SESSION: Ecological insights into Sustainable Development 19.9.2019

THE CO-BENEFITS AND (SOCIAL) COSTS OF NATURE-BASED SOLUTIONS (NBS) (Christopher Raymond)

KEY QUESTIONS or COMMENTS RAISED in the DEBATE

CONCEPTUAL and OPERATIONAL QUESTIONS?

- Do we really understand nature?
- How do NBS relate with social, environmental and economic sustainability?
- Which VALUES do we support through NBS?
- How do NBS operate in larger networks? Systemic benefits?
- How do NBS respond to social challenges in the small scale and to Climate Change challenges in the big scale?

NBS vs.?

- How do all the new green-urban concepts relate to each other? (GI, ESS; NBS, etc)
- When does a NBS become artificial?
- Do NBS give the right solution for the right questions? (risk of greenwashing?)
- NBS vs non-NBS? Does nature always triumph over man-made?
- COSTS of NBS: Can they in some situation come from other aspects than NBS?
- DO NBS hide symptoms?
- NBS vs NBO (nature based opportunities): Why not to use a more positive approach? How can we make the concept cool? Fear & discomfort versus Innovation?

PEOPLE, NBS & GOVERNANCE?

- What roles might machines have on the future governance of NBS?
- CONTROLLING NATURE? NEW (designed) NATURE vs. EXISTING (protected) NATURE… both imply a human intervention.

PEOPLE, NBS & EQUITY?

- SPACE and NBS: Who is affected by spatial (NBS) improvements? How? / Who has an effect on the quality of the space (NBS)? How?
- GOVERNANCE: How do all these positive features contribute to equity? How can we enable equity to exist in NBS?
- NBS and inequality? Urban vs Periurban; Technology vs Heritage

STUDY QUESTIONS AND DATA ANALYSIS IN URBAN ECOLOGICAL STUDIES (Johan Kotze)

KEY QUESTIONS or COMMENTS RAISED in the DEBATE

METHODOLOGIES

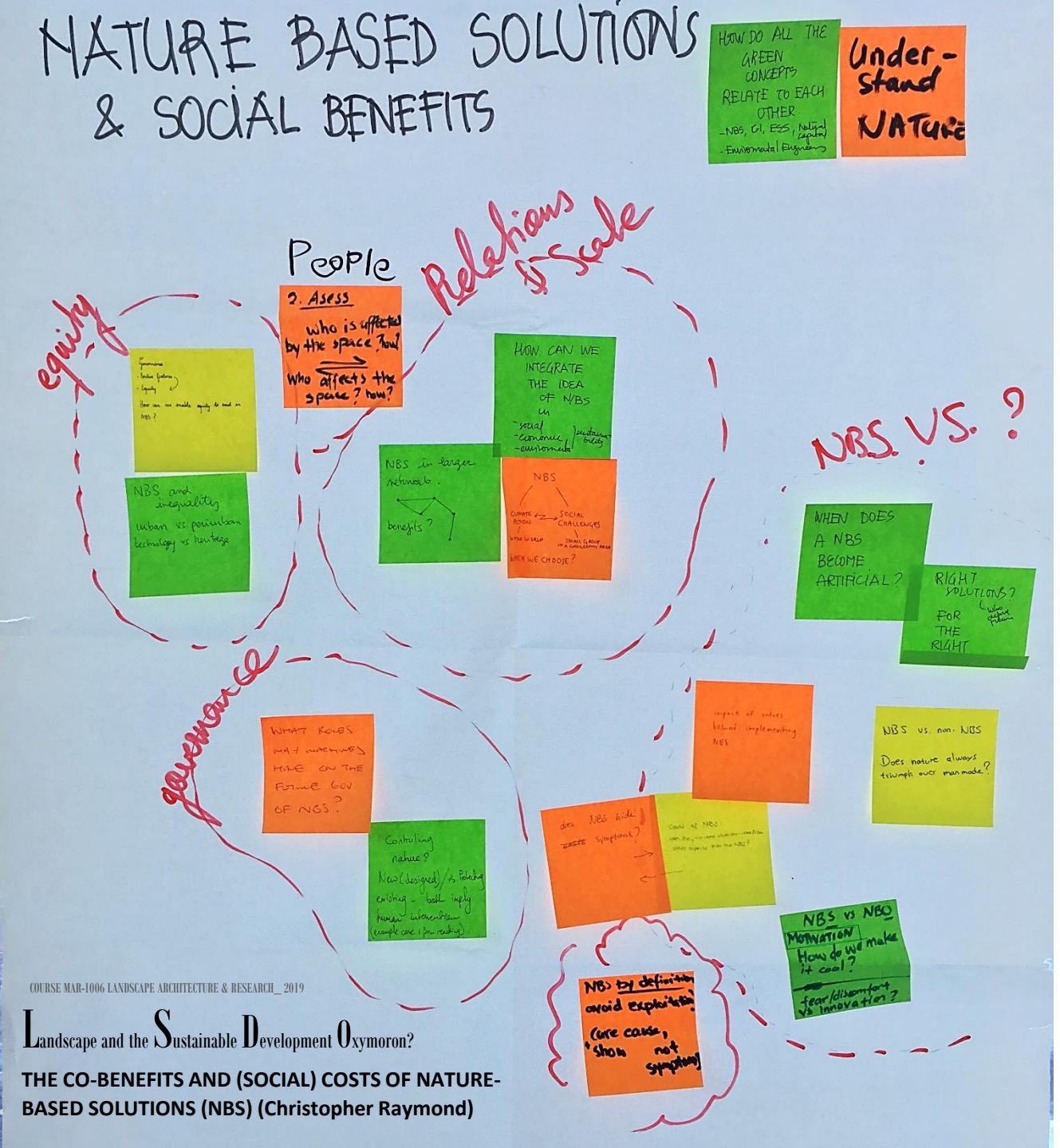
- SYSTEM THINKING implies the understanding of the elements and their relationships, PLANNING THE EVOLUTION OF SYSTEMS requires the definition of goals and agendas. How can we integrate different human agendas with “nature” agendas (if such a thing exists)?
- HOW can we assess the benefits of an infinite and limitless system? At which scale do we need to operate? How do we set the limits?
- What is the place of ECOLOGY in the sustainability discussion? How to make the public case?
- Detailed knowledge about ecosystems: Is it currently taken into account in urban planning? What knowledge is (not) considered by (not) incorporating actors/experts?. Do we generate enough synergies?
- What studies are necessary to address this topic properly? Where are they provided?

ANTHROPOCENTRIC QUESTIONS ABOUT LIVING ENVIRONMENTS?

- NATURE and URBAN FABRICS:
    - Size vs. Densification
    - Age vs. Conservation
    - Habitat Quality vs. Diversity
    - Corrections vs. Network systems
- QUANTITY & QUALITY OF URBAN NATURE. Metrics?
- How humans preferences impacts the NBS we “allow” around ourselves?
- Can urbanization happen in a way that enriches the biodiversity of one area?
- Is reversibility really possible? Is there any example about how to reverse the condition of a damaged urban environment?. If yes, What was the scale?
- How can non-humans be “designed” for when it affects human comfort? (e.g. insects. Diseases, etc.)
- Population: meat consumption? Integrated pest management?

SIMPLE vs. COMPLEX SYSTEMS, SPECIALISTS vs. GENERALISTS?

- Are humans driving the biosphere towards higher levels of simplicity? Associated risks? Effect of disappearance of specialized species and proliferation of generalist/cosmopolitan species? Will new specialized species adapted to anthropic environments appear (e.g. new bacteria)?
- How is the amount and composition of biomass changings a s consequence of human actions?
- From a human perspective, do we really need insects? What for? What about aseptic and hyper controlled environments?
- Specialist species disappearing: What is the role of private yards in this?. Can private yards create habitats for specific species?
- Will generalist save humans?
- NBS > Functional analogies (bee keeping in cities)?



COURSE MAR-1006 LANDSCAPE ARCHITECTURE & RESEARCH_ 2019

Landscape and the Sustainable Development Oxymoron?

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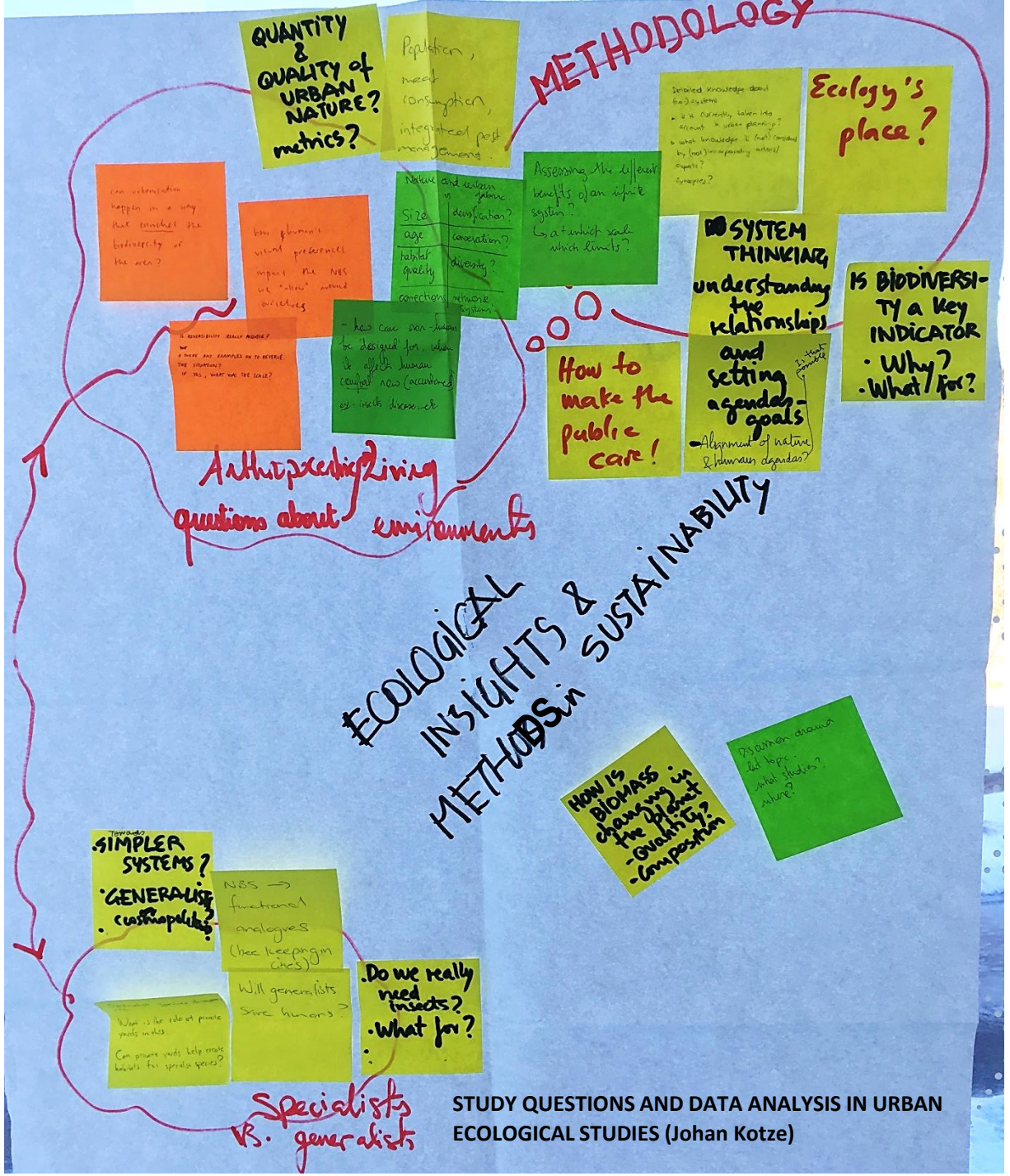

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