

## **Co-creation as governance for nature-based solutions scaling**

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for transition



### Co-Creation

- What is it
- How to do it
- Why to co-create
- Challenges
- Future frontiers





Aberdeen Antwerp Barcelona Berlin **Brighton Bristol Budapest** Burgas Dresden Freiburg Ghent Genk Glasgow

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GUST





by the ARTS project
Accelerating Transitions



Governance of Urban

**Sustainability** Transitions



Niki Frantzeskaki @NFrantzeskaki · 11h Co-deciding which place will be the #urbanlivinglab in #Burgas! @resilienteurope @URBACT #urbanresilience













### Co-creation

the active engagement of actors with different types of knowledge and resources aiming to generate collaborative outcomes openly defined by the facilitators of the process

Outcomes: vision narratives, new understandings of problems and opportunities, new knowledge, hybrids of solutions, strategic agendas or experiments





### Why to co-create?

- Fostering and forging synergies > achieve more together
- Collaborative creativity > think better together
- Unexplored possibilities > aim for more together





### Why to co-create?

• Nature-based solutions deliver climate services while ensuring wellbeing and social services only when ecosystem services are coproduced (Raymond, Frantzeskaki et al 2017)





Raymond, C.M., Berry, P., Breil, M., Nita, M.R., Kabisch, N., de Bel, M., Enzi, V., Frantzeskaki, N., Geneletti, D., Cardinaletti, M., Lovinger, L., Basnou, C., Monteiro, A., Robrecht, H., Sgrigna, G., Muhari, L., Calfapietra, C., 2017. An Impact Evaluation Framework to Support Planning and Evaluation of Nature-based Solutions Projects. Report prepared by the EKLIPSE Expert Working Group on Nature-based Solutions to Promote Climate Resilience in Urban Areas. Centre for Ecology & Hydrology, Wallington, United Kingdom.

Raymond, C.M., Frantzeskaki, N., Kabisch, N., Berry, P., Breil, M., Nita, M.R., Geneletti, D., and Calfapietra, C., (2017), A framework for assessing and implementing the co-benefits of nature-based solutions in urban areas, Environmental Science and Policy, 77, 15-24, doi.org/10.1016/j.envsci.2017.07.008

Potential for multi-

### Why to co-create?

- Nature-based solutions deliver climate services while ensuring well-being and social services only when ecosystem services are co-produced (Raymond, Frantzeskaki et al 2017)
- Nature-based solutions when co-created instigate place transformations that are pivotal for inclusive urban regeneration (Frantzeskaki et al 2018)



### Why to co-create?

- Nature-based solutions deliver climate services while ensuring wellbeing and social services only when ecosystem services are coproduced (Raymond, Frantzeskaki et al 2017)
- Nature-based solutions when co-created instigate place transformations that are pivotal for inclusive urban regeneration (Frantzeskaki et al 2018)
- Nature-based solutions when co-created are socially and institutionally embedded through placemaking, narratives and social learning (Frantzeskaki et al 2016 in Kabisch et al 2016)



### How to co-create?

- Transition Management (Loorbach 2007, 2010; Frantzeskaki et al 2012,2013,2014,2015,2017,2018a,b; Wittmayer et al 2016a,b,2017,2018)
- *Knowledge co-production spaces* (Frantzeskaki and Kabisch 2016; Pereira, Karpouzoglou and Frantzeskaki 2015)
- Performative methods (Tabara et al 2016; Calafassi 2018)

#### Future City 11

Niki Frantzeskaki · Katharina Hölscher · Matthew Bach · Flor Avelino Editors Co-creating Sustainable Urban Futures A primer on applying transition management in cities

This is a unique book that provides rich knowledge on how to understand and actively contribute to urban sustainability transitions. The book combines theoretical frameworks and tools with practical experiences on transition management as a framework that supports urban planning and governance towards sustainability. The book offers the opportunity to become actively engaged in working towards sustainable futures of cities. Readers of this book will be equipped to understand the complexity of urban sustainability transitions and diagnose persistent unsustainability problems in cities. Urban planners and professionals will build competences for designing transition management processes in cities and engaging with multidisciplinary knowledge in solution-seeking processes. The heart of the book marks the variety of very different local case studies across the world – including, amongst others, Rotterdam in the Netherlands, La Botija in Honduras, Sydney in Australia and Cleveland in the US. These rich studies give inspiration and practical insights to young planners on how to create sustainable urban futures in collaboration with other stakeholders.

The case studies and critical reflections on applications of transition management in cities offer food for thought and welcome criticism. They also introduce new lenses to understand the bigger picture that cocreation dynamics play in terms of power, (dis-) empowerment, legitimacy and changing actor roles. This will equip the readers with a deep understanding of the dynamics, opportunities and challenges present in urban contexts and urban sustainability transitions.

Co-creating Sustainable Urban Futures

TFrantzeskaki · Hölsche Bach · Avelino Eds.

Niki Frantzeskaki Katharina Hölscher Matthew Bach Flor Avelino *Editors* 

Future City 11

# Co-creating Sustainable Urban Futures

A primer on applying transition management in cities



Life Sciences



springer.com





Antwerp – Co-creating a nature-based solution in Saint Andries (2017, Resilient Europe)

Poznan (2018, Connecting Nature)

### Co-creation

the active engagement of actors who hold different types of knowledge and resources with the aim to generate collaborative outcomes openly defined by the facilitators of the process.

Outcomes: vision narratives, new understandings of problems and opportunities, hybrids of solutions, agendas or experiments



Are all planning processes co-creation processes?

#### **DESIGN CRITERIA**

Input design:

**Inclusive**) (Adler et al 2017; Beunen and Obdam, 2011; Udovyk and Gilek, 2014; Wyborn, 2015; Vignola et al 2009; Newton et al 2012; Spruijt et al 2014; Fernandez 2016; Hegger and Dieperink 2015; Tengo et al 2017; Shuttenberg and Guth, 2015; Van der Voorn et al 2015, p.6; Gulsrud et al 2018) **Open** (Thompson et al 2017; Voorberg et al 2014; Sheate and Patridario, 2010; Langer et al 2017) **Legitimate** (Dunn et al 2017; Wesselink et al 2013; Van Stigt et al 2015; Voorberg et al 2014; Debarbieux et al 2014; Shuttenberg and Guth, 2015)

#### Outcomes produced are:

Actionable (Wyborn, 2015; Fischer et al 2015; Van Stigt et al 2015; Newton et al 2012; Voorberg et al 2014; Daedlow et al 2016; Hegger and Dieperink 2015; Steiner 2014; Smajgl and Ward, 2013; Simon and Schiemer, 2015; Shuttenberg and Guth, 2015; Lopez-Rodriguez et al 2015) and **Usable** (Thompson et al 2017; Van Stigt et al 2015; Pain et al 2011; Armitage et al 2015; van der Hel, 2016; Daedlow et al 2016; Shuttenberg and Guth, 2015; Jahn et al 2012 )

#### Tailoring to socio-cultural context:

Multiple **formats** (Coenen et al 2009; Armitage et al 2015), Multiple **actors** (Udovyk and Gilek, 2014; Beunen and Opdam 2011; Newton et al 2012; Armitage et al 2015; Voorberg et al 2014; Carton and Ache, 2017; Hadorn et al 2006; Tengo et al 2017) and **Extending institutions** (Carton and Ache, 2017; van der Hel, 2016; Daedlow et al 2016; Tengo et al 2017)

#### **DESIGN CRITERIA**

Input design:

Inclusive – brings together multiple knowledges

**Open** – opens to new knowledge, ideas and multiple actors throughout **Legitimate** – knowledge input is reliable and legitimate

Outcomes produced are:

Actionable for policy and planning – immediately planning relevant Usable for all co-creators including practitioners

Tailoring to socio-cultural context:

Multiple formats - fitting to context

Multiple actors – fitting to culture

**Extending institutions** – relating to multiple policy targets and agendas

Frantzeskaki, N., and Kabisch, N., (2016), Designing knowledge co-production spaces for urban environmental governance – Lessons from Rotterdam, The Netherlands and Berlin, Germany, Environmental Science and Policy, 62, 90-98



To secure a better urban future, we must strive to produce an integrated and actionable urban knowledge

#### Urban Planet: Knowledge Towards Sustainable Cities. 2018.

Editors: Thomas Elmqvist, Xuemei Bai, Niki Frantzeskaki, Corrie Griffith, David Maddox, Timon McPhearson, Susan Parnell, Patricia Romero-Lankao, David Simon, Mark Watkins. Cambridge University Press

### Challenges to co-create



- Common language as a precondition > in order to co-create a narrative of reason for nature-based solutions
- Co-created outcomes are the new commons > who owns, who gets rewarded > impact agendas and reward systems
- Different timeframes > science and planning cycles not in sync

Frantzeskaki, N., McPhearson, T., Collier, M., Dumitru, A.,Kendall, D., et al (2018), Nature-based solutions for urban climate change adaptation: linking the science, policy, and practice community for evidence based decision-making, Bioscience – Under Reviews

### Frontiers for research



- Research municipalities > to co-create for what?
- Knowledge alliances > from co-creation to co-optation?
- Shifting roles of researchers > truth-holders to standardise, systematise and legitimise weaved knowledges
- Knowledge brokerage > communicating and translating coproduced knowledge to ensure it is actionable and usable
- Democratisation of science > socially robust is not always socially sustainable

Frantzeskaki, N., McPhearson, T., Collier, M., Dumitru, A.,Kendall, D., et al (2018), Nature-based solutions for urban climate change adaptation: linking the science, policy, and practice community for evidence based decision-making, Bioscience – Under Reviews



#### #Listen2Cities #Habitat3

"There is clear evidence that national and global sustainability efforts can be scaled-up when local and regional governments are effectively empowered, capacitated and resourced"

# future for global sustainability NATURE-BASED SOLUTIONS THEME GROUP

- Global community of research and practice
  - Share and weave knowledges globally
    - Continuity and mainstreaming

#### NATURE-BASED SOLUTIONS THEME GROUP COORDINATORS



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## Edited Open Access Book Proposal *Cities innovating with and for nature-based solutions* Marcus Collier and Niki Frantzeskaki

Vision and Mission of the Book:

- Practical guide to innovate with nature-based solutions
- Bringing new knowledge of nature-based solutions to the forefront including cross-case evidence
  - Showcasing how nature-based solutions improve liveability and resilience of cities

#### Target Audience:

- Undergraduate and post-graduates > educate the next generation of urban professionals

### Edited Open Access Book Proposal *Cities innovating with and for nature-based solutions* Marcus Collier and Niki Frantzeskaki

**FIRST CALL FOR CONTRIBUTIONS** 

FRIDAY 8<sup>th</sup> JUNE 2018 500-1000 words long abstracts to: <u>marcus.collier@tcd.ie</u> frantzeskaki@drift.eur.nl



more nature and natural features and processes to cities, landscapes and seascapes. These solutions also support economic growth, create jobs and enhance

Frantzeskaki et al 2016, EU-Brazil Sectoral Dialogues on Innovating Cities with Nature-based solutions

#### **Acceleration Mechanisms**

by the ARTS project Accelerating Transitions

MDPI





### **CONNECTING MULTIPLE INNOVATIONS**

- ✓ Social innovations > the new social, unusual social relations and ways of knowing
- Technological innovations > multifunctional technology for NBS
- Business innovations > new value creation models from business
- Organisational innovations > burst the silos open, cities as innovators
- ✓ Governance innovations > co-creation and multi-actor experimental planning
- ✓ Knowledge innovations > new forms of knowledge, use of knowledge









### New role of science

✓ Science to bridge the gap between plans, strategies and disperse innovations and the future we want in and for cities

✓ New ways of generating knowledge
 ✓ From consultation to co-creation
 ✓ New knowledge holders

✓ New urban science > open, solutions-oriented, socially robust and impactful





The Nature of Cities @TNatureOfCities · Mar 11 Storks, foxes, coots & kit foxes: all are harnessing resource opportunities in cities, & evolving as a result. buff.ly/2mlZoln pic.twitter.com/rCVD9rqZGy



AND

**KEEP** 





