



Urban Nature for Equitable Cities

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[OUFC 2021 Lorien Nesbitt Urban Nature for Equitable Cities - YouTube](#)



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URBAN GREEN EQUITY
green gentrification

BIOCULTURAL DIVERSITY
Vancouver case study

PATHWAYS TO EQUITY
biocultural diversity & mosaic governance

QUESTIONS





Urban Forests

Trees and associated vegetation in urban environments (Konijnendijk et al., 2006). Also *tree-dominated urban ecosystems* or *urban green space(s)*. Include street trees, parks, urban woodlands, cemeteries, golf courses, urban gardens, etc.

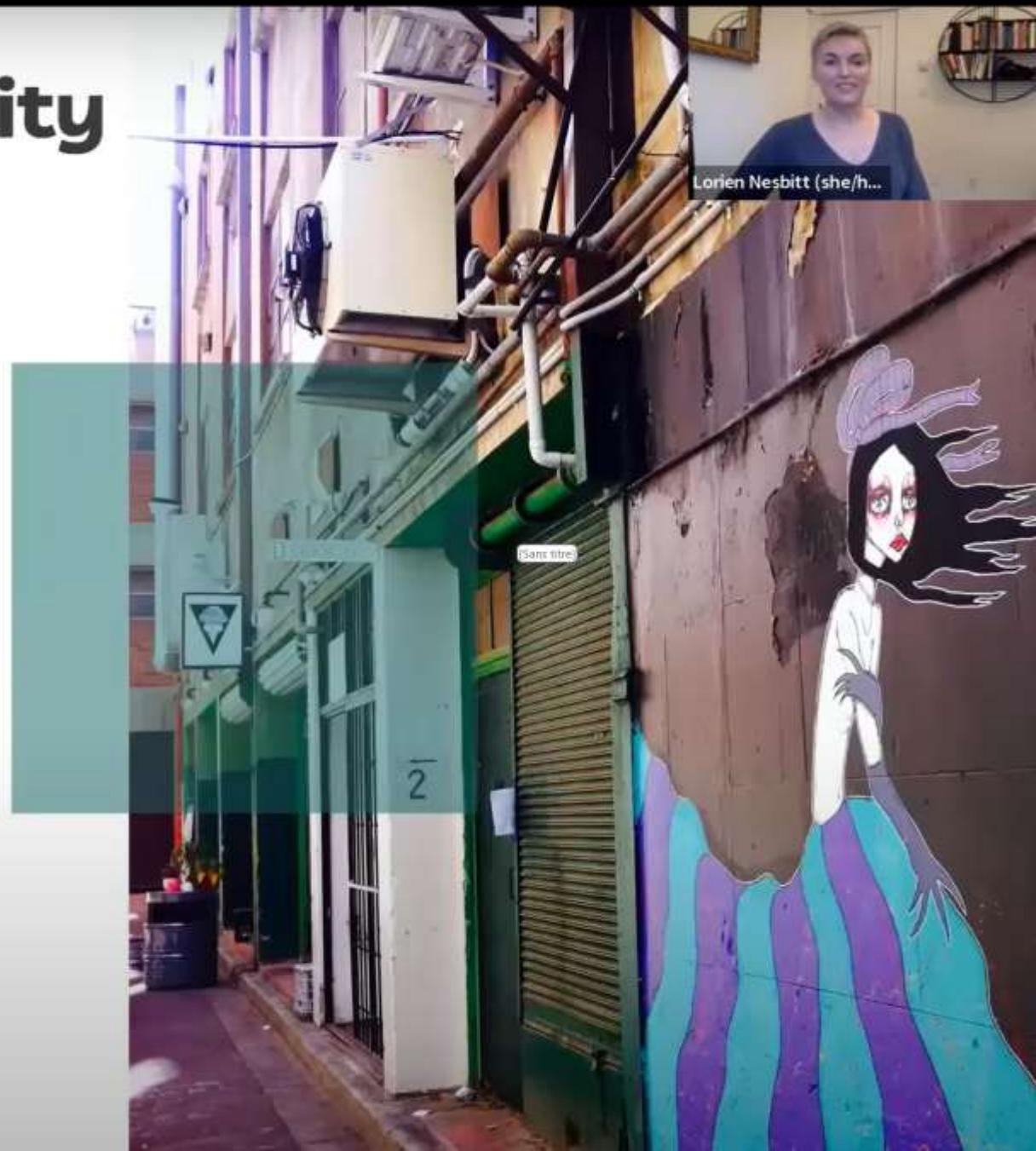






Urban Green Equity

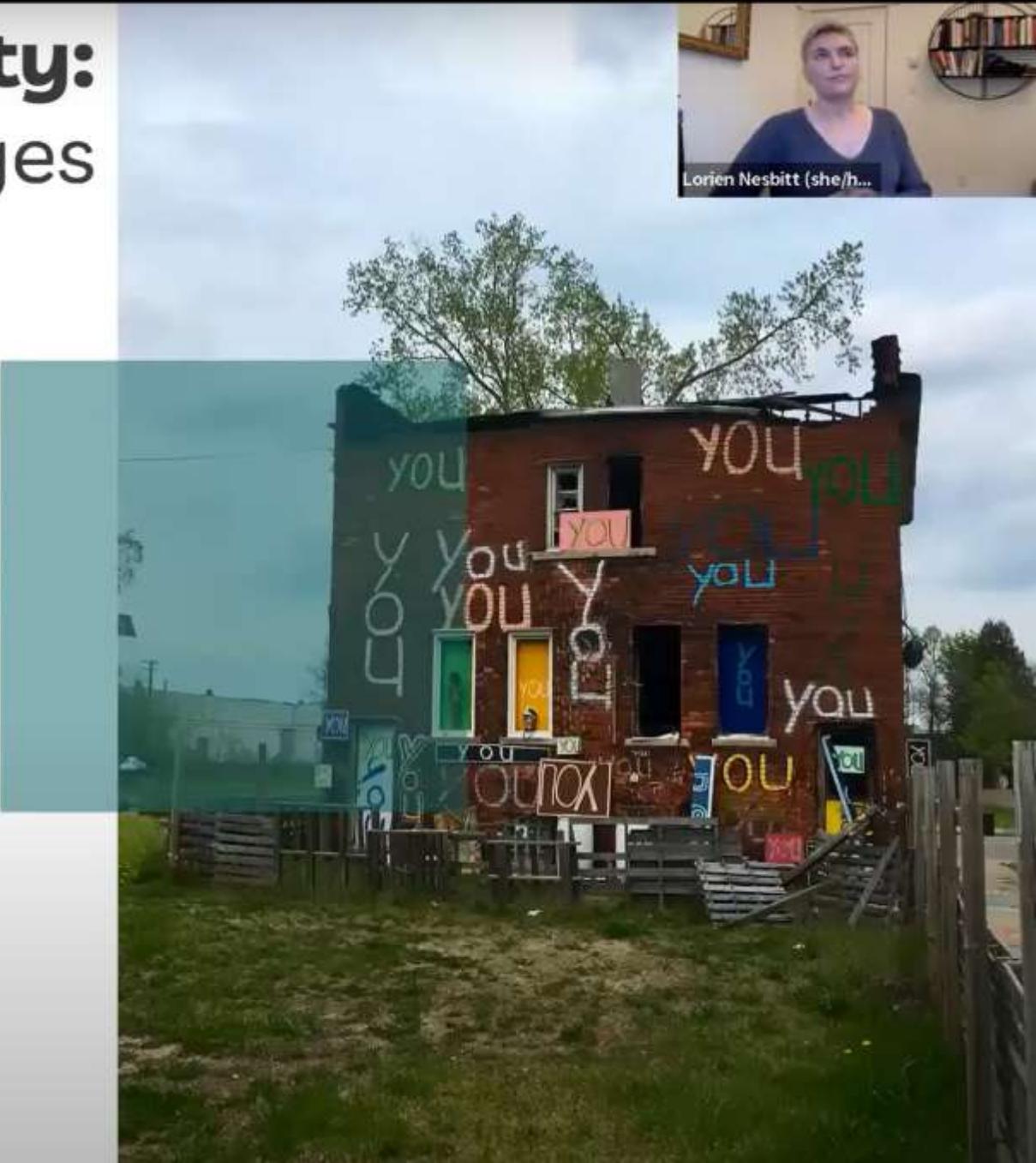
Fair access to and governance of urban forests, regardless of differentiating factors, such as socioeconomic status, racialization, cultural background or demographics



Urban Green Equity: challenges

Key questions:

- **What** do we have access to?
- How do we **experience** that access?
- How are our **needs/values** reflected in the urban forest landscape?

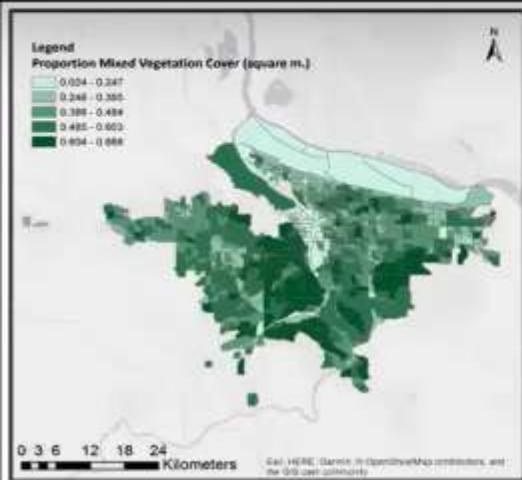




Urban forests are (often)
unfairly distributed



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+ve Factors

- Income
- Education

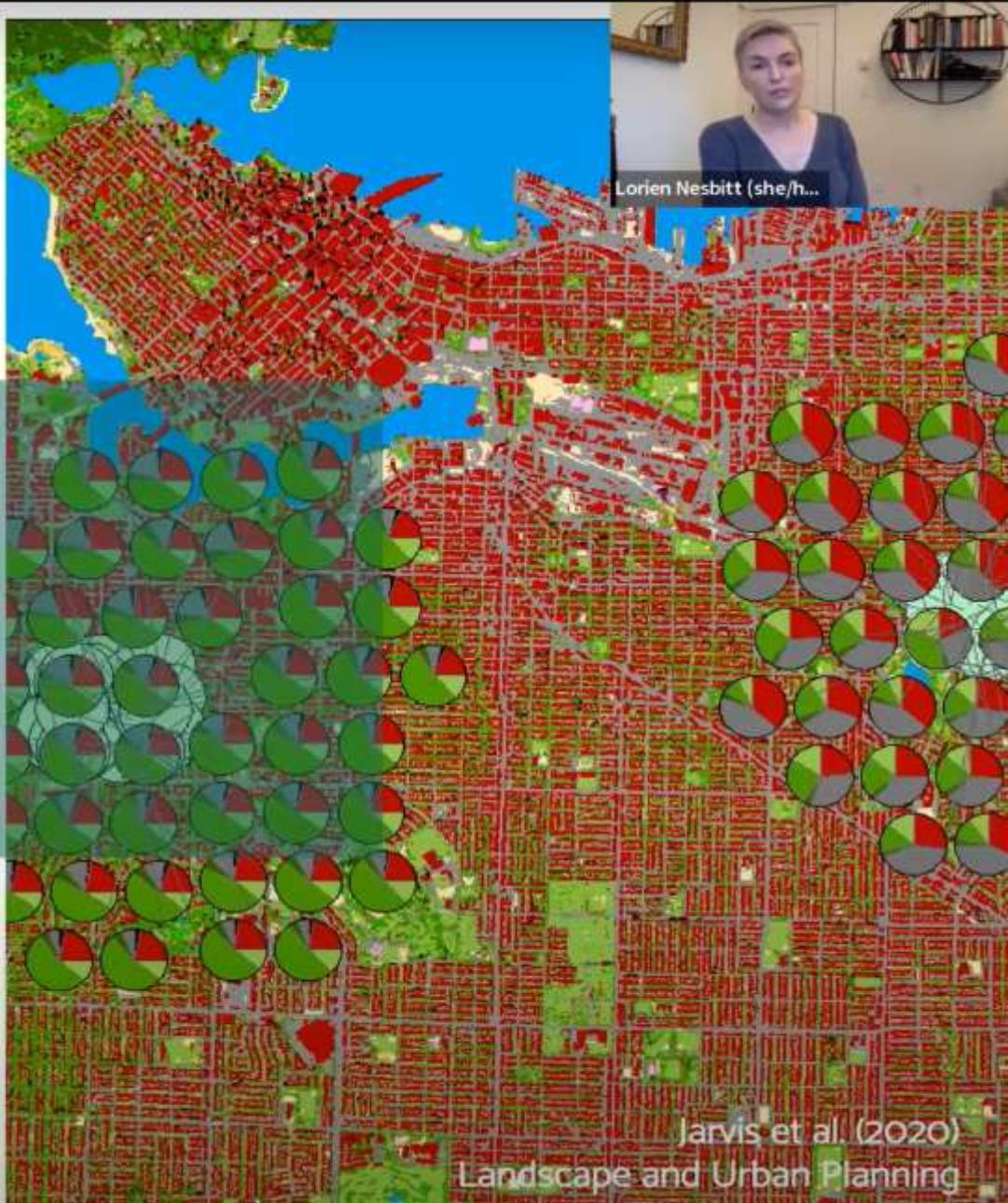
-ve Factors

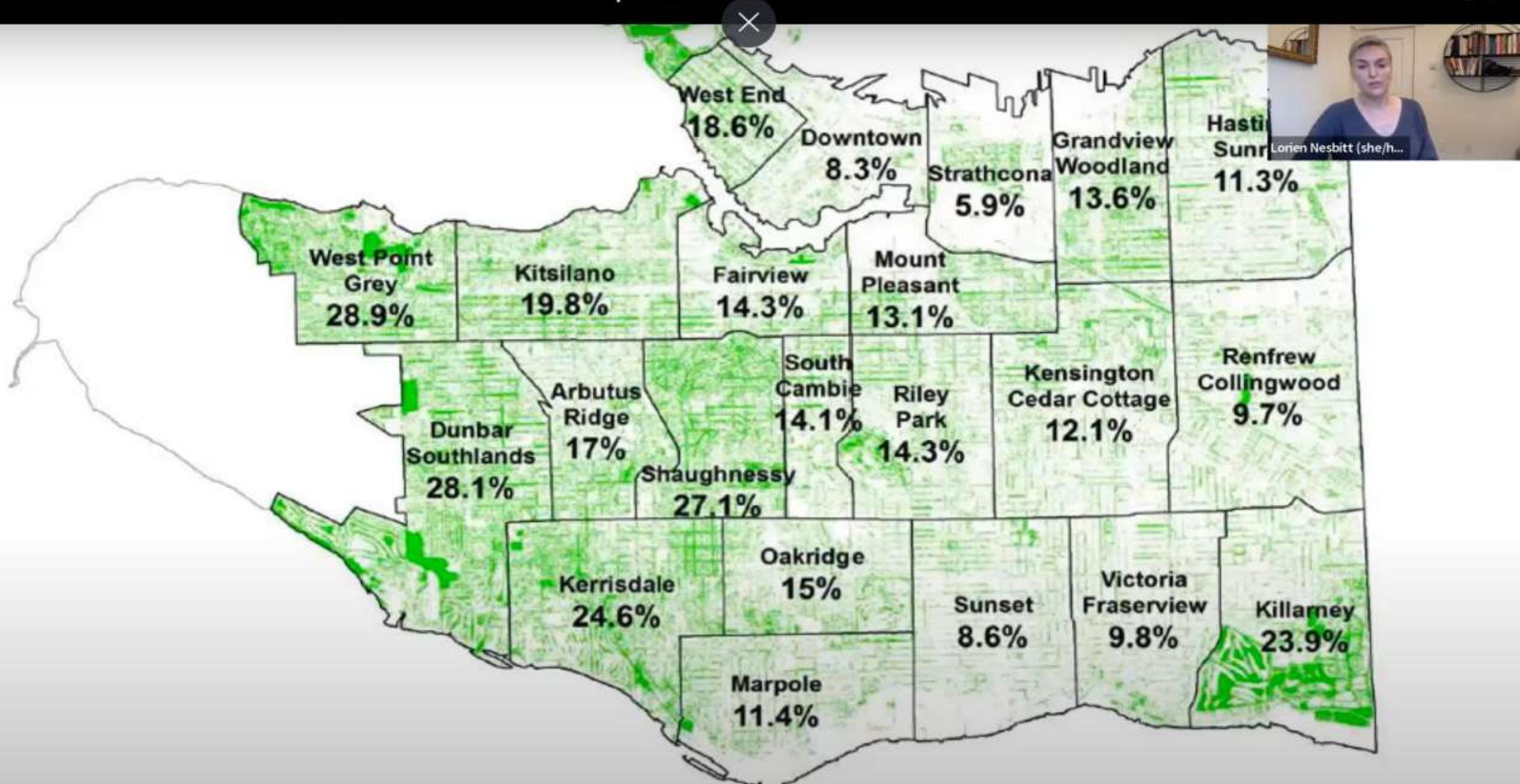
- Racialization in some cases

Urban forest distribution in Vancouver

Neighbourhoods with residential instability, material deprivation, ethnic concentration:

- Lower access to public parks
- Lower residential exposure to vegetation & water
- Higher residential exposure to buildings and pavement







 **Landscape and Urban Planning**
Volume 181, January 2019, Pages 51-79

Research Paper
Who has access to urban vegetation? A spatial analysis of distributional green equity in 10 US cities

Lorien Nesbitt  , Michael J. Meitner , Cynthia Girling , Stephen R.J. Sheppard , Yuhao Lu 

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<https://doi.org/10.1016/j.landurbplan.2018.08.007> 

 **Landscape and Urban Planning**
Volume 194, February 2020, 103686

Research Paper
Greenspace access does not correspond to nature exposure: Measures of urban natural space with implications for health research

Ingrid Jarvis  , Sarah Gergel , Mieke Koehoorn , Matilda van den Bosch  

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PLOS ONE

 OPEN ACCESS  PEER-REVIEWED

RESEARCH ARTICLE

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Trees Grow on Money: Urban Tree Canopy Cover and Environmental Justice

Kirsten Schwarz , Michail Fragkias, Christopher G. Boone, Weiqi Zhou, Melissa McHale, J. Morgan Grove, Jarlath O'Neil-Dunne, Joseph P. McFadden, Geoffrey L. Buckley, Dan Childers, Laura Ogden, Stephanie Pincetl, Diane Pataki,

ANTIPODE
A Radical Journal of Geography

 Free Access

The Scalar Production of Injustice within the Urban Forest

Nikolas C Heynen

First published: 12 January 2004 | <https://doi.org/10.1111/j.1467-8330.2003.00367.x> | Citations: 127

Environment and Planning A 2009, volume 41, pages 2651–2670
doi:10.1068/a41236

Street trees and equity: evaluating the spatial distribution of an urban amenity

Shawn M Landry
Florida Center for Community Design and Research, University of South Florida, 4202 E Fowler Avenue, HMS 301, Tampa, FL 33620-8340, USA; e-mail: landry@arch.usf.edu

Jayajit Chakraborty





PORLAND PARKS & RECREATION



PORLAND
URBAN FORESTRY
MANAGEMENT PLAN
2004



PORLAND PARKS & RECREATION™
Healthy Parks, Healthy Portland

Building Racial Equity Together



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New York

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GREENING GREENPOINT

Stewarding Trees & Community

GREENING GREENPOINT

GET INVOLVED!

HOME TREE WORK REQUEST FORM ABOUT

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Detroit



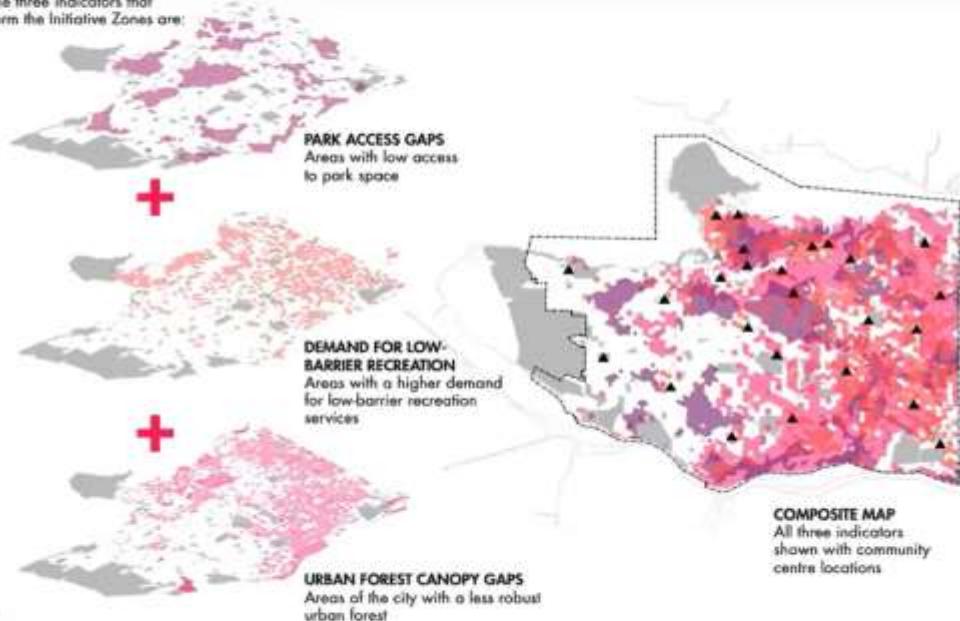




EQUITY

APPROACH**INITIATIVE ZONES MAPPING**

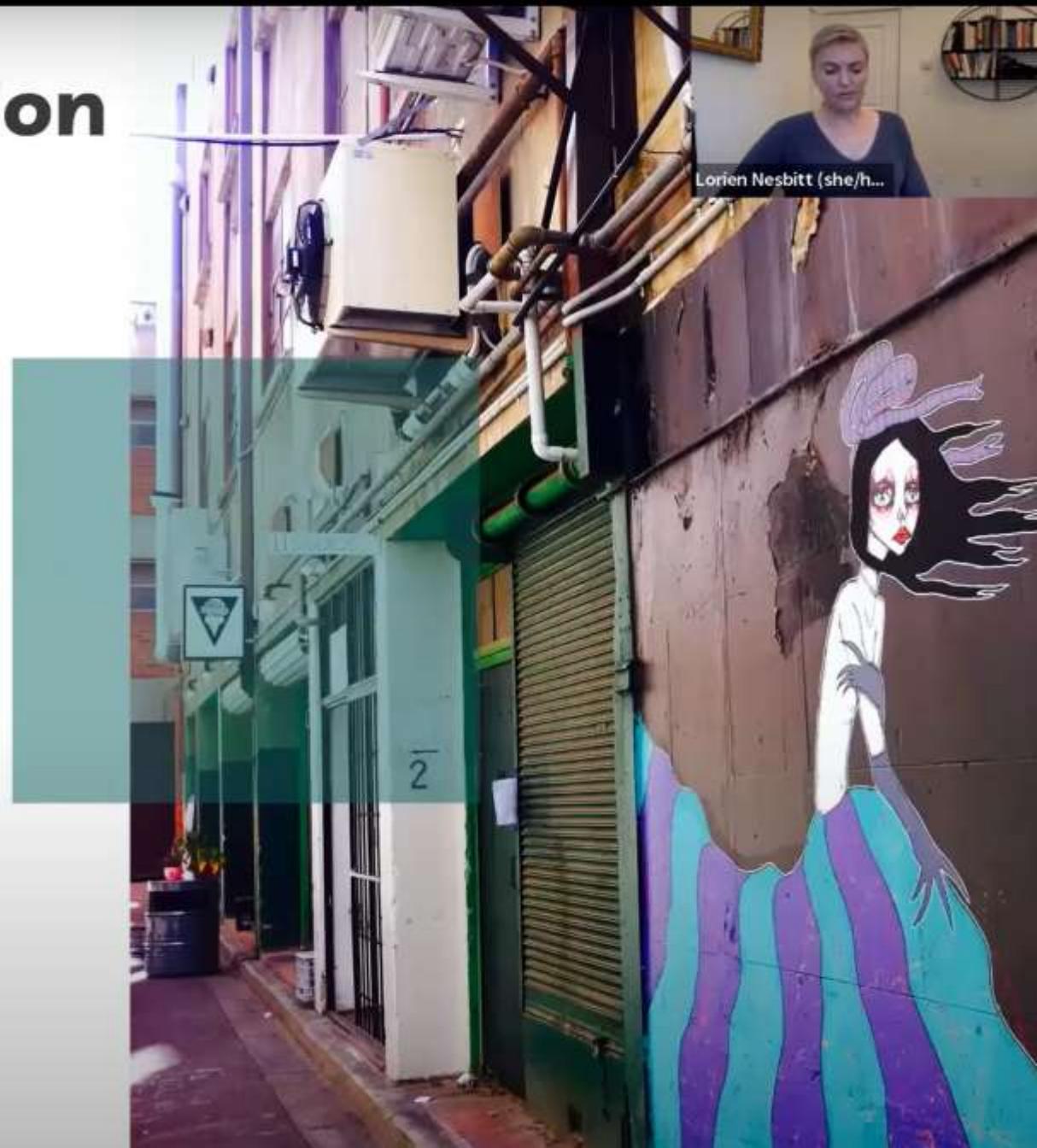
The three indicators that form the Initiative Zones are:



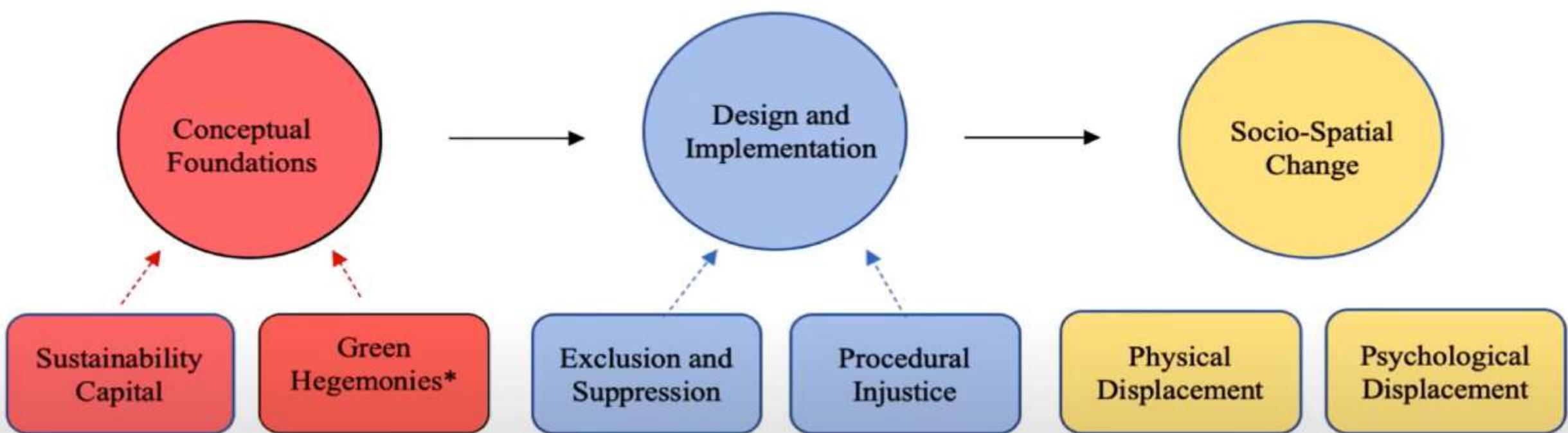


Green gentrification

Physical or psychological displacement of marginalized residents due to improvements to urban forests that increase cost of living or create a sense of exclusion and barriers to urban forest access



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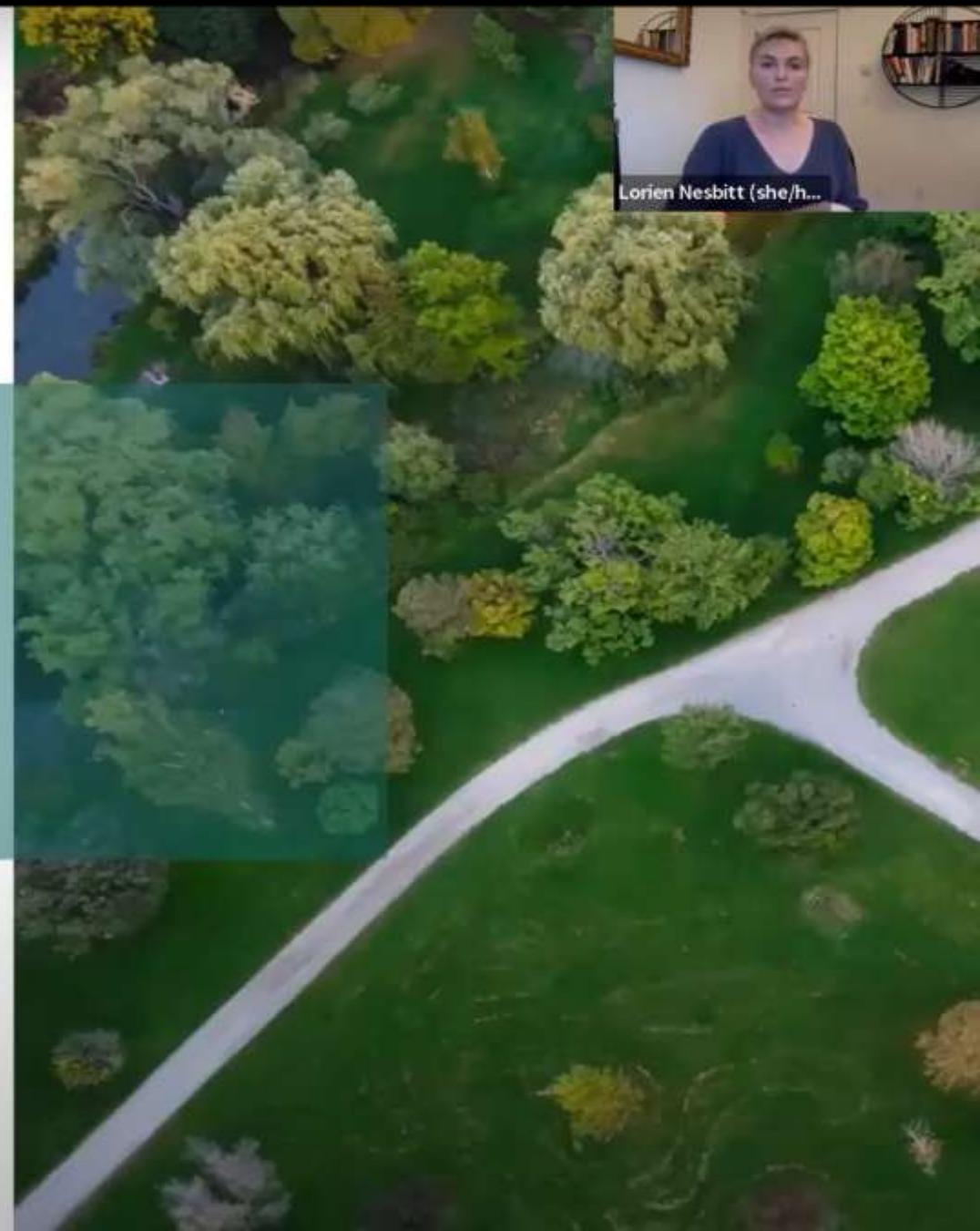
Different cultures and diverse natures



Urban Green Equity: challenges

Gaps:

- Diverse perceptions of urban forest **quality**
- Multiple approaches to **stewardship**
- Current & historical **marginalization** in urban space



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Biocultural Diversity

“The inextricable linkages between cultural diversity and biological diversity and what these mean for nature and culture” – Buizer et al. 2016



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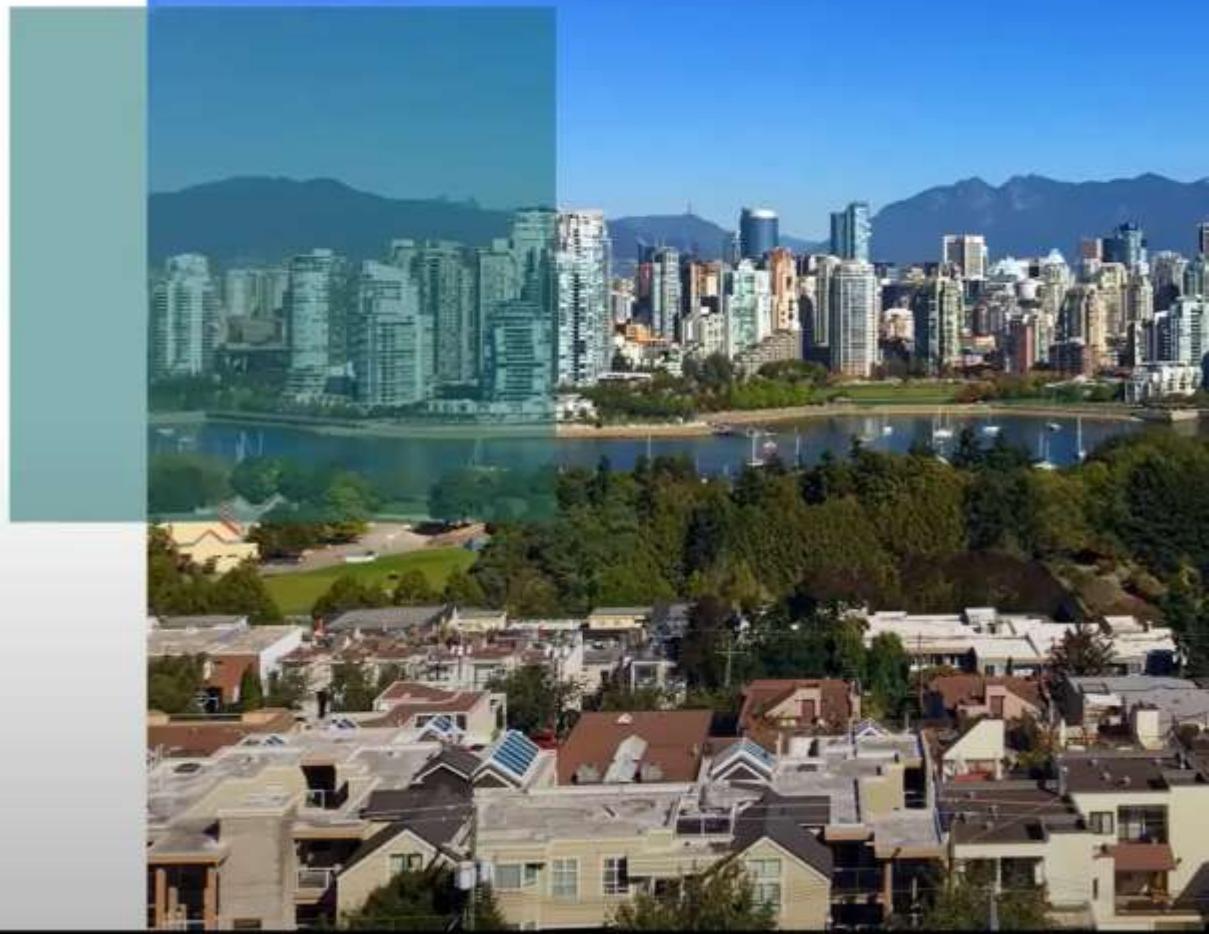
Biocultural Diversity

Vancouver case study



Biocultural diversity:

- lens to understand urban green equity
- framework to address conceptual challenges
- case via which to examine green equity approaches



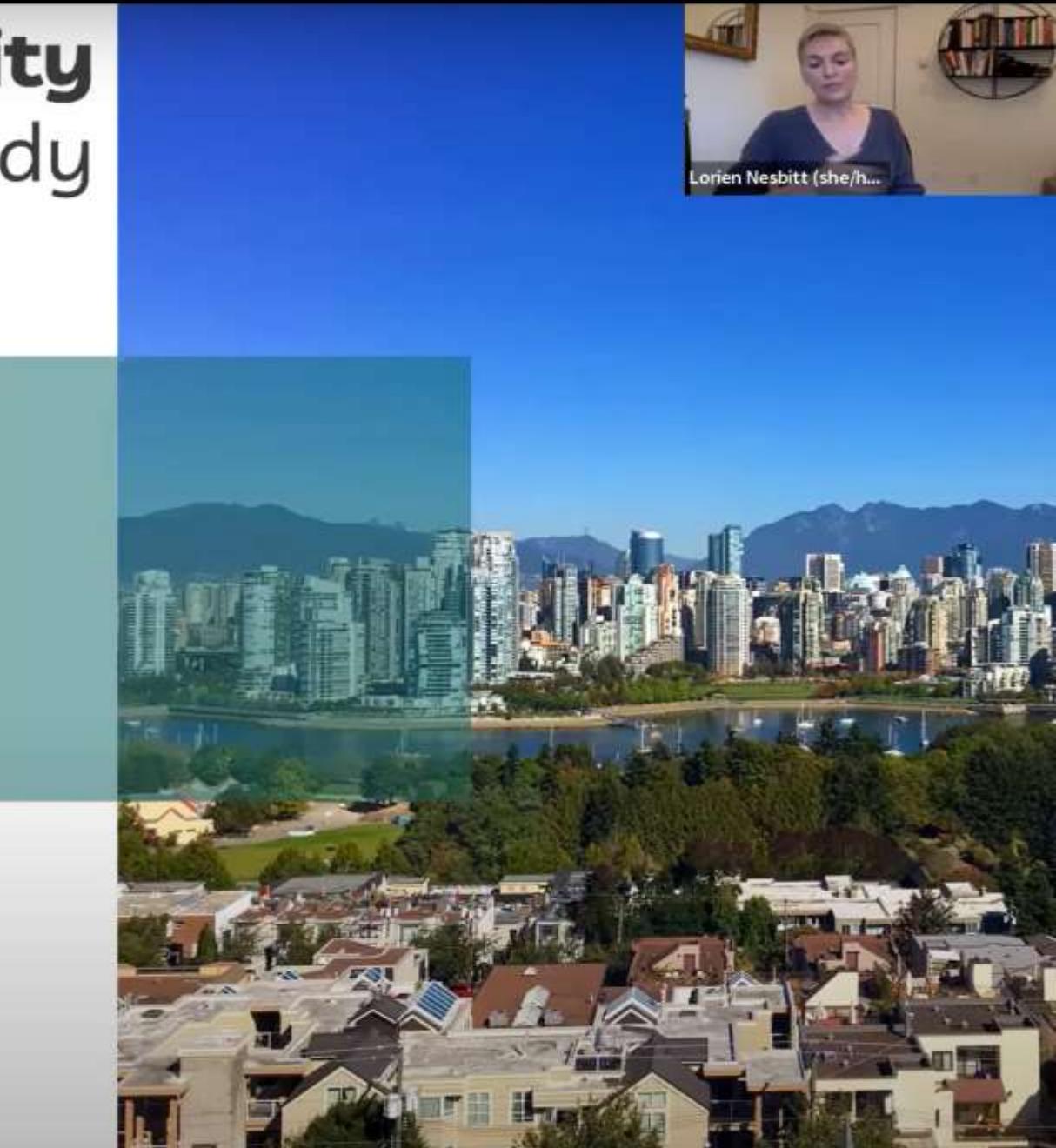


Biocultural Diversity

Vancouver case study

4 biocultural discourses/expressions:

1. Ecosystem services & 'Vancouverism'
2. Indigenous reciprocity & resistance
3. Asian aesthetics
4. The Three Sisters



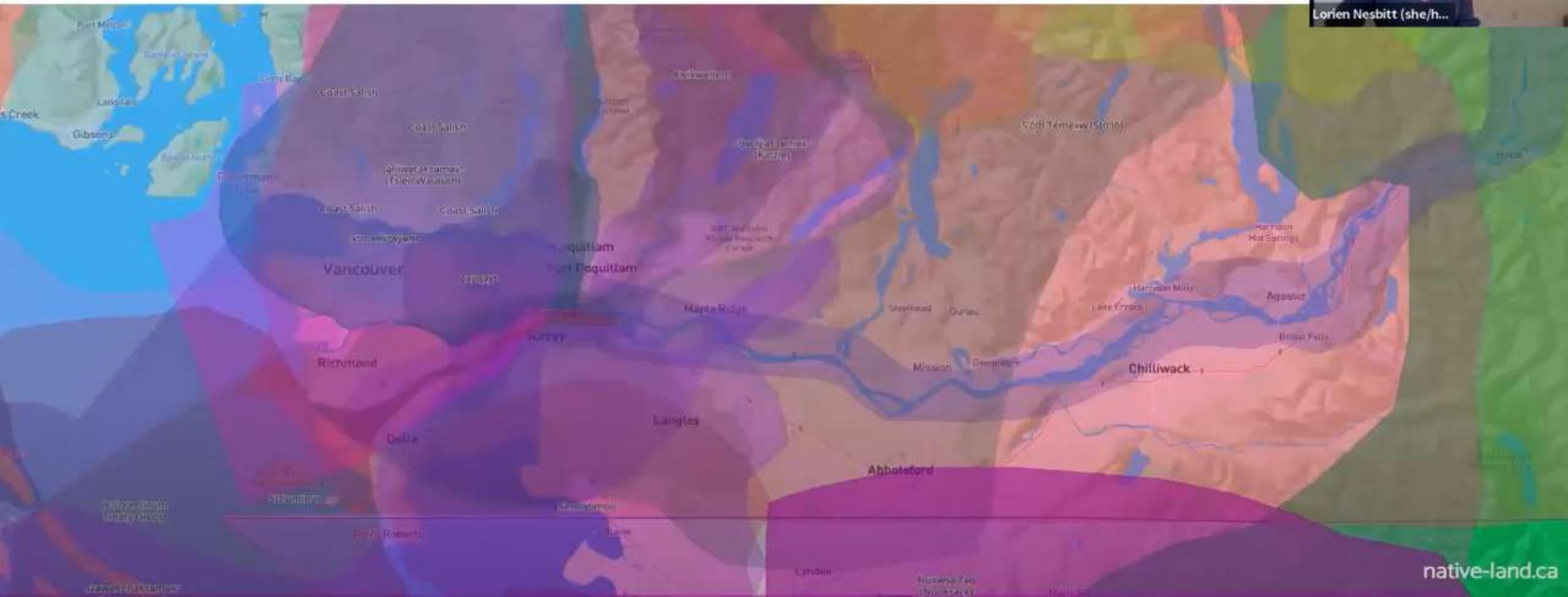
Biocultural Diversity

Vancouver case study

- Dominant biocultural discourse
 - Municipal & regional policies
 - Planning histories
- Ecosystem services
- Nature → humans
- Sustainability branding and identity
- 'Vancouverism' – liveability

1. Ecosystem services & 'Van...
2. Indigenous reciprocity & res...
3. Asian aesthetics
4. The Three Sisters



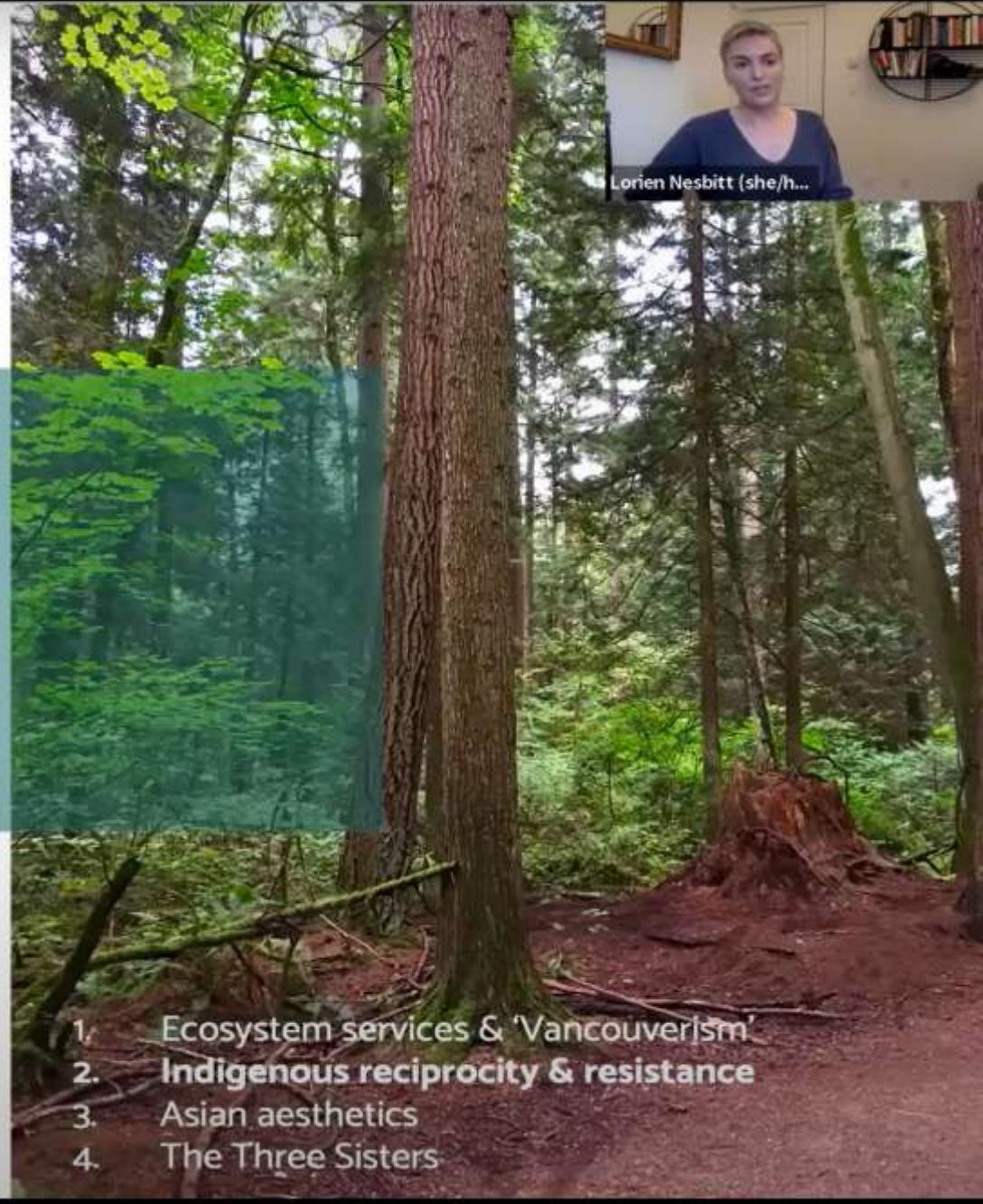




Biocultural Diversity

Vancouver case study

- Reciprocal relations with nature
- Holistic view of urban ecosystem – nature and humans are not separate
- All beings have rights and responsibilities: Natural law
- Intercultural learning: Stanley Park, UBC Farm, DTES
- Resistance: Trans Mountain Pipeline



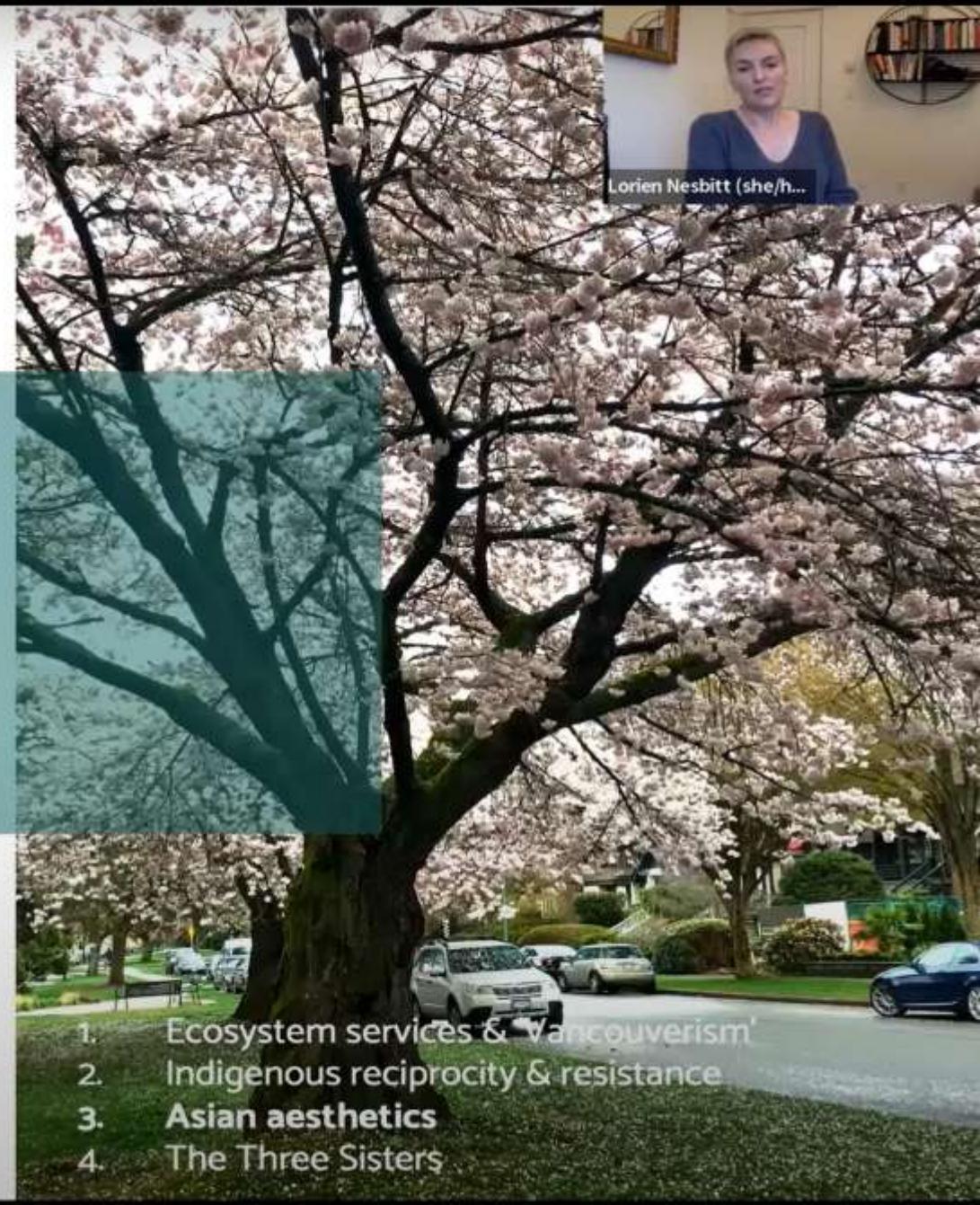
1. Ecosystem services & 'Vancouverism'
2. Indigenous reciprocity & resistance
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Biocultural Diversity

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- *Prunus serrulata* and *Prunus spp.* urban trees
- Dr. Sun Yat-Sen Traditional Chinese Garden
- Intercultural learning:
 - Modeled after Ming Dynasty gardens with local plant species



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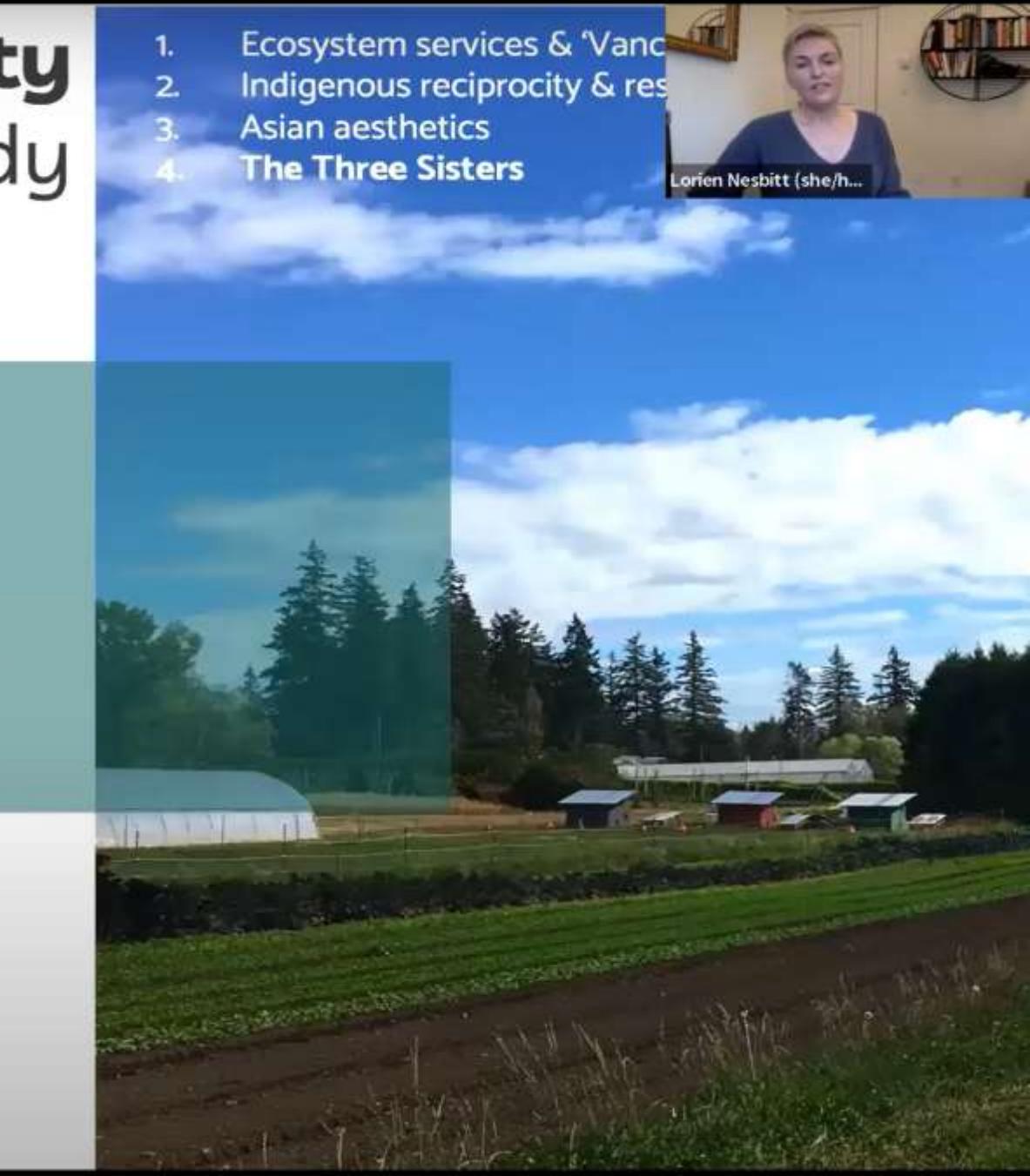
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Biocultural Diversity

Vancouver case study

- Tal A'xin: Maya in Exile Garden
- Established by Mayan refugee families in mid-1990s
- Traditional Mayan farming practices of reciprocity and care
- Three Sisters: corn, beans, squash
- Intercultural learning: UBC Farm site workshops, volunteer opportunities, knowledge sharing



1. Ecosystem services & 'Vanc...
2. Indigenous reciprocity & res...
3. Asian aesthetics
4. The Three Sisters

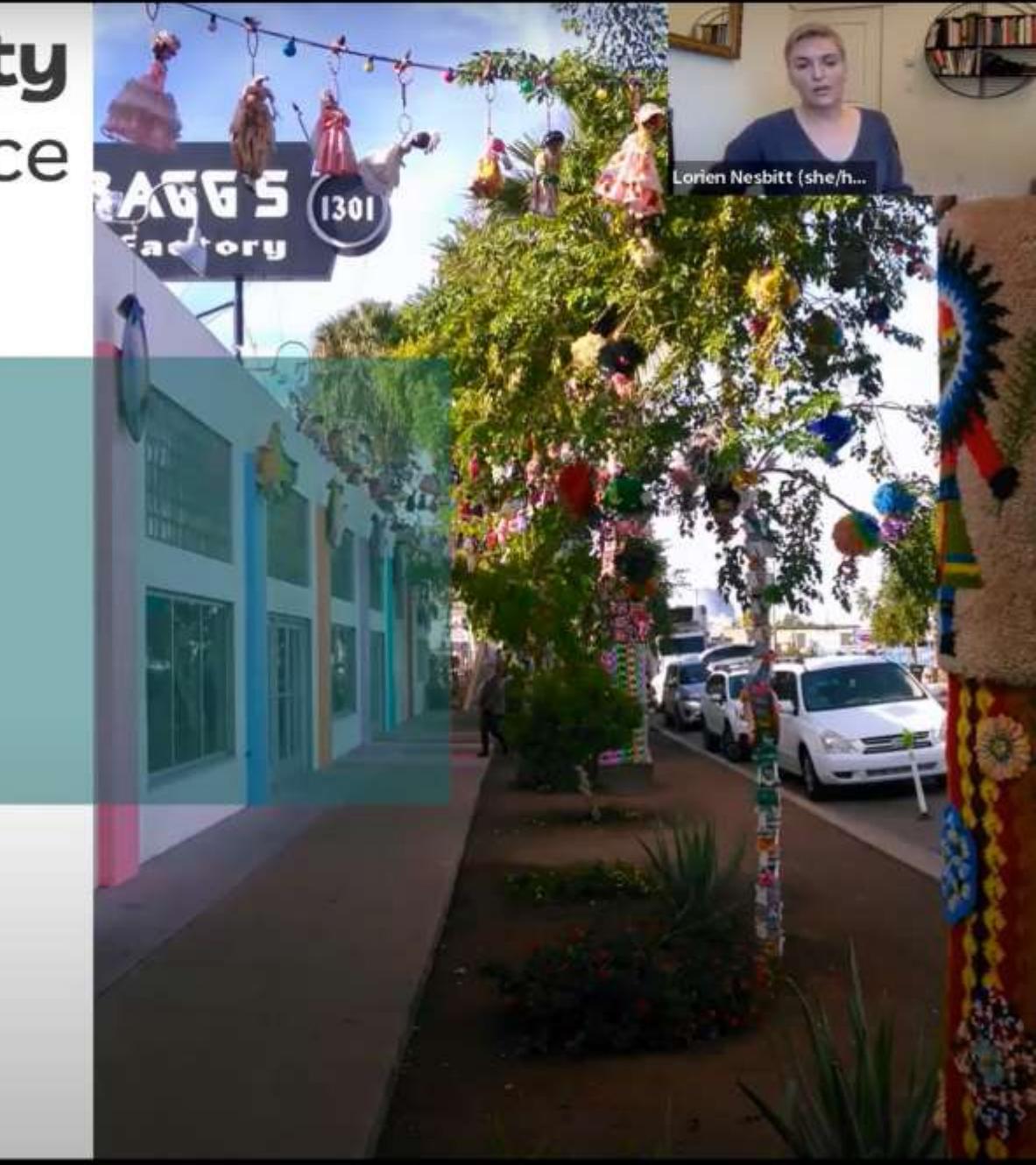


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Pathways to Equity

mosaic governance

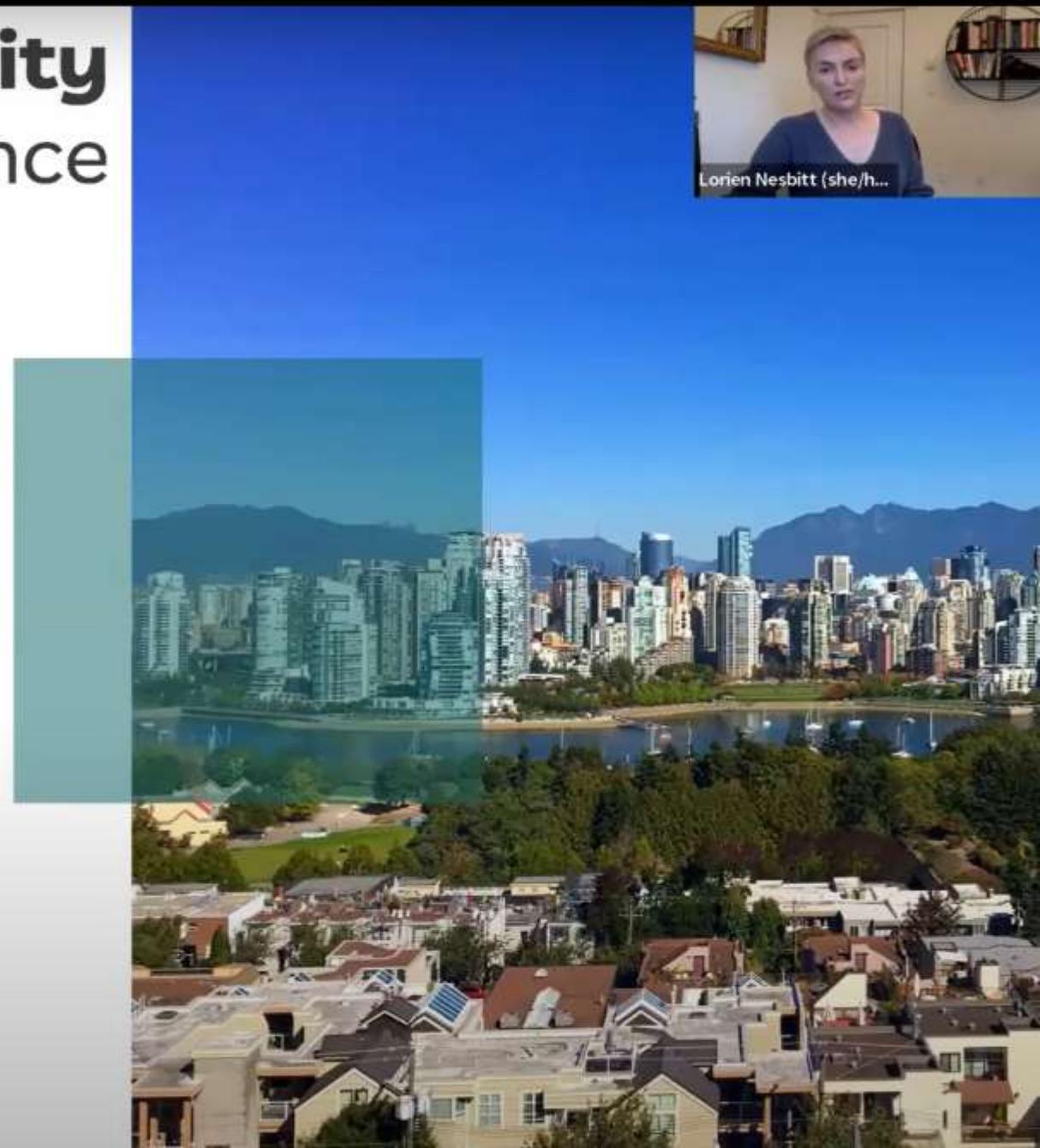
- Multicultural cities have high biocultural diversity
- Biocultural diversity growing & changing
- Diversity absent from dominant urban forestry discourses
- **Recognition:** recognition of the diversity of people, communities and their (biocultural) experiences, and the importance of their participation in urban forest processes (decision making, stewardship)



Pathways to Equity

mosaic governance

- **Mosaic governance:** mosaic of governance approaches across the urban landscape supporting diverse practices, cultures, people and institutions (Buijs et al. 2016, Gulsrud et al. 2018)
- Institutional commitment to context-sensitive governance
- Important leadership role for institutions (municipal/regional govt.)
- Applications to support biocultural diversity need further study (e.g., scale, policy)
- **Vancouver:** Current policies highlight citizen engagement, EDI but lack operational approaches





Jim Leyden (Míxat Kanim, Black Bear Warrior)

'There's an old story that if you're out of centre and you're feeling off, you would sit yourself under a big cedar tree and just lay there and just kind of think or be, and ultimately the energy of the tree would centre you, you know, and bring you back to a healthier head space... If there were more trees, I think, people would be more comfortable in their own skins, let alone their environment.'



Questions and Feedback

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