700
Number of hours invested in the events by the participants

Table 1. Nordic co-design events and their participants

Date	*Event*	*Registered participants*	*Main organisers*
23.4.2021	Nordic co-design kick-off	833	Ministry of the Environment FI
28.4.2021	Sustainable Aesthetics	249	Ministry of Education and Culture FI, Ministry of the Environment FI
5.5.2021	Beyond sustainability-as-usual: co-creating transformative change in sustainable living	290	Aalto University
6.5.2021	Carbon-smart urban landscape	164	Aalto University
19.5.2021	Wood Architecture and Design in Bauhaus	142	Ministry of the Environment FI
	Total	**1678**	

Table 2. Forthcoming Nordic Bauhaus events

Date	*Event*	*Main organisers*
2.6.2021	What should designers and city planners know about biochar?	Aalto University
Summer 2021	Arctic views to Bauhaus	Ministry of the Environment FI
September 2021	Designs for a Cooler Planet	Aalto University
October 2021	Bauhaus goes digital	Ministry of the Environment FI, Building Information Foundation

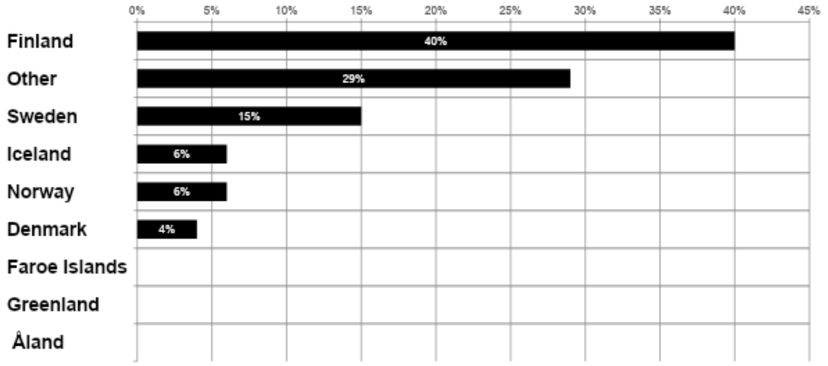
In the series of Nordic events, participants have discussed themes such as

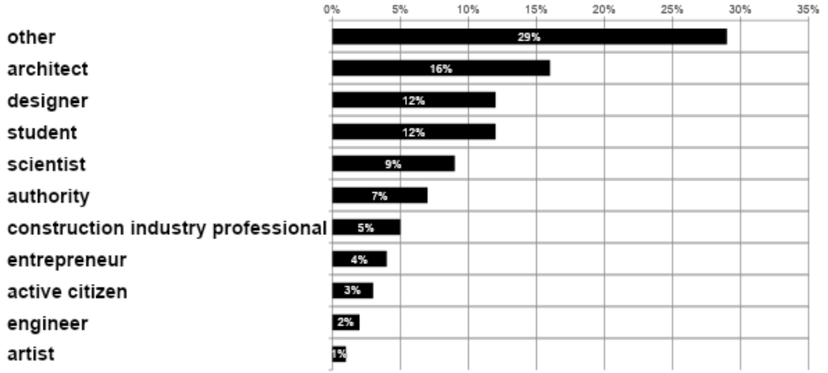
- circular economy & climate
- digital innovation & smart communities
- ecosystems & biodiversity
- children & youth
- knowledge & education
- equality & well-being
- change & creative, collaborative practices
- sustainable aesthetics
- wood architecture & design
- carbon-smart urban landscapes.

These themes, and more, were examined within the context of the built and living environment, and in the framework of the New European Bauhaus's triangle of virtue; inclusion, sustainability and aesthetics.

The discussions were framed around questions of best Nordic examples and ideas: What are the Nordic innovations that should be a part of the NEB? What should a successful NEB initiative focus on? What should it aim for? How should it function? How might we get there? Who should be involved?

The participants were from all the Nordic countries and beyond and represented e.g. the creative and construction industry, scientists, students and authorities.





The events were organized by
- Ministry of the Environment, Finland
- Aalto University
- Ministry of Education and Culture, Finland

in collaboration with
- Nordic Council of Ministers
- National Board of Housing, Building and Planning Boverket, Sweden
- Council for Sustainable Cities, Sweden
- Innovation Agency Vinnova, Sweden
- Archinfo Finland
- Design and Architecture Norway
- Danish Design Centre
- Iceland Design and Architecture
- Nordic Historic Wooden Towns' Network

4. Summary of the results

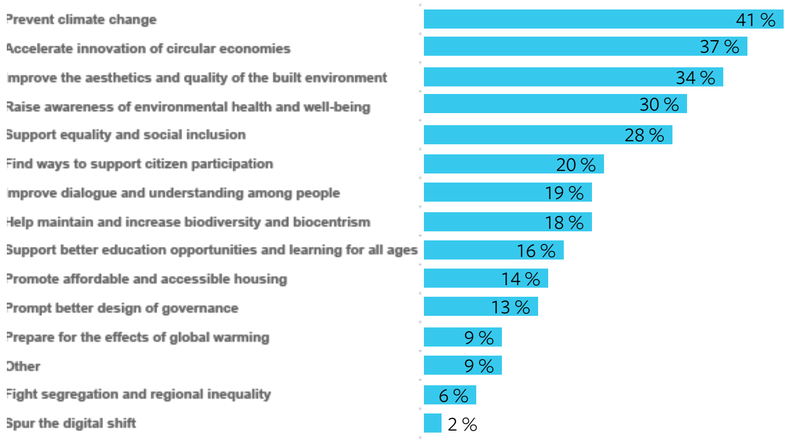
In this section, we present the summary of the views and comments that the participants of the co-design events expressed. In section 5, the underlying comments are presented in relation to the three aspects of the NEB: aesthetics, inclusion and sustainability.

In the first Nordic event, the participants were asked what should be the main goals for the New European Bauhaus. The answers emphasized the sustainable aspect of the initiative, since addressing the climate crisis and accelerating innovation towards circular economies were voted the top two goals for the initiative. Balancing this, the theme for the second Nordic gathering was voted upon by the participants to be “aesthetics”.

All aspects of the initiative – sustainability, inclusion and aesthetics - were touched upon in various discussions across events. The Nordic perspective to the New European Bauhaus is a broad one: It does not focus on any one of the three pillars, but rather has a kaleidoscopic view on the issues represented in the NEB: Sustainability, inclusion and aesthetics are intertwined in a complementary manner, recognising that they are fundamentally interconnected.

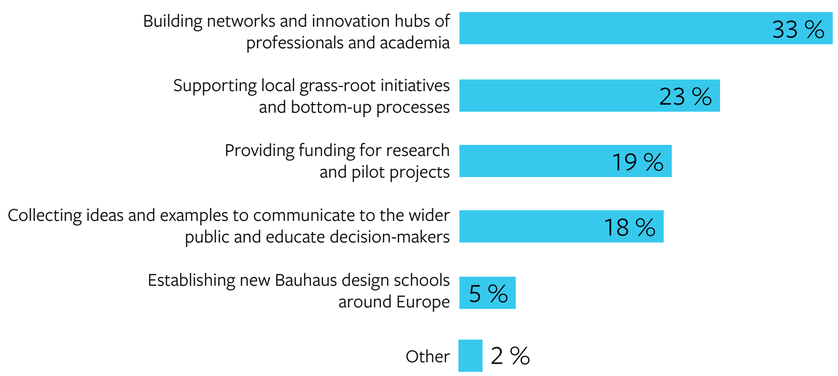
The theme for the second Nordic co-design event was chosen by the participants

In my opinion, the most important goals for the New European Bauhaus initiative would be to



Multiple choice question: Three options choice. N 481

In my opinion, the most important goals for the New European Bauhaus initiative would be to



Multiple choice question: One option choice. N 162

Both strong and weak signals emerged from the discussion across different events and thematic workshops. These discussions explored what the Nordic perspective for the New European Bauhaus could and should be.

All results could be categorized into 22 different groups as follows:

1. Aesthetics and narratives to support change
2. Nature-bound aesthetics rethought
3. Strong relationship with nature
4. Urban green and biodiversity in cities
5. Smart density
6. Local and traditional methods and materials
7. Urban qualities of traditional wooden towns
8. Building with sustainable and organic materials
9. Circular economy
10. Zero-waste material use
11. Stop to demolition, yes to retrofitting
12. Quality over cost
13. Innovating, prototyping and research
14. The new architect: A Nordic Academy
15. Contemporary Nordic design principles
16. Young architects want to do something
17. Cooperation across sectors and borders
18. Environments that promote health and well-being
19. Connecting urban and rural
20. Life-long learning
21. Digital solutions to enhance design and participation
22. Participation & co-creation

Participation and equality were emphasized in nearly all discussions. The strong Nordic tradition and values concerning equality was seen as a design premise: It was said that Nordic art, design, and architecture have played a role in creating and further developing the Nordic welfare society and should still continue to do so. Architects, designers, artists and other actors in the creative field were seen as a force to drive the changes towards the best possible futures by for example facilitating co-operations.

Nature was discussed throughout. Many were aware of the need to completely reframe our language and values around the natural environment and biodiversity. Nature was seen as something that needs to be embedded in the built environment, not only for the benefit of humans, but for other living creatures as well. Nature, including wilderness, was considered as a source of health and well-being that everyone should have access to, and be involved with and engaged by.

Nature was also seen as something to learn from. The participants suggested that the natural environment could be a source of inspiration, unlocking yet more sustainable building techniques, design innovations, and cultural interactions. In many cases, the workshops provoked a deeper discussion about humbleness towards nature and more-than-human-centred design approaches.

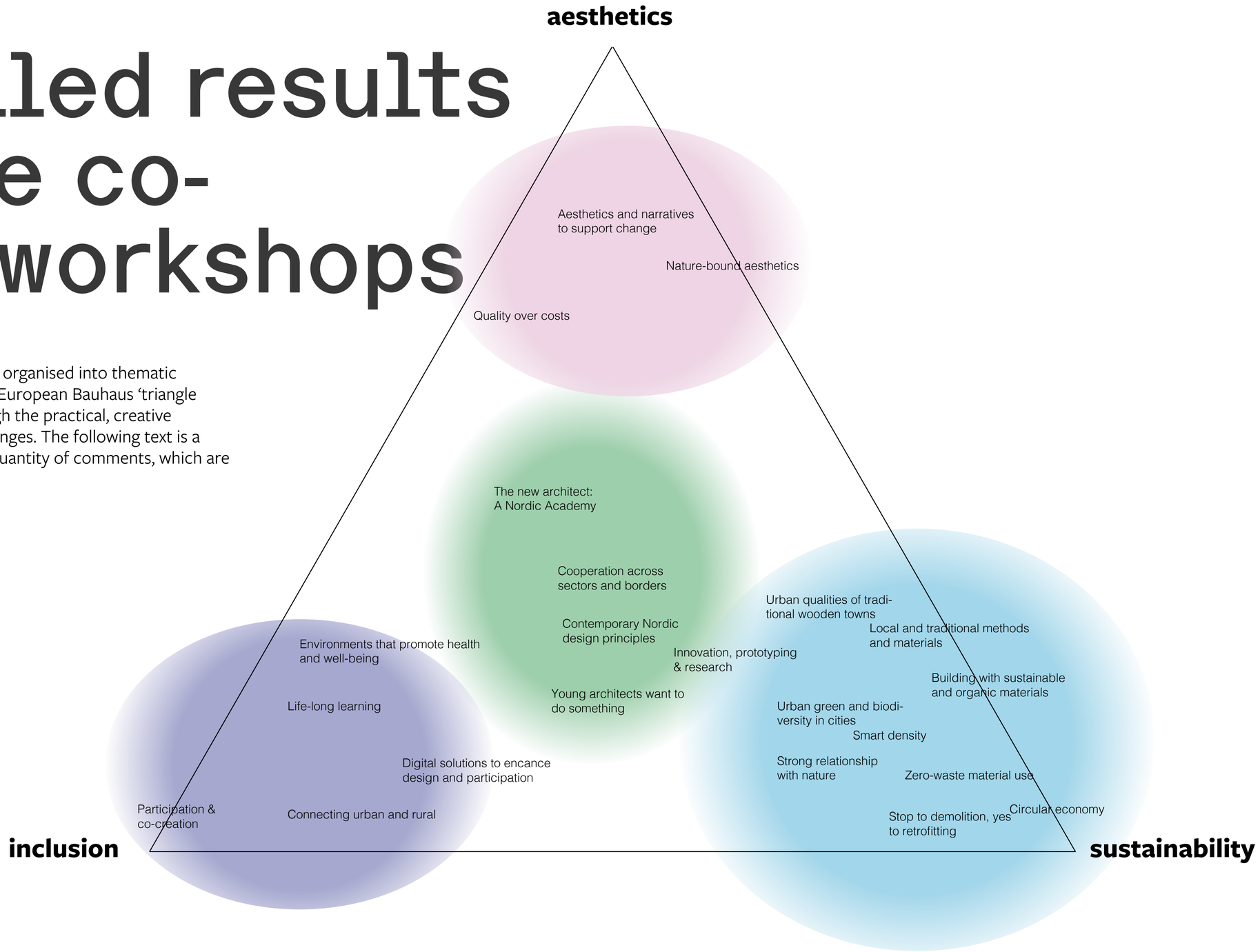
The participants pointed out that the Nordic **Arctic nature** is in rapid and inevitable change, brought upon us by the warming climate. They suggested that this change in nature can also influence change in Nordic aesthetics, which has traditionally been strongly connected to Nordic nature, with its sense of space, vivid seasonality, and the diversity of its land- and sea-scape.

Sustainable solutions for the built environment were stated to be crucial. The participants called for a stop for the demolition of our building stock, and strong focus on retrofitting, renewal and regeneration. They expressed a strong demand for transitioning to a circular economy, especially regarding building materials. Wood architecture and nature-based solutions were brought up as an important part of fighting climate change in the built environment. The Nordic region has particularly strong capabilities here, but participants also suggested we have a long way to go.

In addition, **weak signals** from the discussions could be identified. They could be described as a need for our societies to make progress in a way that is healthy for the planet; a need to shift into circular instead of linear understanding or “progress”; as a need to see nature as a resource for well-being and learning instead of a source of raw materials. Furthermore, there were weak signals about the importance of fostering the value of collective intelligence and expertise. Thus, these weak signals could be translated into an understanding of “us” as an important, immaterial resource that can partially replace the material resources.

5. Detailed results from the co-design workshops

The material from the events was analysed and organised into thematic entities. The themes are presented in the New European Bauhaus 'triangle of virtue' and described in further detail through the practical, creative and critical lenses of examples, ideas and challenges. The following text is a shortened and compiled summary of a larger quantity of comments, which are available as an attachment.



1. Aesthetics and narratives to support change

Challenge: There's a resistance to change. How to ease the adaptation to the changes needed to make in facing the effects of the climate crisis?

Idea: The conceptions of aesthetics are culture related and political. Could the change in aesthetics inspire a change in culture and politics? And vice versa? Could art, culture and the aesthetic side of architecture and design help us accept the coming changes that the climate crisis will bring? Could aesthetics ease us to give up old harmful habits? Can we decouple happiness from the materia and rather accustom us to immaterial sources of happiness?

Aesthetics can be an expression of our most meaningful values and ideas. Architects and designers often have the means of imagining and visualizing positive futures. We need support for aesthetic innovations alongside innovations of materials, structures, construction and other technical matters. Could new aesthetics be created through participatory processes?

2. Nature-bound aesthetics rethought

Challenge: The Nordic and arctic landscapes are changing due to global warming and biodiversity degradation. Therefore, our iconic nature-bound inspirations for Nordic aesthetics need to be rethought.

Idea: Let's rethink aesthetics drawing inspiration from indigenous approaches of the Sámi people, re-thinking nature, space and environmental conditions: Our natural spaces are not empty, but full of life — they are already in use as they are. People should try to avoid leaving signs of their presence in nature. We need to embrace wilderness, darkness, silence and space. The aesthetics of changing seasons is important.

We should learn how to imitate nature in order to break our harmful patterns, creating new sustainable adaptations, based on nature-inspired solutions. For example, we plan cities which are static, even though nature is continuously evolving, and this natural flexibility is also something a city should adapt to.

Idea: Could a deeper, more sensitive understanding of indigenous cultures help us understand people as part of nature, responding to patterns of movement, and thus also better understanding and prepare for the ground for climate-based international migration?

The participants of the event on April 28th were asked to write down keywords regarding Nordic sustainable and inclusive aesthetics and NEB.

3. Quality over costs

Challenge: How can we ensure that quality, value, and more intangible forms of meaningful impact are stronger evaluation criteria of developing the built environment? How might we insert the aesthetic component into the development processes?

Idea: We need structures that ensure the aesthetics and quality of our living environments. Let's form public procurement legislation, and associated capabilities and skillsets, for quality of living and wellbeing, for art and aesthetics, complementing the current perspectives that value safety, risk, and technical competence.

Example: There is a peer-review process as a supplement to measurement and evaluation of quality and sustainability in the official Danish sustainability certification for buildings (DGNB Denmark). The projects are externally reviewed/evaluated concerning architectural quality during design stage and post construction.

Structures that ensure the aesthetics and quality of our living environments.

4. Strong relationship with nature

Challenge: The New European Bauhaus needs a more-than-human-centered approach to design; a planet-centered one, recognising that we are part of nature, not separate to it.

Idea: Nordic people have a strong relationship to and understanding of nature; what we call nature is never far away. But let's learn from indigenous cultures, which tend not to have words for 'environment' and 'nature', recognising that they are not separate to us, not some kind of 'other'. Let's rewrite the complex relationship between human, nature and the built and living environments, considering flora and fauna as participants and stakeholders in planning and design. What could be the role of artists in challenging the nature versus human divide?

Example: The everyman's right runs across the Nordic region, enshrining the right to access public or privately owned land, lakes, and rivers for recreation and exercise. The right is sometimes called the right of public access to the wilderness or the "right to roam". How might this be extended, with a richer idea of 'more-than-human-centred' design, with landscape and nature also 'roaming' into our towns and cities?

More-than-human-centered approach to design; a planet-centered one.

5. Urban green and biodiversity in cities

Challenge: Our cities need to become greener on a larger scale. How to ensure that future towns and cities contain enough biodiverse green space?

Idea: Urban green has to be given fundamental and pivotal positioning as part of climate change mitigation and adaptation strategies. We need to think of the whole landscape as part of design and better understand the potential of nature-based infrastructures. We need rich, complex and diverse meadows for insects, plants, small gardens and woodlands even in our densest urban areas. New green or nature-based technologies could be designed, maintained and owned at a community level, producing multiple forms of value. We also need to preserve and maintain existing valuable spaces around the cities, such as ancient forests.

We should appreciate the urban green as a provider of a richer, more diverse, healthier living environment and as a supporter of sustainable lifestyles. Let's ensure open spaces and immediate connection to nature for everyone. Reworking local amenities, and peoples' everyday needs, around local neighbourhoods means that we can reduce transportation emissions and unnecessary travel, bringing natural experiences closer to urban areas. How to support different size and income level municipalities to deal with greening their cities?

Idea: What if there was a minimum area access for each individual as a right including green areas? Or a minimum distance to meaningful greenery for everyone? Could the "Percentage for art" funding mechanism be copied to "Percentage to biodiversity" in every urban plan?

Idea: We need more research to provide knowledge that feeds into practice faster. How do urban greening projects affect housing prices and value? How does it affect health and wellbeing? What new aesthetics might emerge from these more complex conditions? How urban greening projects affect housing prices and value? The potential of urban green to mitigate climate through carbon sequestration and storage has not yet been fully harnessed in urban planning and more research is needed on the importance of carbon sequestration and e.g. life cycle assessment of green infrastructure. Urban nature and climate are different from natural and wild environments; more research on urban conditions is needed.

Idea: Artificial light in the night has a negative effect on animals and insects. In the cities, there's a need for smart public illumination and warmly dimmed street lights in the night: Light pollution has a strong impact on insect and bird diversity; even just a little light can change their migration and breeding schedules.

The participants of the event on May 6th were asked how national politics could support carbon-smart landscapes.

6. Smart density

Challenge: Economic interests are often main drivers for densifying, yet they can also be justified by sustainability and conviviality. Dense urban structure may promote active transport like biking and walking, but in itself, it does not support sustainable lifestyles (high consumption patterns can counteract this). Often, not enough space is left for green infrastructure, which can be seen as a trade-off rather than an opportunity to integrate. How might changes in lifestyles (home office, online retail, local food production, four-day workweek, etc.) change the discussion on urban living and density?

Idea: Let's rethink the city, recreating the urban landscape and the concept of smart density. Given changes in technology and culture, what new patterns of urban development might emerge? We may need to challenge current concepts of densification, whilst also addressing perennial issues of low density. Densification needs to be done with quality and sensitivity.

7. Local and traditional methods and materials

Challenge: There is a lack of respect for local features and of acknowledging the traditional building techniques. Design needs to be empowered from the identity of the area and its resources.

Idea: Let's implement local materials and indigenous methods to create sustainable practices and aesthetics: Especially in the Nordics we should build with wood and learn from tradition and professionals who know the material well, for example craftsmen. For ideals, tradition and the scarce use of materials we should look both to the post-war generation and further, to pre-industrial times. A question to future development is finding the good combination of using newest technologies and relying on the old building tradition.

Example: The city of Pudasjärvi, Finland, has made a municipal decision to have all public buildings in local massive wood and in a high level of architecture. The city of Växjö in Sweden, aims to be Europe's first modern wood city ('Trästad'). From 2020, 50% of all new buildings will be made in wood.

8. Urban qualities of traditional wooden towns

Challenge: Could the new way of urban planning be inspired by old Nordic wooden towns?

Idea: Nordic wood tradition is a lot more than just using wood as material. Dense wooden settlements are part of the historic landscape. The use of space, scale and dimension in between the private and public are unique in Nordic wooden towns. Should the new way of planning be inspired by the past? By building new places relatable to traditional wood towns, we also get new kinds of urban qualities to the environment. For example, traditional wooden towns have a unique way of dealing with indoor-outdoor relation and recreational outdoor spaces. Cities are complex systems, where choosing of materials has an influence on the quality of the environment.

Example: In Nordic historical wooden towns trees and greenery are everywhere, because trees had a technical function to prevent fire from spreading. In addition, the greenery in the old wooden town's cityscape has been used to funnel the wind and cool down the environment. Trees give shade to the buildings and thus reduce the need for additional cooling. In the future, when cities are increasingly heating up, these kinds of nature-based and traditional smart solutions should be researched and used.

The participants of the event on May 19th were asked keywords about Nordic wood architecture and design.

9. Building with sustainable and organic materials

Challenge: When building new, we need to focus on using sustainable, healthy materials

Idea: Let's reinterpret "less is more", and recognize the potential of timber and the value reuse adds to both the economy and the environment. Less developed low-tech materials are easier to re-use, and in this the timber industry has an unrevealed potential. As an organic material, wood has the ability to release heat from the water it absorbs more than any other organic material. This quality also affects indoor air quality in a positive way. Using straw as insulation in a wooden frame is a good example of using materials in a 'new old way'. Wood is healthy both for the users and the environment.

Idea: A controversial question was raised: Could start to build from living trees instead of dead ones? There have been studies on this. Building bridges on living trees is a tradition in India. This would feed our poetic sense of improving cities in a biophilic sense, since living close to living nature has been evidenced to have a lot of (co-)benefits.

10. Circular economy

Challenge: We need to move from the linear economy to the circular; from new building part production to relying on the existing buildings as a material bank. What kind of obstacles do we have on standards and regulations regarding reuse? What are the material requirements for reuse in the future?

Idea: Changes in legislation that create incentives and support different aspects of circular economy are needed. We need adjustments into several crosscutting fields of legislation. Let's look at forming a tax model for the circular economy and the life cycle perspective as a design assignment. We should consider material buy-back agreements as the new state of affairs in construction projects. There is also a demand for community-based neighborhoods, built around circular practices and sharing economy in everyday life. Could we somehow pull back from throwaway consumer culture into a culture of making, doing, sharing and repairing?

Form follows availability. Could there be marketing support or a platform for smaller companies that have skills to maintain current buildings? We need a common service for sources for reuse, e.g. accessible databases for reusable timber products led by municipalities, for example.

Example: Nordic minimalism rethought: The design principle of using as little as possible in as simple as possible way in the context of circularity and reuse of materials, as Danish Lendager Group's projects using upcycled materials. There are also good examples of recycled buildings in Norway, where components of a new building are recycled from old ones, including railings, stairs and fire doors.

11. Zero-waste material use

Challenge: One of the challenges in the use of wood is how to utilize leftover parts.

Idea: How could the left-overs from wood element building (CLT) be used to produce zero waste? For example, when the windows are cut out from the elements, the left-over parts could be used as furniture. This needs rethinking of the processes of making wood elements. We should start the design and planning process keeping in mind also the reusability of materials. How to make it possible to reuse different kinds of parts and pieces (building parts, furniture, objects etc.)? In the building process, packaging also has a lot of potential and possibilities to increase recycling.

12. Stop to demolition, yes to retrofitting

Challenge: We need to make do with our existing building stock. The carbon emissions produced by the construction of new buildings are unbearable. How could we learn to appreciate the less cared for neighbourhoods, if we refrain from building new ones?

Idea: We have to make demolition accountable through tracing, taxing and transparency. Let's focus on the re-use, rehabilitation & repair of also the not-so-highly evaluated 60s–90s building stock. Let's encourage hybrid programming of spaces to facilitate retrofitting of existing built fabric. Prioritize place making and restoration.

Seeing the value of all existing built environments is of essence for decision-makers and professionals, but also to the wider public. People need to be proud of their own living environments, want to protect and take care of them. Should we broaden the concept of cultural heritage? Nature-based solutions are one concept, which could be further developed for improving environments and cities.

Example: There are good Nordic examples of programmes that bring heritage and energy retrofit together, e.g. "Spara och Bevara" [save and preserve] in Sweden.

13. Innovating, prototyping and research

Challenge: We need more support for innovations in reusable construction products, smart buildings systems, new and old materials, services and solutions like repair cultures, wood and hybrid construction and for redeveloping the circular and sharing economy.

Idea: Good examples are a usual way to create followers in the building sector. Let's accelerate the innovation of construction systems that are highly flexible and adaptable to future social and technological evolutions. We need a foundation that would support prototyping of new urban experiments in both physical and digital building. Prototyping should cover all scales from small details to scenarios for resource efficiency and sustainability.

Example: There are good Nordic examples of facilitating innovation and research, e.g. Spark; a needs-driven regional innovation programme in Norway for smart and sustainable local development that uses design thinking, collaboration models and the SDGs as tools.

14. The new architect: A Nordic Academy

Challenge: The world is changing and the architects' and designers' profession along it. More and more, architects need to act as facilitators who bring different focuses and expertise together, working as integrators and translators. The professional training of architects and designers should be steered towards multidisciplinary approaches and systems thinking.

Idea: Let's create a Nordic Academy: Universities and institutes should work more closely together in assessing and handling complexity and uncertainties from a systems perspective. Alongside the fields of architecture, urban design and landscape architecture professional training should include aspects of e.g. public health, environmental psychology, social sciences, biological diversity, mobility, cultural geography and political studies. There should be a focus also on creativity, expression and emotions. The agenda of the New Bauhaus could become the background of a study program.

Towards multidisciplinary approaches and systems thinking.

15. Contemporary Nordic design principles

Challenge: How to enforce empathy as a design principle? How to design things that easily enable the choice of living sustainably? How can aesthetics and art provoke, prototype and promote newly diverse Nordic cultures?

Idea: Design should aim to support opportunities for different needs and backgrounds. Environments should respond to the needs of diversity. We need new design principles and house rules: Let's embrace change as a way to live and use flexibility as a tool for equality. Let's make design processes more collaborative and become aware of different needs. Form follows understanding. Form follows curiosity. Form follows culture.

Let's bring the Nordic minimalistic design principles; simplicity, reliability, creativity to solutions for participation, including digital tools for participation. Let's create a change from designing with new resources to repurposing and redesign. Let's address issues through networks and share best practices. Design things that age beautifully, that are adaptive and can be reconfigured to changing life situations.

Nordic minimalistic design principles; simplicity, reliability.

16. Young architects want to *do* something

Challenge: Politics are slow to change, but solutions and change are needed urgently. What can architects and planners do? How to reach politics and decision makers? How to make the change happen? Especially the young professionals need to be empowered and encouraged.

Idea: The young architects feel that design (urban – architectural – landscape) is not about shape or cool designs, it is about creating social and cultural change. Therefore, let´s include issues concerning e.g. urban green infrastructure and social justice into national visions and strategies, perhaps through EU legislation linked to national policy. How might we rethink ownership and wealth. How might we connect new configurations of landscape architects, architects, planners, decision makers, politicians, especially of the young generations?

17. Cooperation across sectors and borders

Challenge: There are many barriers that prevent architecture and design ideas and ideals becoming a reality.

Idea: We need a more cross-disciplinary approach to decision-making by involving different stakeholders; construction industry, designers, thinkers and the end-users. How to spread the power over what is designed? How can we build literacy for design, art, and architecture into decision-makers and public servants? Let's recognize and involve the gatekeepers who can help facilitate the change from making a successful pilot after another to sustainable implementation and practice. There are a lot of aspirations for the New European Bauhaus to facilitate collaboration across borders and fields of expertise.

Cross-sectional interaction and multidisciplinary approach should be at the heart of the professional training of architects and designers. Taking education outside academia, as well as within, could also introduce the agencies of different actors.

18. Environments that promote health and well-being

Challenge: How to create beautiful, kind and engaging environments that enable us to encourage, stimulate and reflect upon good habits, inspiring and creating change?

Idea: We need environments that promote health and well-being for all; safe places that trigger productive social interactions and intergenerational encounters, stimulating places, spaces and social infrastructures that support and encourage cultural diversity; environments that support active lifestyles and out-doors sports for all ages. Designers and planning professionals need to cooperate more with professionals from the fields of e.g. public health, sociology and environmental psychology. Public participation and understanding of place are also key in making places more equal.

Example: Third spaces and social infrastructures, from libraries to streets, markets to playgrounds, provide encounters and improve social cohesion. The Nordic region has a strong tradition here, but equally we have a lot to learn.

Example 2: Sensory gardens in Denmark are a green oasis for people with special needs that offer carefully designed sense stimulation.

Example 3: The Generations block in Helsinki, Finland unites people of all ages in a multigenerational housing block.

19. Connecting urban and rural

Challenge: How can urban and rural areas be thought interconnected, not only in terms of mobility and regional planning, but also concerning cultural practices? How do changes in technology and culture open up the possibility of reimagining small towns and villages?

Idea: Let's strengthen the dialogue and collaboration between big cities and small municipalities for mutual learning and building bridges. We need designers, architects, programmers with experience from outside of urban lifestyles. Could the rural areas act as testbeds for smart communities? What new forms of sustainable mobility might be required in these more dispersed areas? How might the traditional Nordic summer cottage become sustainable and social? There is a potential to build smaller scale and affordable housing or Nordic forest cities with ecosystem services in the rural areas.

20. Life-long learning

Challenge: We need active citizenship; citizens who care, show interest and want to participate in the development of the built environment and sustainable lifestyles

Idea: We should cultivate creativity and design thinking in children starting from their earliest days of school. Empower and enable participation through strengthening collaboration with schools and professionals. There are many good examples of architecture and design education for children and youth that enhances participation. Equally, given our ageing populations, how do ensure the elderly are continually and meaningfully engaged in questions of the built and living environments? Built environment education (BEE) is strong in the Nordics.

How could we all learn to be appreciative of our environments? Let's provide architecture and design education for all ages with the help of digital tools. Could life-long learning of architecture and art help us enjoy our cultural heritage and build identities related to our living spaces?

21. Digital solutions to enhance design and participation

Challenge: ICT as well as multidisciplinary tech and design expertise is traditionally strong in the Nordics, but these have often played out in areas disconnected to the built and living environments.

Idea: Let's render creative placemaking and distributed decision making based on inclusive technology possible. Digital tools and metadata should be used to make the silent voices heard. Tools, such as geographic information system (GIS), building information modelling (BIM) and digital twins have the potential to help professionals plan, design, construct, and manage our built environment efficiently. Let's consider our cities, buildings and spaces as a service. Could digitalization also help us move from human-centric to planet-centric design? Let's use the world class human-centred design skills found in Nordic video game and tech sectors to help transform our built and living environment sectors.

There is a need for data literacy skills. We need to make environmental data more understandable and accessible to people. Art-based methods, digital boot camps and festivals could inspire people with different skill sets and backgrounds to learn data literacy. ICT programs in schools could focus on cultivating creativity and design thinking as well as data literacy skills. Digital platforms could be used as tools for facilitating conversations and networking.

Example: Digital placemaking tools for decentralized organisations and citizens initiatives in Sweden by Plato project. Plato helps to gather ideas, take decisions, map needs, budgets and areas of responsibility and provide a socially focused digital meeting place for the participants.

Creative placemaking and distributed decision making based on inclusive technology.

22. Participation & co-creation

Challenge: The residents, citizens and future end-users are to be more involved in developing their habitats. The design processes need to be overall more inclusive. We have to make sure that the co-creation approaches, methods and techniques do not only echo the voices of the active, but represent the voices of everyone in the society.

Idea: We have to make sure that the ones worst affected by climate crises and other environmental crises are included in design, technology, policy and decision making generally. We need a framework for participatory design that happens together with the planning professionals and officials or even before the official planning process starts. Participation needs to be meaningful and inspiring. It is crucial to communicate to the participants what will be done with their feedback and ideas and how they affect the plans. Participatory planning through group modelling or analysis could be an efficient way to address complex planning issues.

We need equal access and safe space to participate in planning for everyone, especially policies or structures that involve child participation. Children and young people should not be treated as a mass, or individuals as a representative of their age, but as a heterogeneous group with different needs and means to participate. Should we create a reward sticker: “This is designed in cooperation with children and the young”? We should have a children’s and young’s own Bauhaus initiative.

Example: There are many good examples of methods and processes from the Nordics in regards to participating children and young people in planning processes.

6. Conclusions

Material in the light of Agenda 2030 Sustainable Development Goals

The Nordic countries are following their development in relation to the United Nations' Agenda 2030 Sustainable Development Goals (SDGs). Therefore, we analysed how the results from the Nordic NEB co-design events translate to SDGs. We paired the presented comments from the events with matching SDGs. In the following, the most often mentioned SDGs are presented with exemplary comments from the workshops.

The size of the SDG image represents the number of comments related to each goal.

Goal 11: Sustainable cities and communities
Make cities and human settlements inclusive, safe, resilient and sustainable.

Summary of presented views:
Beautiful and kind environments can inspire and create change. We need more multi-use areas, green infrastructure, outdoor spaces for all seasons and weathers, but also unbuilt spaces and wilderness in urban areas. Landscape and nature are to be made more an integral part of design.

We need to emphasize the appreciation of cultural heritage in our built environments. Demolition has to stop and instead we need to focus on retrofitting. Transforming from linear to circular economy has to happen fast. The contemporary quality of the living environments means aesthetics of repair. The new building stock needs to be made flexible and adaptable from the get go. We need to build more with wood.

Cities, buildings and spaces should be considered as a service. Our cities should strive to build sustainable communities, that practise sharing economy. For citizen empowerment we need digital placemaking tools and overgenarational and multicultural approaches to participation. Designers, architects and planners are to act as the facilitators and experts of co-design processes in different scales. We need to keep in mind the rural alongside the urban.

Goal 9: Industry, innovation and infrastructure
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Summary of presented views:
Architecture and design should be seen as a tool to manage resources in a sustainable way. Nordic innovations related to reusable construction material and the infrastructure for recollecting, marketing and distributing these materials should be further developed and disseminated. We need strong support for innovations in the field of wood architecture and design and traditional wood building techniques. Cross-sectional & cross-border cooperation for innovations is key.

Digital innovations, such as BIM-based building databases and digital twins can help tackle complex planning issues. Bringing user-centered digital tools to the design processes and opening data increases participation and inclusion. Artistic and design approaches to the digital shift might also bring digitalization closer to the public.

Goal 10: Reduced inequalities
Reduce inequality within and among countries.

Summary of presented views:
We need to develop tools and processes of participation for everyone. There must be equal access and safe spaces to take part in different kinds of design and planning processes.

Children should be seen as citizens and understood as capable experts and part of the community. Participatory processes should also be made inclusive so that the voices of all young citizens with different backgrounds are being heard. There's a need for a children's and young's own Bauhaus project or movement.

Goal 4: Quality education
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Summary of presented views:
Let's inspire citizens of all ages to learn about the built environment through e.g digital tools. Children should be empowered and enabled to participate through built environment and architecture education, co-creation and learning active citizenship skills.

Professional training needs to be developed into a more cross-sectional and multidisciplinary direction. Should we form a Nordic Academy for Systems Thinking? The Nordics have good academic environments to build from.

Goal 15: Life on land
Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Summary of presented views:
Biodiversity is crucial in cities and planning. We need more green roofs and facades, city-gardens, trees, new green technologies, but also urban wilderness. Considering flora and fauna as one of the stakeholders of the built environments is a good starting point.

Goal 16: Peace, justice and strong institutions
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Summary of presented views:
Nordic institutions lead change and foster trust. Governance should be open to initiatives from civic society and facilitate change. Institutional support to circular economy and nature-based-solutions is of the utmost importance. We need political weight also behind the importance of the aesthetic qualities of the built environment.

Goal 3: Health and well-being
Ensure healthy lives and promote well-being for all at all ages.

Summary of presented views:
Environments should support health and well-being. We need to create and preserve places that are green, support social interactions and active lifestyles. Places that prevent loneliness, but also protect silence and leave room for imagination.

Goal 12: Responsible consumption and production
Ensure sustainable consumption and production patterns.

Summary of presented views:
Nordic minimalism in the contemporary context means circularity, reusage and reduction: It is the aesthetics of minimal material and energy consumption without forgetting quality.

Goal 13: Climate action
Take urgent action to combat climate change and its impacts
Summary of presented views: We need to move our premise from human-centered to planet-centric.

Attachment

Unedited material from the Nordic co-design events
Virtual post-it notes, chat comments and conversation notes.

The size of the comment indicates the amount of "likes" given.

Quality over costs

It is easy to set up criteria for sustainability, accessibility etc., but aesthetics & beauty is a tricky subject. Do you have advice on what these criteria could be?

Quality over costs, this is what good design and architecture are doing.

European legislation perhaps needed, implement regulations to maintain the European cityscape instead of capitalistic high-rises, enabling more green spaces, stronger regulations are needed for the European region

Many cities wants to have a ecological, green brand. When do we see a city with aesthetic brand?

Quality should be in the center.

Challenge / establish new ways of measuring value and impact that work on a public, labour and individual level

Public procurement law where quality always goes before price (like in Switzerland) would change the mind set of the building economy.

Legistlation (quality of living, on top of current building safety point of view)

How to insert, legislate for, and argue for the aesthetic component into systems governed by capitalist realism where the concept of immaterial value "aesthetics" is seen as a non-rational extra cost that diminishes investor/developer profit? Systems that also avoid, negate or invalidate the value of public or non-specialist discourse and involvement.

Peer-review process (as alternative to architectural competitions and prizes) as a supplement to hard fact measurement and evaluation of quality and sustainability in the official Danish sustainability certification for buildings (DGNB Denmark). Projects externally reviewed/evaluated concerning architectural quality during design stage and post construction. (DGNB Diamant)

Aesthetics is about paying attention and learning to pay attention to diversities, in material, spatial, surface and form, in affordances and interactions, in human engagements from the micro to the makro, from the variations of rhythms, scales, patterns and forms, the harmonies, variances and contrasts in combinations of seeing, feeling, hearing and being in the world that is not an over designed monotonous hyper rationalised nowhere.

Political support to quality and aesthetics of the built environment: Tools for measuring etc.

Aesthetics and narratives to support change

Perhaps beauty is not the key aesthetic concept. Perhaps the aesthetic emerges at the intersection of understanding and practice (or as a marker of understanding of practice)...and so as a vehicle for the expression of values and ideas.

Wooden architecture and design products is a central Nordic intersection between aesthetics/architecture and sustainability

Sustainability, overpopulation = sustainable aesthetic is the aesthetic of adaptation

Aesthetics should be the second demand after the carbon zero emission demands that will have to be applied in the large scale.
Or could aesthetics be the means to get to zero emission?

The Nordic model of equality in society (basically the welfare state model) is in itself worth 'exporting' in NEB. Art, design, and architecture have for decades played a role in creating and further developing the Nordic model, alas NEB as such with its intention to encourage work across disciplines is nothing new.

The industrial society – not nature – has made us think of fast lifecycles, production and consumption. We live such a comfortable life in the Nordics that we don't really see the problems even though we see alarming news from the Amazon or animal production. It seems that crisis is needed before we see and are willing to do things differently. What will push us over to artistic and intellectual discussion?

This social (etc.) homogeneity is behind many of the traditionally valued aesthetic qualities of the Nordic living environments. However, this is also becoming an increasingly clear point of concern from the perspective of intergenerational/sustainable aesthetics.

The conceptions of aesthetics are culture related and political.

Our wish for beauty is something that is not necessarily innate, it has to be taught to the child, and learned from an early age.

I think the biggest potential is always in children. They need tools to analyse their environment and they should be part of "aesthetic transformation".

Aesthetics are always departing from a human point of view, it is interrelational.

No, maybe not the same aesthetic views in the Nordic - but, I believe we share some of the same values.

The aesthetic component is subjective, it depends on the era in which it is made, on the place (Genius Loci) and on the succession of human generations! E.g. What C generation wants as aesthetics?

Could we make the aesthetic component less subjective?

The normative facets of aesthetics might precisely derive from e.g. sustainability. However, instead of "objectivity", I would strive for a better understanding and acknowledgment of aesthetic diversity.

We must refer to the great masters of architecture!
And look at Nordic form and function
And follow the first rule of arch. composition, which is expressed in the concept of the "architectural Unity"

Doesn't the Nordic value of shared resources depend on a culture of social homogeneity?

The narratives we tell are extremely important

Nordics don't share the same aesthetic views, but are likely to be ready to discuss which are the basis for a good environment and city surrounding.

Architects have the means of imagining and visualizing varied future prospects. The ability to see the possibilities of change is important. Architects as the visualizers of positive futures.

Could art and culture, the aesthetic side of architecture and design help us accept the coming changes that the climate crisis brings among us? Couls aesthetics ease us to give up old harmful habits?

I think our ability to connect environmental impact to values that people truly care about (beauty, social inclusion, physical wellbeing etc., ex: "save our winters"), as well as facilitating new ways of meaning making such that new sustainability narratives can emerge is crucial. Which means rethinking roles, stakes, values, impact.

Wind farms are an interesting example of how aesthetic values change from one generation to another. I often discuss them with students and they always bring up how their parents think of them as ugly whereas the students themselves find them quite beautiful, even sublime in various landscapes.

Aesthetics are heterogenous, otherwise it is just 'style'

We need aesthetic innovations. We have a lot of support for innovation of materials, structures, construction and other technical matters. What could be the innovations of aesthetics in practice?

The current hyper-production of wind turbine parks in Norwegian nature shows that respect for the landscape doesn't resist the colonialist power of capital
...make the oxymoron contradiction of "sustainable development" obvious

Human wellbeing include the material aspects as well as nonmaterial - one of the main goals of the Bauhaus. Suggestion: people to participate in creation of aesthetics process, to find out what is their attitude of the 'beauty' (not only formed by designers and architect)

Nature-bound aesthetics rethought

Landscapes are changing due to global warming, so iconic nature-bound inspirations for nordic aesthetics are changing too.

Wilderness, silence and space

Relationship to nature is much more than how it is 'physically' interpreted in the NEB. It is a way to live.

The western societies tend to draw a clear border between urban and natural environment. We might have personal relationships with "nature", like our summer cottages or the piece of forest we (mostly finns?) inherited, but we don't tolerate nature in our urban environment. exactly as Dan pointed out, nature is messy - even if another species would find a way to live among us, we're very quick to clean them out. Like bats living at our attics or spiders under the windowsill.

Deep understanding of Sami-culture

Indigenous approach to nature and space: The natural spaces are full and already in use as they are. People should try to avoid leaving any signs of their presence in the nature.

Nature has a direct voice. We are part of nature, not different from it – this is more of an ethical discourse than an aesthetic one

Interspecies and animal aesthetics, also biomimicry?

Mentioning Bajrke Ingels and nature is rather contradictory, he talks about hedonistic sustainability, meaning, let's keep on building like mad and expect to be sustainable along with it!

Embodied, engaged experiences are fundamentally aesthetic.

"Empty spaces" - depending much on their "borders" / "limiting edges" - that would/might define if they are "loud" or not...in short, nothing is so "absolute"

Is darkness a part of Nordic aesthetics? Climate change can take away the snow, which gives us even more time to enjoy darkness...

In small dozes darkness can also be comforting and help us to turn inwards, reflect on what´s essential - and enjoy candles and glögg!

Snow is absolutely a part of the Nordic esthetics. Snow and darkness together is a part of nature

Snow is part of the environment! When mud season arrives our opportunities shrink with our access to the landscape!

And with darkness, the meaning of other senses than sight which often dominates. This naturally links to the idea of silence. The feeling of coldness as a part of Nordic aesthetics or at least experience?

In wood construction we imitate concrete construction - why? We should imitate nature, not the present towns or cities in order to break the pattern and create something new based on new, nature-inspired solutions. For example, we plan cities which are static, even if nature is continuously evolving, and this flexibility is also something a city should adapt to.

Have to stay positive: Climate change can take away the snow, but luckily not the darkness!

It's not just darkness that is nordic, but also the amazing amount of light during summer. Even if climate change takes away the snow, the differences in light conditions will still create some kinds of seasons in the nordics.

Snow makes any environment look cute... I guess it's the same effect with sunshine in the South.

Just to add on light and dark in Nordic countries. I live at the 69 plus northern latitude and the polar night between 1st Dec and mid-Jan is full of colours contrary to what people think more to the south. Definitely part of aesthetics here but to a strong degree in all Nordics.

Plant library objects are utilised to model the urban green and living plants in a more detailed way than algorithmic models can. Therefore, understanding nature as part of modern urban reality can help to better understand those many good qualities of the green environment. A radical change in this is, also, needed, to understand the benefits of nature in architecture and to increasingly utilise them in the environmental design.

The flattening of seasons as a result of anthropogenic environmental change is an alarming thing also experientially. However, this type of flattening has been produced also on purpose through e.g. heating streets to prevent snow and ice (e.g. Aleksanterinkatu in Helsinki).

Nordic winter or rainy season demands more consideration of natural light, viz permitting the sun to reach also street levels.

From human-centered to planet-centered

Strong relationship with nature

Nordics have a strong relationship to and understanding of nature. This differentiates the Nordics from Central Europeans.

How to interpret woodlands into urban environments? Architecture in nature is an 'aha experience', how to bring nature into urban spaces as an 'aha experience', too?

My experience from living in urban areas is that I was rarely reminded about natural elements in the city. Now, living on the countryside, I get reminded everyday, I feel more connected and related and responsible for acting sustainably.

Relationship between human, nature and built environment

Tree alleys in streets for microclimate, esthetics for living, home for birds, insects

Bioart Society and Mustarinda in Finland https://bioartsociety.fi/about https://www.mustarinda.fi/info

The fox in our neighborhood are suffering deep health problems due to territorial pressure.

Discussing the LIGHT in the Nordic Region(s) - has/should maintain in mind the basis of the various QUALITIES of the Light in the Nordic, as these are the Unique and Different from other regions and places in Europe and the Globe.

How can different size (and income level) of municipalities deal with greening their cities?

We have very much green around us in the North, but in fact it is mostly a storage of timber.

Public engagement and support to (and connecting and visualising) local projects that promoted environmental and social sustainability during the Oslo miljøhovedstad 2019

Immigrants in Finland often don't have access to Mökki, which is an iconic biocultural experience. Can we have public-shared means of accessing this resource?

Animals as Stakeholders = Swedish scholar Jonathan Metzger

Adding biodiversity into cities. Green roofs, city-gardens, trees

Let all the flowers bloom.

In the Nordics we have the 4 season in totality. This allows us to really enjoy each season intensely. In other countries they do not have this

According to the inhibitor of Sapmi we have 8 seasons

We have two seasons in Iceland - winter and the hopeless belief that there will be summer

Nature-based solution is one concept which could be further developed for different environments and cities. Green infra and buildings could be more in integrated in planning and design.

What should be the inspiring new principles of aesthetics? Cities should be built valuing nature, not destroying it. We have removed the one thing that brings well-being to our human inner needs, nature and the natural world.

More-than human-centred design approach, i.e. planet-centric

There is this idea of the 15 minute-cities in which nature is just found a leap away. This is not applicable in the mega cities, which is why they will be so vulnerable when the most difficult climate changes will occur, such as shortage of water and food.

Nordics have a strong relationship to and understanding of nature. This differentiates the Nordics from Central Europeans. Nature has a direct voice. We are part of nature, not different from it – this is more of an ethical discourse than an aesthetic one

I think the whole professional cohort should more directly deal with the deterioration of our precious earth, not only stay at the surface and evaluate projects from the utter layers!

How the wild should entail the unexpected brought to us in the city is still to developed, through art, through creativity and through people's own hands

The taiga / boreal forest is a rich environment!

How to empower people to redevelop their connection to soil and growing food in urban areas? Could for example schools have their own gardens and greenhouses?

Smart density

More research is needed to provide knowledge which should feed into practice better and faster.
Urban nature and climate are different from natural and wild environment, more research on urban conditions is needed
Lack of research on the many perspectives of the benefits of urban green and the many ways how UGI contributes to wellbeing/climate mitigation/climate adaptation. Much evidence exists already, but research implications and knowledge need to be put into practice.
How urban greening projects effect housing prices and value? Eg. Sankt Kjeld's square in CPH

Strict national legislation and local guidelines for planning and urban development. New development should be directed away from green areas. What if there was a minimum sqm area access for each individual as a right including green areas?

Nature-based solutions & renovating existing building stock

More research on renovating solutions is needed

What is smart density? How to achieve carbon neutrality in cities?

How do you get space for green in dense cities? Economic interests are often main drivers for densifying, although it is justified by sustainability. Space for green areas and possibilities for diverse urban green have, thus, become limited in cities.

Although dense urban structure may promote biking and walking, does not support sustainable lifestyles, but instead, increases consuming and traveling. In addition, in big cities, dense structure adds car dependency (distances between areas grow larger). In addition, not enough space is left for green infrastructure, such as growing material / space for soil, for instance, for trees.

How to create economic value for urban green?

How changes in lifestyles (home office, local food production, 4-day work week, etc.) change discussion on urban living?

Rethinking the city, recreating the urban landscape – what is smart density? Densification needs limits; how dense is too dense? At what point of density does the value of a property start to go down? Courage is needed to challenge the current concept of densification.

Densification needs to be done with quality: Sensitized densification.

Urban green has to be given significance and it needs to be valued as part of climate change mitigation and adaptation; urban biodiversity; urban wellbeing; and as a provider of quality/better and healthier living environment as well as a supporter of sustainable lifestyles. Also, urban nature is experienced by people on their everyday lives – it matters.

Urban green and biodiversity in cities

Be able to combine forests for wood industry and preserve/ develop biodiversity.

Every man`s right - recreation without boundaries. Open spaces and fast connection with nature

How to interpret woodlands into urban environments? Architecture in nature is an 'aha experience', how to bring nature into urban spaces as an 'aha experience', too?

Urban gardening

Planting a tree in buildings and streets is not an answer for healthy green environment. It looks like counting the small aquariums as a part of ocean.

How to introduce small gardens into cities?

Preserve existing values in cities and around them, such as ancient forests, fine parks, be aware of what we have

Let our big cities become so green that you do not have to travel out/long to enjoy nature, this also generates less traffic

Woodlands. Pieces of forests used as city parks, cemeteries. Famous ex Skogskyrkogården in Stockholm.

More trees and plants planted after building (housing, infra)

Our cities need to become greener on a larger scale, it does not hold to plant any trees here and there. Still many gray places, transforming these into green oases, people need it for their health

Flower meadows for insects - it already exists but in small scale, mow grass by segments in the area and not all at once

Landscape as part of design

Transit-Mobility = Much travel occurs in order to access green experiences. We can reduce travel and CO_2 emissions if we can bring green experiences closer to urban centers.

How to systematically bring biodiversity into city planning and cities? Bringing biodiversity helps us to minimize the impacts of climate change.

New green technologies applied at community level (such as urban greenary): efficient microorganisms (EM)

Species-targeted stewardship groups like HPK, Verho, Longinoja, which perform actions based on restoring a species (in this case Trout), that has knock-on benefits

Tomas Björkman, Ekskäret Foundation, http://www.ekskaretfoundation.com/

Rain harvesting in urban gardening.

% to art idea could be copied to % to biodiversity in every plot, every housing area

Tree planting city policies: bring one down - plant one (or two).

The new European Biodiversity Strategy 2030 aims at protecting 30 % of land and inland water ecosystems and sea ecosystems.

Transform bad buildings or places for the better, for the greener

Prins Eugens Waldemarsudde, Stockholm, harmony of nature, culture and aesthetics: https://www.waldemarsudde.se/

Naturum, Vänerskärgården, https://visitsweden.com/where-to-go/southern-sweden/vastsverige/naturum-vanerskargarden-victoriahuset-and-lacko-castle/

Smart public illumination (warm dimmed street lights in the night) - artificial light in the night have negative effect on animals/insects.

Is the public illumination topic in biodiversity protection? I heard about it, but very little and it seems that it's very new thing? And very interesting and seems important!

Yes! Light pollution has a huge impact on insect and bird diversity, even just a little bit can change their migration and breeding schedules

Urban qualities of traditional wooden towns

In traditional wooden towns, entrance to the apartments is from the yard site, which turns their backs to the city - this is something Jan Gehl wouldn't approve. Kimmo raised a question on features, which we don´t want to adapt from old wooden towns anymore. Related to this, parking lots/system was mentioned, which totally lacks from the historical towns.

Also the greenery is different, since in historical towns trees and greenery are everywhere. (A specific type of) trees, on the other hand, have been used to prevent fire from spreading, thus having a technical function. Also the greenery in the cityscape and the urban fabric that funnels the wind cools down the environment in traditional cities, when trees give shadow to the buildings. This takes away a need for additional cooling. In the future, when cities are increasingly heating up, these kinds of (nature-based) solutions should increasingly be researched and used.

The contradiction between preserving and developing: How to keep the old wooden cities lively, active (and cared for)? If we say yes to densification, should there be applicable rules, that the densification doesn't destroy the old wooden towns?

Example: In composing a wood building strategy for the town of Hamina in south eastern Finland (Hamina, or Fredrickshamn in Swedish), an important aspect of the strategy is preserving the old town, and possibly even expanding it.
Hamina is a historical town with a round city plan built inside a star-shaped fortress. Historical wooden city center is a valuable asset for us in terms of the brand, marketing and so on.

Is a wooden town as dynamic as others? A question was raided if a townscape or tone of a city is changing in our minds, when thinking about a modern wooden town. Do we miss a mental idea of a wooden city ? When we think about a city, we see a concrete facade and neon lights. What we need is a vision on how an archetype of a modern wooden city (should) look like. This helps us to concretise their qualities, aesthetics of the new materials and those new features for the new generation of urban inhabitants.

In wood construction we imitate concrete construction - why? We should imitate nature, not the present towns or cities in order to break the pattern and create something new based on new, nature-inspired solutions. For example, we plan cities which are static, even if nature is continuously evolving, and this flexibility is also something a city should adapt to.

Urbanisation in Europe:
Bauhaus der Erde is an initiative leading climate research (just mentioned). Wood construction is also related to rapid urbanisation and population growth, when it can be asked if wood construction can be an answer to bring these becoming people to cities.

Regarding wood construction, there is a crucial need for political changes to start this new paradigm in Europe, which enables us to give knowledge to the rest of the world, where climate change (and also urbanisation) is happening and, also, decided.

Dense wooden settlements are part of the European historic landscape.

In wood architecture, the environment needs to be seen as a whole, through a concept of planning dense and low-rise

It appears we should take steps to a direction of unknown (biophilic) waters and to consider, to whom the wellbeing of cities is targeted. Aesthetics of wooden materials can act to promote the (environmental) value of cities. Also, we need to consider the components a city wants to be built on.

Nordic wood tradition is also a lot more than only the material itself, including aspects of scale and space, among others. Cities are complex systems, where choosing of materials has an influence on the quality of the environment. By building new places relatable to traditional wood cities, we also get new kinds of urban qualities to the environment. For example, traditional wooden cities have a unique way of dealing with indoor-outdoor relation and recreational outdoor spaces. Also, public space is even more important.

An example of a new area built by new technology (CLT and multi-storey buildings) but by traditional wood town principles is Linnanpirtti (?) in Turku. It has been influenced by a nearby Port Arthur (?) historical town. It has an association to old towns by its yards and the urban structure, which is formed in closed urban quarters.

How we currently build on wood seems to be that we build similar (high-rise) buildings than from concrete, but only with a timber facade. What we need to consider is the urban quality of urban spaces related to different facade materials, and to renew our thinking on building on wood. The current public discussion is mainly about high-rise building and chemicals (CLT), not about changing the pattern of thinking. Also landscaping and urban nature exist in speech but don't come into reality.

A response to this was given from architectural history - the big change is often recognised only afterwards, then understanding how some phenomenon started and how it came out with. It is possible wood construction is in similar position, when in 100 years or so historians can give a name to this change.

Local and traditional methods and materials

Implementing local / indigenous materials and methods to create sustainable practices and aesthetics

Architectural histories that are more inclusive (example: Anne Bethel Spencer, gardener), reexamine past choices (example: garden city) and look at sustainable lifestyles of ancients.

Improvement of building from local materials (wood)

Learn from Japanese carpenter techniques of re-building wood buildings in order to provide an indefinite life span.

We should build with wood of course, and remember to listen those who know the material well, carpenters. Quantity and quality!

Implementing local / indigenous materials and methods to create sustainable practices and aesthetics

The city of Pudasjärvi, Oulu Region, a municipal decision to have all public buildings in local massive wood and in a high level of architecture.

A question to future development is, if we build by newest technologies or rely on the old building tradition.

As a willderness guide we use cedar canvas canoes and tump lines to carry portages. These tools and methods are borrowed from the first nations people who first developed the routes we travel. The materials seem fragile at first but folks discover that they are sturdy, quieter than modern materials, and sustainable (and can be repaired easily with locally available materials in the woods). We introduce our environmental ideas and the value of sustainability through the active engagement with these practices. I would imagine that this method would transfer readily to architecture and design and that there are many many examples.

Promote local creative individuals, promote local culture

Self-building and involvement of local community to care about reuse, recycle

Resources: wood; possibility to create something similarly to the post-war generation did

We need to learn from the past: We should present options and concrete examples from the past and try to find the balance between ready-made wood elements and handmade wood building. Are the principles of building in the traditional way idealistic principles? Is using no glue for example a reality?

One thing I have been interested in is how artworks are tacitly designed to capture and direct attention as a means to express ideas. Buildings can be more explicitly utilized in this regard because they direct our physical engagement with spaces, they engage us cognitively and practically. I would think that the use of natural local materials and design strategies that make familiar historical references, engage normative practices, and direct attention to the way we are embedded in a natural environment that puts pressure on us as we put pressure on it would be a way to express ideas of environmental sustainability.

Respect of local features, acknowledging the cultural and economical diversity of people and cultures in the area. Being empowered from the identity of the area.

Aesthetics are a result of mentality and location. We should clarify the question of aesthetics before we give out a solution "out of our sleeves".

Scarcity of resources might be more obvious in Denmark than in the rest of the Nordics

Prefabricated construction elements:
Possibility to prefabricate is one of the great qualities of using wood elements in construction. It is a great advantage especially in urban areas, when it is easy to choose, in which order the elements are delivered to the building site. This means there is a need for a smaller area in the site (and also a denser environment), when the elements don't need to be stored in the building site. Also, the deliverance of the elements can be decided in a short timespan.

Reform in use of building materials:
A provocative question: How much we can develop cities top-down - for example, when the Swedish king told the people to build on brick (to prevent fire from spreading), people still continued to build on wood, because they were used to it. Nowadays, the national authorities promote building on timber, but a lot of construction still comprises pre-constructed sandwich elements. In this, an urban fabric can be seen comparable to a healthy diet - as long as a person doesn't eat only sausages or only potatoes, the person (and an environment) is healthy and rich.

Could we start to build from living trees instead of dead ones? There have been studies on this. Building bridges on living fixus trees is a tradition in India. This would feed our poetic sense of improving cities in a biophilic sense, since living close to living nature has been evidenced to have a lot of (co-)benefits.

Noll-CO2 certification being developed in Sweden, could be a tool for Europe. https://www.sgbc.se/utveckling/utveckling-av-nollco2/

Should we stop using wood as material and more like complex and brilliant systems?

Make multistory wood buildings easy to achieve and make the entrepreneurs choose these over concrete even if the price is similar...sometimes even a bit higher

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Sustainable building materials, LCA, EPD, Smart Design. Smart community living.

Understanding of the possibilities of the material. The price is recalculated when benefits of wood are acknowledged (building schedule, health...)

Database focused on wood: Knowledge

Wood is beautiful!

Wood is: Sustainable: There are wooden buildings from the late 16th century: The definition of sustainability
Wood is: Healthy: Both for the users and the environment
Wood is: Beautiful: Wood also needs ambassadors of beauty

Building with sustainable and organic materials

Example: We are advanced in Nordic wood industry where it comes to technical adoption

Maybe we need tax relif or other method to make NBS more desirable and used. If it is only optional, it won´t be used.

Not to ignore the carbon footprint that is produced outside of Europe in order to produce the goods that are consumed in Europe.

We will have to put pressure on Brazil to preserve the jungle in order not to lose the Amazonas in the meantime, because nature is all ours, globally, also our Nordic Woods!

Improve transport methods of Nordic wood products to Europe and overseas in order to minimize the carbon footprint of the transport.

Existing examples: Metsä Wood, Think Wood

Should be enhanced on European level: Branding, spreading though ad campaigns

Different wood products have different qualities: CLT buildings can be built fast, large and fire-safe: Problem is that there's not too much experience. Quality is not as high as in timber? The trees we use are too young. We have to use old trees, 90-80 years old trees have better qualities.

Honkasuo plan: requiring wood as primary construction material.

Promote building in wood. Smaller in scale. Outside city center. Example: Garden City Movement (Trädgårdsstad), Egnahemrörelsen.

In wood construction we imitate concrete construction - why? We should imitate nature, not the present towns or cities in order to break the pattern and create something new based on new, nature-inspired solutions.

Conscious and aesthetically appealing environment through responsible material solutions

Learning about the products their benefits and take part in making building more ecological: Finding general framework for the approach

Different aspects of the wood building process: Packaging, possibilities to recycle. Transporting elements in right size, too big is difficult to use. Compatibility of different elements. Visible components are easier to maintain, more aesthetical

Small amount of wood in a bathroom could help save energy, even though the wooden ceiling is generally considered to be more expensive than a Gyproc for example. (lower temperature by heating, but ends up in the same temperature because of the hygrothermal effect)

Less developed (low-tech) materials are easier to re-use, and in this, timber industry has an unrevealed potential. In this, "less is more" gets a new interpretation, when re-use adds value to both the economy and the environment. We need new discoveries for low-tech initiatives, and this needs new regulation from the top-down approach. How much "super-processing" do we need, and whose wellbeing it benefits? The wellbeing of the citizens is, of course, a priority. A question to future development is, therefore, if we build by
newest technologies or rely on the old building tradition.

Timber used to be a very valuable material. Today, many cheap materials are used, but the externalities of the cheap materials are usually not taken into consideration: for 'cheap' aluminum, cheap labour, energy and global prices are needed. When using cheap materials, we are not really paying the real cost, the impact of cheap energy and materials. Most of the practices are still 'business as usual'.

Also, there is a need to think and use materials in a 'new old way', such as using straw as insulation in a wooden frame.

Wood has the ability to release heat from the water it absorbs. All organic materials act the same way, but wood absorbs and desorbs heat the most. This also affects indoor air quality in a positive way.
What about moisture build up? Not to worry. Our houses in the north are actually too dry, especially in the winter. The water that flows is the problem, not the warm wet air in the bathrooms. Obviously the structure needs to be air tight in order for it to work, but otherwise there is no problem. Same way as in a sauna, there's plenty of hot, wet air, but no damage to the paneling.

Stop to demolition, yes to retrofitting

Before you build something new, make sure that what is being built makes the place after better for sustainability

SPARA och BEVARA.
Swedish programme to bring heritage and energy retrofit together

Repair-caffee - also for buildings

Sustainable renovation, gentle, preserve products, affordable "mini" or "zero" renovation applied by Swedish housing companies

Example: Revisit hybrid programming of spaces merging with existing built fabric. Diversifying use of space with retrofitting

Inspire with example: best practice shared in a visual way, to browse through (e.g. like in HiBERatlas - Historic Building Retrofit Atlas) for architects and buildings owner. [was tested also as toll in teaching]

I would like to ad how important it is to talk about cultural heritage, art and maintenance while discussing Bauhaus

Cultural Environment as Resource in Climate Change Mitigation and Adaptation (2014) http://norden.diva-portal.org/smash/get/diva2:756802/FULLTEXT01.pdf

Idea: Encourage hybrid programming of spaces to facilitate retrofitting existing built fabric, buildings that are a product of other production methods and economies.

Make use of existing buildings. If demolishing, reuse the materials. Create footprint of demolition.

We have experience in retrofit and renovation projects in general where we include many stakeholders and many different indicators. Dialog and communication

Idea: Make demolition accountable - through tracing, taxing, transparency. AIM to encourage retrofitting, discourage demolishing.

https://www.talli.fi/en/projects/karviais-tie-12-housing-renewal

What if the ownership prevents cities to utilise derelict buildings on their areas? Should there be financial, tax or other incentives?

Do we still need new buildings? New buildings should be seen as the last option, if refurbishment, repair or sharing of spaces don´t work.

What should be the inspiring new principles of aesthetics? Designing things that age beautifully, that are adaptive and can be reconfigured to changing life situations.

Good example of resilience, social architecture, doing as little as possible, reuse and respect for built heritage: Anne Lacaton & Jean-Philippe Vassal winners of Pritzker Prize 2021:

Focus on the re-use, rehabilitation & repair of the not-so-highly evaluated 60s–90s building stock instead of demolishing it and creating new but material intensive wow-house stock.
> Recognise the values and build upon them, let people be proud!

Potential in old structures and buildings, transform into new uses. And value the beauty and the quality.

Reuse and repurpose and looking at the value of existing places is of essence
– rather than the lineare new build of city areas and buildings. Give place-making and restoration a priority more than today.

We need to take care of our heritage, it is now a question of post war architecture that we need to protect....

How could we learn to "tolerate" also ugly neighbourhoods, if we refrain from building new ones (due to need to cut material-dependency in construction)? Maybe making the surroundings nicer, greener, livable. Empowering people to adopt a caring attitude towards their own place?

Need for "klimatdeclaration" and to calculate carbon footprint.

Zero-waste material use

A challenge in wood element building (CLT) is, how the waste from the construction can be used, for example when the windows are cut out from the elements, in a high building there is, then, something like 600 window-size pieces of CLT. These could be used as furniture, for example, but they can't always be used. Minna Riska mentioned how they are trying to create a system to leave spaces to the holes during the production process in the first place, so there would not be need to take them off.

What kinds of parts and pieces (building parts, furniture, objects etc.) could be made out of the leftover wood so that the new pieces could last for decades or centuries? How to invent ways and 'islands', in which things would be made differently?

One of the big challenges in the use of wood is how to utilise leftovers – the low-quality, low-value parts of wood. Wood waste is burned in the Nordic countries to produce heat and power. Using bio-based materials for energy production means lesser use of fossil fuels. If wood waste can't be burned, it will be sent to i.e. Poland to be used as board material for Ikea.

In the UK, where wood resources are scarce, small timber is used in a very different way from the Nordic countries, in which wood is seen as the new concrete.

What are the material requirements for reuse? Standards and regulations regarding reuse. Acknowledging risks.Structural issues.Packaging issues. Designing new buildings in the way that they could be more easily reusable: Components

Reuse of materials

In general, current legislation is not valid in a new type of recycling society. Different aspects of circular economy are indeed sometimes challenging to fit into the existing legislative framework. Adjustments are typically not required into just one law, but into several cross-cutting fields of legislation (e.g. nature protection, construction, chemicals, health & safety, etc.).

Nordic Platform for reuseable wood material

Common page for sources for reuse
For example reuse of timber
Database for reuse is needed
Could be led by municipality

Currently the reuse happens mostly through local contacts. Spreading the knowledge out though contractors. Sharing on database

Infrastructure for recollecting and distributing/marketing reused (building) materials – as building materials or for other applications.

Funding Lendager-type pilot projects aiming to upcycle used building materials.

Change the way we talk about reusing building parts – not seeing them as waste but as valuable material. Taking down obstacles for reuse from the system.

Circular economy

Community based neighborhoods which practice circular economy in the daily life.
There is a project built in Helsinki but we need to develop more of them https://solwers.fi/en/solwers-starts-developing-a-circular-economy-residential-and-office-project-in-helsinki/

Make more efficient and inclusive use of circular knowledge brought to Europe and the nordics from different regions where ressources are more scarce.

Standards and regulations regarding reuse

Understanding of sustainable construction, also for new build - prepare for a circular life and design for reconstruction.

Wood construction starts from a forest and ends to a constructed building. An important reform in all the construction is the transformation from using only new resources but to utilise existing materials. Regarding wood construction, the timber also needs to be given back to the circulation. To enhance circulation in an endless cycle is a challenge, for example in cases when wood-based materials are connected to other materials, such as mineral-based materials.

The society is built on a linear model, and every part of that, may it be taxes, laws etc needs to be adjusted for a circular economy.

How do you use the tax system, so that it supports the circular production? Designing a tax model for life cycle perspective - research wanted. Look at it as a design assignment - a pragmatic approach.

Regulatory environment solving complex issues?

Certification shemes can be used as tools/drivers for future regulation and present action

To enhance circulation in an endless cycle is a challenge, for example in cases when wood-based materials are connected to other materials, such as mineral-based materials.

As an example of fast lifecycles, wooden parts of buildings, such as windows or doors, are allowed to be replaced even when they have already lasted for decades. Also, parquet floors are not sanded anymore, but replaced, which has lead to thinner lamelling, which can't even be sanded, but require replacing

Construction sector does not change without laws and regulations. We need changes in law that create incentives towards circular economy.

Relying on the existing buildings as a material bank that mostly substitutes new building part production.

Using new materials like https://www.betolar.com/about-us

Considering material buy-back agreements as the new status quo in public construction projects.

There are good examples of fully recycled buildings, such as in Norway, where in a new building all components are recycled, for example donated from other buildings, including railings, stairs and even firedoors.

Reuse

Having a transitional school before 1. year arch school - holistic bauhaus summer school- To implement: either school requirement or industry has to require. Diploma, your final work has to be a report: ex: how does your final work answer to these seven points?

Working together with other specialities to change people's viewpoints on quality, aesthetics, culture.

The new architect: A Nordic Academy

Architects bringing different focuses and experts together, act as facilitators

Architects should focus on the inhabitant more, towards co-design

Empowering architects, landscape architects in Nordics to take the lead in the development projects

Accessibility audits / assessments

Functionality - moving, doing, playing - researching the world with the eyes of a child.

Aesthetics is never just perceptual. Or better we are never passive perceivers. Perception is an adaptation for action. We perceive because we are embodied in our lived environments. Aesthesis = sensuous knowledge, knowing through perceiving as opposed to reasoning. Pair this to acting and add the notion that an environment is always a niche, a relation between an agent and a world and we gh\et a far more realistic and constructive notion of aesthetics.

Example: How can built fabric that is a product of previous social, economic and production landscapes be re-adapted?

Beside the architects as professional contributors, architecture as an academic field needs to be involved in the processes, to study and support the processes, assess the outcomes, empower voices of the unheard, and help build up knowledge to support further development. We do need a lot of researchers from fields like public health, environmental psychology, social sciences, biological diversity, mobility, cultural geography, political studies and such – but let's not forget the research within the fields of architecture, urban design/urbanism and landscape architecture.

Edu at master: Common agenda within courses. Understanding about resources, sustainability, we cut the edu in. moduls, easier. The agenda of the new bauhaus could become the background of a study program.

Design plays a critical role in the path to social transformation, since we [architects etc.] are agents of change, equipped with knowledge and power. Development in the built environment that does not release the potential for sustainability is unsustainable. In the future boundaries between "built" and "environment" will be blurred and urban ecology entangled with social structures (queer ecology). Instead of being part of something bigger, we should be working with intimacy.

Problem: Lack of artistic confidence. Program that connects the psycological process of creating/expressing. knowledge around creativity w/ explicit focus on emotion. Ask people how they feel about academic problems/problems. Iq+Eq

Need: A Nordic Academy for Systems Thinking. You can't change/design a system without understanding it. We have good academic environments to build from.

We are good at various univeristies and institutes, assessing and handling complexity and uncertainties, from a systems percective, aim to strengthen the society in this. Create an Nordic Academy.

Designer tools can feed into other practises.

Multidisciplinary education curriculum

I think it is necessary to teach/learn the role of each discipline in shaping our built environment and also being aware that like for an orchestra a symphony is not the sum of the different musicians playing: this is what I really believe is crucial in being an architect

Olof Kolte at LTH: Sustainability, crafted with natural materials, students have to make. Provide themselves with tools to survive by transforming the available resources surrounding them, in the woods. Gives a scale of what design can mean.

Arch students 4-5 year. workshop/course where they have to think about beams and columns, make prototypes of bridges. Goes parallel with a city that wants a bridge. Design and build small prototypes that take part in the competitions.

Building 1:1, urban context and/or on campus (NTNU). 1.semester students. Expanded to Master courses and student-led activities (Live Studio)

Give architects the mental tools to ask the right questions. (example: what are you doing to improve the quality of everyday life?)

Taking education outside the academia would also introduce the agencies of different actors to this multidisciplinary interaction

Promote female architects , artist and designers more in arch education.

Innovation, prototyping & research

Spark: A needs-driven regional innovation programme i Norway for smart and sustainable local development - using design thinking, collaboration models and the SDGs as tools

Arctic smart villages 'älykylä'. Holda group Solar technologies. NollaE.

Open source innovation platform for sharing best designs, practices and contacts around wood and hybrid construction www.opensourcewood.com

Ideas: Create and Show the construction of urban ecosystems, exemplifying Blivande. A house and community that exists both physically and digitally. Help others develop that type of luminal spaces. IRL and Online. Merging human connectoin needs and our digital present and future.

Prototyping may cover the scale from small scales to scenarios/models for resource efficiency/sustainability at national or global levels.

Open source sharing

Requiring area plans to assess and limit the carbon footprint caused by the soil stabilisation and the built environment.

Solar companies, smart buildings systems, wood, straw, clay, lime. Smart village systems.

5G infrastructure and a testbed for smart services and solutions in Kera, City of Espoo (Finland) https://www.espoo.fi/kera

Good examples are a usual way to create followers in the building sector.

A foundation supporting prototyping of new urban experiments - at several scales. Both physical, digital and scenario building

Prototyping and testing small to create great changes as in Dan Hill's presentation.

Re-develop the sharing economy that existed before mass-consumption.
> and nordic countries have good basis for this!
[Italian guest speaking ;-))

Facilitating Creative Industries

Facilitating social innovations

Idea: Energy cooperatives in decentralized social communities: "virtual powerstations".

Where to find solutions? Inspiration from publications; Consulting colleagues; Learning from others; Improvisation; Pilots to test the new knowledge

Architectural Democracy research / matrix for tackling complexity

Portotyping can gather different stakholders from law to desginers, producers to users. Create an inclusive process.

Possibility to invent reusable construction products.

Develop construction systems that are highly flexible and adaptable to future social and technological evolutions.

We will have to reinvent cooling, producing clouds and covering from the sun, as part of the design process.

A school for governance and steering towards effect! The Nordic model is largely depending on trust in institutions and representative democratic system, but does not adopt to change very well. Politicians and other decision makers need to be educeted in new ways of organising and advance to system change instead of projects with single impact.

Pilots to test the knowledge of woodworks

Flexibility also a tool for equality? Giving opportunities for different needs and backgrounds.

Better mobility in cities for children and youth - play webs etc

Mystery and freedom - leave space for imagination - don't over design - ensure diversity while still working within health and safety standards

The new culture of planning between different scales, audiences, cultures, populations

Copenhagen space 10; a research and design lab on a mission to create a better everyday life for people and the planet.

Empathy as a design principle

Contemporary Nordic design principles

Art in infra, for example, squares are made for people to do move. Marks and spots and lines to follow.

Ideas: Make this efforts and places less white. So many young people with other backgrounds do not join initiatives due to their representative whiteness.

Create a change from designing from new resources to repurposing and redesign.

Less is more Nordic Esthetic as a way to design with less environmental footprint.

Architecture as a tool to use/manage resources in a sustainable way.

The principle of Nordic design: simple,-realiable, creatice, applied to digital and urban networks

Embrace change as a way to live. Adaptable soundings. Grow and improve. See it as a "start" not as a final solution

To change/design a system one needs to understand the system. We need a Nordic Academy for Systems Thinking. We have good academic environments to build upon.

Addressing migration issues through networks and sharing best practices on how to make more inclusive environments.

The tradition of 1950s industrial design (Wirkkala and others) applied to digital solutions: simplicity, reliability + creativity

What kind of value can we find from the Nordic aesthetic?

We have habits of living minimalistic. Close to nature. Nordic climate.

Absolute reduction of material and energy used in human communities.

Transformation of design processes for more collaborative and covering more diverse audience

Minimalism - the Nordic culture, the use of minimum, circularity, reuse.
Nordic culture represents worldwide a maximum use of ressources and waste production

How to build and how to design things that don't provide any more choice for living unsustainably?

Practical Design for all - attitude. "Vackrare vardagsvara" goes still strong and help widening accessibility to all levels and forms of daily life.

Awareness of the different needs

Design of spaces that can easily be altered and readapted to different uses

Why not use acoustic perception instead of vision as a perception of an increase of the entropy - while sound is thermodynamics!

Form follows understanding / Form follows curiosity

...if the aesthetic emerges from practice, from how we use spaces, rather than as a property of appearances, the subjectivity of taste seems a less pressing matter?

Rethinking Bureaucracy - an academy for rethinking public sector practice - moving from law to design driven models

Young architects want to DO something

Politics are slow to change, but solutions and change are needed urgently! What can architects and planners do? How to reach politics and decision makers? How to make the change happen?

Design (urban – architectural – landscape) is not about shape or cool design, it is about creating change.

Include issues concerning urban green infrastructure to national visions and strategies, perhaps through EU legislation?

Imbed Nature-based solutions to university curriculums of landscape architects and architects, and effectively connect latest research to teaching.

Taking into account actual needs and desires of residents/users -> working & designing in an inclusive way, co-design, also, with decision makers & politicians?

Rethink ownership and wealth – How to give value to access to urban nature?

Connect: Landscape architects, architects, planners, decision makers, politicians
Learning and knowing!

Cooperation across sectors and borders

The future - change in who is leading development planning and what expertise is used

Collaboration between the fields. Architects bring multidisciplinarity in the projects, different focuses and experts together, act as facilitators

Also. Collaboration is NOT the same as collective design. We need to illustrate how collaboration works, and not just say the word.

national craftsmanship in collaboration with architects, high diversity of details in the build surroundings, and high quality also; intentionality of working together when working on local is the core for quality; by industrial working we have lost it in the Nordic countries

Mapping out barriers for smart cities and co-creating/identifying solutions in the Nordics and internationally.

Example: KreaNord was a great unifying force in the Nordics. How about resurrecting it, in the NEB context?

Building strong collaboration networks with community initiatives

Cross-disciplinary in decision-making is key

In some cases, the builders have the ultimate decision over the will of an architect

Multidisciplinary European pilot projects including several countries for energy renovations in affordable housing (E2ReBuild) with sociologist, architects, engineers...

And is this the wrong conversation? What is the institutional logic of the end-users of the built environment in question?

Learning from Nokia failures don't create silos, create co-operation

What could be the role of artists (not only visual artists, architects and designers) in challenging the urban/rural and nature/human divides and triggering other imaginaries of the future? And how does that materialize in the digital shift?

Need to think how architects, planners and others responsible for built environment can work with designers of experiences, systems, services, digital, etc. different perspectives on user centred design

Infrastructure is also digital. Organizational. And tax system. How do we organize for innovation and stimulate co-creation?

We need to focus on different topics in our NEB dialogues and the built environment is definitely a relevant focus but let's not forget that the scope of the New European Bauhaus initiative is much more than the built environment, it is very much related to how we want/wish to live our lives in Europe, and in the future climate neutral Europe more specifically. In this context the issue of values is absolutely important, a strength of Nordic societies.

Construction industry must also be involved, not only architects, designers, thinkers

The clients and building owners are important too.

Who are the clients? An who are their clients? Users....

Agreed - there are many stakeholders involved and some of them with a lot of power over what is designed, like the construction industry. need to involve the gatekeepers who can help facilitate moving from pilot to implementation. what is stopping design ideas from becoming reality?

Multidisciplinary approaches of all disciplines and specialized fields, not placing all the emphasis on architecture

Example: The Baltic states are very close to us, and any sustainable development should include them as well.

The focus of the New European Bauhaus should be broad enough to address also areas of fashion, food, product design, packaging, technological advances etc practice not only built environment. We have a dysfunctional relationship with our materialities.

Artistic practice and research need to be in the core of Nordic Bauhaus. There are already forms and institutions for this, but those need to be more inclusive and open.

Cross-sectional interactions of Small Visionary Projects within Art, Technology and Design at NAVET: https://www.kth.se/navet/research/small-visionary-projects

Problems are not completely separate, commonalities can be further emphasized

Get clients and contractors on board

Tell about your projects

How to mediate the different institutional logics of the "artistic architects" and "money building industry" ?

Collaborations in new combinations within the Bauhaus initiative

How to spread this thinking beyond the people who are already interested in it? How should we communicate about this to the society around us?

Bringing together architects, construction companies, artists and the public by sharing knowledge

Share knowledge

There are similarities, but also differences in thinking and practices, as well as complementary ideas in the Nordic countries. There is a need to learn from each other. It is important to carry on the conversation – there is a need for thoughts that go beyond the 45 minutes of a workshop.

Environments that promote health and well-being

Cities planned as preventing loneliness

Promote Sense of belonging

IDEA: integrated health care system among fastlege, hospitals, dentist and so on.

Residents in new neighborhoods have trouble taking ownership over new green spaces. Guerilla gardening and local control over plantings-maintenance could inspire a sense of belonging
More avdenture playgrounds/ bygglekar as base camps for kids to voice their views, get involved and learn about climate and society

Third spaces in different places and scales (from libraries to the common spaces in the buildings providing encounters) to improve social cohesion

Place understanding and Design - to create beautiful and kind environments, nudge good habits, can inspire and create change.

Green development costs something but it gives back as well in terms of well-being and aesthetics

Green facades not only nice for climate and insects, also aesthetically attractive for us and me this health-promoting = integrate more green in our facades in cities, use facades actively, get back gardens in cities

Cleaning the snow out of the walk-ways

Oodi library - third space where you do not have to consume, possibilities for learning and exchange

What triggers productive social interactions? How does some spaces (third spaces, for example) trigger a certain type of connection, while some spaces does not?

What about Ergonomics?

Generation living: Nordic countries has lost the connection with other generations, older generation aso. Build communities with bigger houses for families, smaller houses for elder people, to mix generations

Aalto campus: Humaine architecture brought by materials, light, human-scale spaces

Sensory gardens in Denmark

Bertschi School Science Wing, Seattle, WA

Generations Block, Helsinki

The first things to take into account when designing should be health both of the inhabitants and environment, considering materials and nature. Then the aesthetics and desires of the surroundings.

How does our embodied interaction with a building/space influence our aesthetic engagement with that space and social engagement with the community within it is embedded...ahh, Perhaps this question is about to be engaged.

Create politics that give way to a better way of living

Playfull and joyfull world would be the best possible New European Bauhaus

According to Marković (2012), the aesthetic experience is an exceptional state of mind, which opposes everyday, pragmatic experience and "protects" the individual from the effects of oppressive reality (Marković, 2012).

Activate the outdoor environment during all seasons including the most harsh ones (winter)..

Social/leisure activities are in relation to the availability of natural resources of which the existence depends on a sustainable living lifestyle - parks, snow/skies, ice, wood/hiking/camping

Council of Oulu Region has for many years had a project to develop public meeting places in small towns in cooperation with Oulu University.

Built Wellbeing Project by finnish Heritage Agency (for the time being only in Finnish: https://www.museovirasto.fi/fi/kulttuuriymparisto/rakennettu-kulttuuriymparisto/rakennettu-hyvinvointi)

Multi-use areas are good

Seeing humanity as part of the context: human-centric. We design the context and the context shapes us! And what we want to shape becomes the politics.

Environment responses to the needs of diversity (ethnic, age, background)

Mixed-use spaces and the "buffer zone" between the public and the private are interesting places where social interaction can happen even more

Connecting urban and rural

How can urban and rural areas be thought interconnectedly not only in terms of mobility and regional planning, but also concerning cultural practices?

Idea: Beyond the city, include rural areas. Smaller cities and areas as testbeds.

Designers, Architects, Programmers with experience from un-urban lifestyles, knowledge, everydaylife = DESIGN SCHOOLS in the rural

Eco-villages: who are doing real-world experimentation with alternative and sustainable settlement systems?

IDEA: smaller scale and affordable housing - garden cities, Nordic forest cities, ecosystem services, building with wood in the woods: explore the RURAL vs. URBAN: adjusting the production landscape; the culture of the rural landscape. Moving back into the countryside. Reuse and rehabilitate.

Smart communities - rural areas as testbeds

Collaboration between big cities and small municipalities for mutual learning and building bridges.

Focus on living in rural areas, "village exhibition 2030" (prestudy Region Kronoberg, Sweden) https://www.regionkronoberg.se/nyheter/pa-vag-mot-bymassa-i-kronoberg-2030/

Co-working spaces outside of cities - less commuting (less CO2), and more inclusive (better solutions).

Is there a post-Covid renaissance for the wooden villages? Will we in the future live more spread out in smaller towns and habitats, where wooden building is easier? Desification with wood in cities is difficult, but rural areas are easier to use wood.

Digital solutions to encance design and participation

How to make environmental data easier to understand? How to support data literacy skills?

Idea: Digital involvement in education - programs in schools (high schools) partnering one day with different organisations. Both digitally and IRL. Connecting co-creation to local youth.

Encourage open access for design documents so everyone can learn from them and develop them

Develop design software in such a way to make it user friendly for people from different backgrounds, this would encourage everyone to be designer

The facade opener project by Architectural Democracy to open up the facades of buildings via open source photogrammetry

Re:bygg, hackathon circular buildings, as a way to find new solutions (CRKKL project http://blogg.regionkronoberg.se/cirkulara-kronobergkalmarlan/event/rebygg-hackathon-var-med-och-hitta-nya-losningar-for-cirkulart-byggande/)

Design systems in Finnish public sector

Challenge: Increasing digital demands - increasing environmental footprint and need for resources?

The paradigms of land use are in transition. How to govern the debates related to that?

Children to be able to connect and discuss about the future environment - platform?

Invite young people in developing tools and strategies for crisis communication (instead of just complaining about their behavior). In what ways do they want to be communicated with? How do we reach out to them in times o crisis? Which channels, messages etc, etc, etc. See the CoCo research network, coco.mau.se

ICT and tech innovation is strong in the Nordics. Tools can help to understand problems and solutions, and involve people.

IDEA: can we have a data bank, everyone can have a report on what kind of data it's shared on different platforms and decide towithdraw data or share more data?

Idea: Creative digital bootcamps. Meet across geographic and sector borders and collaborate intensively for a short period (a day, a week, a month)

Art-based methods to support urban data literacy skills.

How to support household energy consumption and waste management with smart technology?

Mobility as a Service (MaaS)

Space as a Service (like parking lots, streets, emply lots)

School as a Service like in Otaniemi

From mobility as a service to accessibility as a service

Green Deal must not forget ICT facilities! Not only Design!

Metadata and community ownership, data commons

Mydata.org Mydata operator model in Helsinki

Digital twin for city (Helsinki)

Sitra Data Economy programme

Also Norway has some regulations on web accessibility. I think it's very good.

Data flow between BIM and GIS

BIM-based building national database = digital twin

How to numerize / parametrize architecture?

Digital Citizenship

Gamification

Ideas: Co-designing projects in urban spaces with participatory local software, such as https://dreams.blivande.com > discussion over plans and projects instead of direct impossition from above. Distributed descionmaking and grant distribution.

Ideas: Digital Festival, bringing all projects together and inviting citizens to come and explore together IRL, what others are creating digitally. Great city event and networking opportunity

We need to question the role of technology in our decision making and policies

Idea: Invite people from local city development to hubs again digitally or personally. To foster trust and invitation to collaborate. Easier through the credibility of NEB and EU

Developing smart communities that promote inclusion, offering support to individuals with different backgrounds, religions or disabilities.

Creative placemaking based on inclusive technology

Gamified Cohousing project in Hyrsylän Koulu, Finland

Example: Digital placemaking tools for decentralized organisations / citizens initiatives. https://www.platoproject.org (Vinnova partner)

Empowering the silent voices. Technology as a tool to reach out the ones who aren't usually heard - using them as co-creators of an urban area.

Idea: Digital Networking platforms for the organization and participants of NEB, to be able to connect, trust and resource from each other experiences. DECENTRALILZED OF COURSE

Participation & co-creation

Participatory planning through group modeling/analysis is an efficient way to address complex planning issues.

Participation in green area planning. Aarhaus convention tends to be defensive, not proactive about involving people in proposed land-use change.

Participative workshops during design processes (example Oodi Library)

Better Block but with kids and youth

Important also to comminicate to the participants what will be done with the feedback and ideas

We need a framework for participatory design that comes before OR together with the architects and designers.

Equal access and safe space to participate in planning

Social housing of 2nd half 20th century: include peoples perspective, value the qualities and "allow" to be proud

Enabling people using tools to enable others

Is information for residents available in different languages?

NEB should be available for everyone, and needs to be guided by the needs of many different viewpoints and social classes. Why is it called Bauhaus? There is a need for a solution in a crisis.

Participatory methods? How to involve residents and different target groups?

Policies or structures that involve children participation

Citizen empowerment - citizens driving urban development projects in collaboration with cities/private actors.

Participation model in Helsinki, participatory budgeting and Stadiluotsit

Co-creation methods and techniques

Co-design and co-creation processes in Hiedanranta area, Tampere.

A new reward sticker: "This is designed in cooperation with children and the young".

For all children and youth! Diversity!

Giving voice to children!

Children as experts also

The role of children in the community – overgenerational and multicultural approach

Childrens inclusion in urban space and the built environment through Bygglek/construction play. Can be used in different topics. Education, circular economy etc. First step in participating in design/construction/urban landscapes.

MEANINGFUL PARTICIPATION: Participation for preparing the ground for laying a claim, involving citizens in co-creation. Participation for improving quality rather than a checkbox.

Challenge! Create results in engagement for children within their grasp of time. 20 years later is a little far away...

It should be obligatory to involve children in planning parks and schools. Places they use.

19 % of 7-16 year old children want to talk about built environment and share their ideas.

We should update our view of also the small children as capable

Include residents more active when planning parks, public buildings, housing ...

Children's and young's Bauhaus need own project/movement, it cannot be just a decoration in adult's frames

Vallastaden, Linköping - community living with "human-scale buildings" and integrated environment

Co-operation and genuine participation of children and youth.

Finding ways of making kids voices heard that connects to ALL children - not only the ones who already have engaged parents

Who are excluded from the discussions currently? The ones worst affected by climate crises and other environmental crises are least included in design, technology, policy and decision making generally.

Whose voices are unheard? Citizens who do not know about the European Bauhaus initiative, who are not architects or designers, who are not part of this practice and academic circle, and even people who are less interested in making a change and do not demand a change at all. I think their opinions are important, and conversations can create changes in the perspectives of all parties.

People who are less well off financially (e.g. jobless, single parents), not academically educated, and living outside of capital areas.

Involving good existing practices from different Nordic countries as there seem to be many good ones enabling child participation

Ask school children to participate in local planning through, for example, participative budgeting systemically

Who needs to be included and considered in decisions of today? Non-human stakeholders and future generations who are impacted by our decisions today.

Collaborations with local architects and municipalities asking children about their views on creating new city planning

Life-long learning

The "Decision Machine" from ArcDem + Metsä + Accenture to be at the Venice Biennale

Empowering and enabling children to participate through education (skills experiences, etc.)

Architecture and design education for all

Active citizenship skills

The "Urban Dots" planning game with legos + kinect for kids

Cultivate creativity and design thinking in children starting from their earliest days of school

Sweden- primary school education on architecture

Strengthen collaboration with schools and activities that help kids understand nature even in urban environment. (More outdoor teaching in schools in relation to sustainability, climate change and their community) Keywords: nature literacy, hands on practice, grow things in your area (not just your own garden)

Built environment education, educating about active citizenship skills

Need to support the identity building and personal development of children

What standard of living is enough? Can we teach or practice the feeling of being content?

Can we decouple happiness from the materia - Accustom us for immaterial sources of happiness.

History of the place -app

The story of the building app (image, and you'll get info about its architect, materials etc.)

DOGA- Program teaching architecture to small kids. Alf Howlid. Norsk Form Oslo

Steinerschool Holistic and basis, every human has it's own entry into the world. Beautiful how they combine different entry levels to the world. Bauhaus for kids, and focus on nature

Green libarary: the public library as urban sustainability learning center that is open to everyone and closes that gap between academia/science an the public by become a multifunctional experience/experiment/learning space

Co-creation should be about teaching skills, hands on tactile skills, to understand quality in design. About materials and craftsmanship